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Quincy Historical Study

An Interactive Qualifying Project Report

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By

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1. webpage
2. Quincy, Massachusetts
3. Adams

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Abstract

This project worked with many historical organizations in Quincy, Massachusetts, to create an interactive web tour of the city. A prototype was to act as the basis for future work by the National Parks Service and the Quincy Historical Society, along with others. The purpose of the website is to promote tourism and learning about the city of Quincy and its history.

Executive Summary

In the past several years, the Internet, and specifically the World Wide Web, has become an important resource for spreading information. Although many individual organizations in the City of Quincy, Massachusetts, have taken advantage of this medium, there was no prior attempt to present a united view of the city's history. The goal of our IQP was to promote the building of such a website by raising awareness of its need and creating a prototype as an example.

The area now known as Quincy was originally settled by Europeans in 1625, and prior to that was the seat of the Massachusetts tribe of Algonquin Indians, from which the commonwealth takes its name. Since that time it has been home to many historically significant persons, events, and important firsts. It is home to the only father and son president of the United States of America, John Adams and John Quincy Adams. It was also where they lived and the site of their final resting-place. With the exception of Arlington National Cemetery, the First Parish Church is the only place to house the remains of two presidents.

Quincy was home to the first Iron works in the nation, the first commercial railway, and the first Howard Johnson's. Quincy's quarries produced the granite for the

Bunker Hill monument and the Fore River shipyard produced ships of war for the county, including the USS Massachusetts. There are many extant homes of people important on the local, state, and federal levels.

When we went to Quincy to build this webpage, we met with many people who were interested in a single webpage, but lacked either the ability, time, or influence to create it. We were able to unite those who had the information with those who had the means of creating and maintaining a website. We finally gave them a prototype of a website, to help them get started. Already work is continuing, and we know even if the site changes dramatically in form, we had a great deal of influence in its inspiration.

1.0 Introduction

The Internet has been growing as a tool for the use of educating the public by bringing information to them in a more interactive, visually oriented way. In this project we wanted to electronically recreate historical landmarks by means of a web page designed to emulate a tour of the city of Quincy, Massachusetts. As residents of the city, we feel that it is underrepresented. The web page will take the form of an interactive 'tour' of the key sites, with pictures, historical data, anecdotal information, all hyperlinked so as to 'feel' like the user was taking a tour. Our goal is to educate viewers about Quincy's History while promoting tourism for the city itself.

1.1 Purposes and Objectives

This project was performed in conjunction with the many historical organizations of Quincy, mainly the National Parks Service and the Quincy Historical Society. Our advisor at Worcester Polytechnic Institute, Professor James Hanlan made sure our project was in compliance with WPI guidelines for Interactive Qualifying Projects.

The purpose of this project was to create an interactive tour of the city of Quincy, focusing on the historical sites. Realizing that this project was far too

large for an IQP, we decided to create a prototype tour that can be easily altered to fit each historic site. We also wanted to insure the website's completion by getting the various organizations of Quincy to agree to supply their resources to the project.

1.2 Project Overview

We realized that this project had two important parts: the creation of a prototype and the agreement of the parties involved to complete the project. For the prototype, we used the National Parks Service run Old House, or Adams Mansion. This was the obvious choice as it is the best known site in Quincy, as well as the best documented. We could create this tour with a minimum of primary research. All items in the house are documented and photographed. The goal of our project was to create a tour out of historical information and artifacts, not research the manufacturer of Abigail Adam's china. We did research and testing to find the best format for the tour and how to present the information by viewing existing websites.

The second part of the project was getting the various organizations to agree to the site's creation. There is no central authority in Quincy governing historical sites. There are local, state, and federal organizations, each with their own goals and agendas. Our job was to get them to share their resources with a single body dedicated to the creation of a web site. We not only had to unify these organizations, we had to find a group to

take up the lead. At first we thought the city of Quincy would house the site, but as we worked on the project the National Parks Service agreed to regulate and run the site.

1.3 Social and Technological Aspects

Our project satisfies the requirements of an Interactive Qualifying Project because throughout the project we were literally integrating society and technology. We used current technologies to electronically recreate the historic places of Quincy to inform the public and promote tourism. The sites of Quincy show us an important part of our national past. The circumstances from which our country rose paint an important picture of our society. It was our intent to use technology to better tell the story of Quincy's history.

2.0 Background

We began this project by researching the city of Quincy and the sites we wanted to include in the project. We also investigated the organizations that operated in Quincy with regard for historical preservation and research. The final topics we explored were regarding the technical aspects of the project to create a web site capable of fulfilling our goals.

2.1 A Brief History of Quincy

The land that now is called the City of Quincy, Massachusetts, has gone through many changes and several names in the past 400 years. It was originally home to the Massachusetts Tribe of Algonquin Indians. In 1625, Captain Wollaston created a trading post with the natives. Though unsuccessful, his name lived at the site of his trading post, Mount Wollaston, and later with the entire section of the town. Boston later annexed the area in 1634 under the control of Thomas Morton. Morton's unprincipled activities caused him to be banished by the Puritan leaders.

The founding of the First Parish in 1639 led to the creation of the Town of Braintree, one year later. Old Braintree consisted of two precincts, North Precinct, which is now Quincy, and South Precinct, which is now Braintree, Holbrook, and Randolph. The First Precinct was home to the Quincy, Adams, and Hancock families, all of which were very important in American History. It was on February 22, 1792, that the first precinct formally broke from Braintree and became Quincy (pronounced 'Quin-Zee') in honor of Col. John Quincy. Col. Quincy was the grandfather of Abigail Adams and the namesake of John Quincy Adams. Richard Cranch, who had married Abigail's sister and was a good

friend of John Adams, proposed the adoption of Quincy's name for the town.

As well as home to prominent Americans, Quincy became an industrial center. Granite became an important industry, especially after the Bunker Hill Monument was crafted from it. As regional demand for the stone increased, immigrant workers and artisans came into Quincy. Laborers and craftsmen came from Ireland, Italy, Finland, Scotland, and the Middle East. To facilitate transport, the first commercial railroad in the country was established. As well as granite, shipbuilding was very important to the development of the community. As early as 1640 shipbuilding was an important economic institution. In 1884, operations were expanded to the Fore River, where in 1913 Bethlehem Steel started operations. The majority of U.S. Naval fleets for World Wars I and II were built at Fore River.

2.1.1 Religion and Ethnology

The original settlement of Quincy was the Algonquin Indian seat of the Massachusetts Tribe, from which the colony and later the commonwealth took its name. The first Europeans founded Mount Wollaston, in 1636, which was part of the town of Boston. Boston, at the time, had a

single religious community that sent Rev. John Wheelwright to create and take charge of First Parish. It was in 1638, at the First Meeting House, which stood by Town Brook, that he preached the sermon that led to his banishment from Massachusetts Bay along with his Sister-in-Law Anne Hutchinson. They left the Mass Bay colony and went to Rhode Island. There has always been a great deal of religious freedom in Quincy, even while the Puritans who ran Boston and the colony were against such liberality. Many of the religious and social leaders who escaped Puritanical persecution originated in the more liberal Old Braintree.

Before Quincy could become its own town, it had to have its own parish. Its population had grown to the point that it required being separated from Boston. That was the way things worked in Massachusetts Bay, it was founded on religion and the only way to gain autonomy was to have your own parish. It is for this reason that the terms 'Precinct' and 'Parish' are interchangeable when talking about the divisions of Old Braintree. It was in September of 1693 that a new Congregationalist parish was gathered under Rev. William Tompson and Rev. Henry Flynt. Tompson was the pastor and Flynt the teacher. As the town changed, so did the parish. In 1640 it became the Church

of Christ in Braintree, in 1708 it became the First Church. After 1792 it was the First Church in Quincy. And in 1959 it united with the Wollaston Unitarian Society and became the United First Parish Church, in Quincy.

In 1725, the Church of England formed a parish along the Old Plymouth Road, leading south from Boston, and the residents of Braintree were able to attend Anglican services. Because the town was tolerant, unlike the restrictive Boston, there were many Anglicans living in Braintree, but they had not had their own meeting house for worship.

In 1728, the first Episcopalian church in Massachusetts was established. It moved in 1837 to the corner of Elm street and Quincy Avenue where it has been rebuilt three times. The parish still survives in the building erected in 1873.

The story of the first Catholic mass in Quincy is very interesting, and appeared in the May 1886 Quincy Monitor:

The first Mass celebrated in Quincy was in what was called 'Long House', which then stood near the brook on Adams Street. Late in the year 1826, a gentleman called to see President [John Quincy] Adams, who was then at home. He introduced himself as a Roman Catholic clergyman, and

gave his name as father Pendergast. He told the President that he came to visit the Catholics of the vicinity and administer the Sacraments to them, and being a stranger he made bold to ask Mr. Adams for information as to where he could find the Catholics. The President received him kindly, and after some conversation called in Mr. John Kirk [an Irishman in his employ] who at that time lived with the President, and introduced Father Pendergast. The news soon spread through the village that 'the priest had come.' Confessions were heard that night, and early next morning the first Mass was celebrated.

For the following years, the Catholics of Quincy were served by the parish of South Boston, until Father Fitzsimmons was placed in charge of the Quincy mission in 1840. In 1841, land was purchased in West Quincy for St. Mary's and when it was erected the next year, John Quincy Adams was in attendance. In 1851 land was purchased on School Street for the St John the Baptist Church. Charles Francis Adams attended its dedication in 1853. With the growing number of immigrants, especially Irish and Italian, both Catholic parishes had to expand.

In 1832 the first Evangelical Church in Quincy was founded, its name has since been changed to Bethany

Congregational Church. It was about this time that the First Universalist Society was formed. In 1838, the first Methodist Society in the town was organized, and built a church on Washington Street. The first Baptist Church was also founded at this time, on Quincy Point. The Methodist and Baptist ministers both came from Cape Cod, following the fishing industry.

The first Quincy Orthodox Synagogue was Congregation Ahavath Achim, Brotherly Love, gathered in 1890 and incorporated in 1899. The first synagogue building was erected in 1903 on School Street. A second synagogue was formed on Quincy Point in 1910, and Congregation Beth Israel incorporated in 1918.

In the early 1900s, the Moslem population grew as immigration from all countries increased. The organization of the Moslem group began in 1937 as the Arab American Banner Association dedicated a Mosque in 1964. The Islamic Center of New England stands on South Street.

2.1.2 Economy

The early settlers of Quincy Bay were interested in the supply of both salt and fresh water, which had been cleared of trees by the Native Americans living in the area. The marshes would supply hay for cattle, and the

wood further inland was a valuable asset. The combination of resources made homesteads based in the Mount Wollaston area self-sufficient. As early as 1641 the town granted Richard Wright a franchise to open and operate the town gristmill. The early people of Quincy had access to farming, hunting, and fishing. In fact, the only necessity not available in Quincy itself was iron, which had to be imported from England.

The first manufacturing enterprise in Quincy, or in fact in all of Mass Bay, was an iron furnace. John Winthrop, Jr., son of the governor, formed a company in England to raise funds for an iron works in Boston in 1644. The town of Boston granted the use of Braintree land for the project. The furnace was built along a brook that still bears its name. Unfortunately for Winthrop, the brook was so under powered that iron cost more to make at his furnace than it did to import from England. The company went bankrupt in 1653. The furnace that produced the first commercial iron in America was excavated in West Quincy by Roland Wells Robbins.

In 1750, the first planned community of the area was constructed. Germantown was made to house German craftsman to work at a glassworks. The land was planned with German street names and the blueprints even specified

the quality of the houses to be built. Germantown included a pottery and glassworks, a candle factory, a stocking weaving factory, a chocolate mill, and a salt works. German workers were hired and moved to Quincy. A fire caused by lightning hitting the glassworks burned Germantown to the ground in 1755. A colony wide lottery was held by the legislature to raise funds to replace Germantown, but the 12,000 pounds necessary were not raised. Many of the German craftsmen moved to Maine, but the name Germantown still holds to that section of Quincy.

As time passed, prosperity in the town grew. The industrial and commercial enterprises in the North Precinct of Old Braintree grew while South Precinct remained agrarian. It was this disparity in economic philosophy that caused the town to split and North Precinct to become Quincy. By the 1820's there were 2 shipyards in Quincy and fishing prospered until the war of 1812. The coastal regions of Germantown and Quincy Point flourished at this time.

One of the largest industries in Quincy at this time was shoemaking. In 1795, over 950 pairs of shoes were exported. The industry rapidly grew in the early 19th century as markets in the south opened to trade. By 1850 boot and shoe making was the largest industry in Quincy.

In 1856, when boots were still made by hand, the Curtis family employed 400 people who made 50 thousand pairs of boots. Quincy out produced all its neighbors around Boston, including Brockton and Lynn. 30 years later, when boots were first manufactured by machine, the boot industry in Quincy dropped to 8% of what it was the year prior to the modernization of its competitors. The boot industry never recovered.

The best known facet of Quincy's economy is the granite industry. As early as the 17th century, the town was using the granite boulders found on or near the surface in the North Commons for foundations, fences, and other constructions. The second meeting house was erected out of this stone in 1666. It was one of the first stone buildings in New England. Working of granite was limited by technology. The only known way to split granite was to heat it up and pour cold water on it, and there was little attempt at quarrying. By 1715, even with the limitations on its use, the town was worried about their dwindling supply of stone. From then on, the town required that any using granite from the commons obtain a license.

It was not until the 19th century that quarrying of the stone began. The stone could be obtained from quarries in far greater quantity than just using the

surface stones. Quincy granite was used to build the Charlestown state prison in 1815. Shortly thereafter, the Dedham jail and St. Paul's in Boston were built by Quincy's growing granite market. The turning point of the Quincy granite industry was the Bunker Hill Monument.

Solomon Willard, an architect in Boston, was commissioned to build a memorial to the colonists who fought the British on the Dorchester heights in the dawn of the revolutionary war. He designed a giant obelisk of granite, made of large square stones. He learned that Quincy was incapable of making stones of such size and regularity, never mind transporting such masses to Charlestown. Willard took up the job of reengineering the granite industry of Quincy to see his vision realized. He left his architectural practice in Boston and moved to Quincy. His work revolutionized the industry, every obstacle being overcome with a new invention.

He not only designed systems for quarrying and splitting the stone, but also convinced Gridley Bryant to build the country's first commercial railroad. The tramway stands in West Quincy and was made to pull the stones quarried and shaped to the Neponset river, where they were shipped by barge to the build site of the monument. After 1825, the industry became Quincy's largest, in no small

part due to Willard. He not only popularized Quincy granite by building his monument out of it, but revolutionized the industry allowing Quincy to deal with the throughput needed to supply buyers. To thank Willard, the town asked him to design their Town Hall in 1844, which now stands in Quincy Square, made, of course, from Quincy granite. The granite industry remained strong until new materials were introduced after World War I.

Quincy has also seen its share of businessmen and entrepreneurs in the retail and service industry.

Grossman's, Howard Johnson, and Dunkin Donuts were all started in Quincy. There are also products of a more specialized variety, no less famous in their respective fields: Zildjian cymbals, Grass Medical Equipment, and Couch alarm systems. Louis Grossman and his four sons, Reuben, Jacob, Joseph, and Sidney, founded Grossman's in 1890. After WWI, Grossman brothers expanded and sold 'everything to build with.'

Howard D. Johnson opened an ice cream stand in Wollaston at the train station. He later opened another on Wollaston beach. His company expanded throughout the 1930s until it had become the largest operator of roadside restaurants in the world. To supply his restaurants, Johnson opened a bakery in Quincy Square, an ice cream

plant in Wollaston, and a candy factory in North Quincy. In the 1940s his operations expanded from hundreds of sites to thousands. He added hotels to his restaurants and his business involvement with Quincy grew. His main offices and supply factories were all in Quincy, and his company employed many in the city.

2.2 A Brief History of the Revolution

In 1765, in order to recoup the costs of several wars fought in the colonies, the British Parliament enacted the mercantilist Stamp Act. This Act taxed all paper goods, including all publications and legal documents and required that a 'stamp' be placed on all items under its jurisdiction. The seal over the top of a carton of cigarettes is a reminder of the Stamp Act. The courts were virtually closed by this act, the colonists wanting to boycott this act without wanting to incur the wrath of the British. A Stamp Act Congress was held and a general boycott of goods was decided on. This led to a repeal of the Stamp Act, but brought about enactment of the Townshend Acts in 1767. These were tariffs and taxes on imports. When, in 1773, a British ship laden with Tea from the East India Trading Company was sent directly to Boston to skirt tariffs (and thereby aid the company), the residents reacted by boarding the ship and throwing the tea overboard. This was probably the most famous of the riots caused by these Acts, and the one that carried the greatest repercussions for Boston. Another event whose fame lagged behind the actual event was the 'Boston Massacre.' The event occurred in 1770, when a group of British soldiers opened fire on a crowd. When tension further heated up

between Britain and the Colonies, the Massacre (as it was called by then) was used as a rallying point. After the Tea Party, the Parliament responded with the Coercive, or Intolerable Acts. These included the closing of the Port and the occupation of the City. The Governor, fearing the riotous populace, left Boston leaving General Gage in a virtual military dictatorship.

All of this led to the calling of a Continental Congress to decide the fate of the 13 colonies. Each colony sent their representatives to Philadelphia for debate. Concurrent with the formation of this body, open hostilities broke out between the British Empire and her Colonies. While en route to destroy a cache of arms, the British forces engaged local 'minute man' militia in Lexington and Concord. This was followed by the Colonial seizure of the Fort Ticonderoga and the British 'victory' at Bunker Hill. In 1775 the Congress named George Washington Commander in Chief of the Continental Army and dispatched him to Boston. Washington used the artillery seized at Ft. Ticonderoga to drive the British out of Boston. The Continental Congress debated over seeking independence from the British Empire. On July 2, 1776, they adopted Jefferson's Declaration of Independence. This was followed, in 1777, by a major victory at Saratoga that

brought France to America's aid. British General Cornwallis surrendered at Yorktown, ending the fighting, and the 1783 Treaty of Paris brought a formal end to the war and recognition for the new United States of America.

2.3 The Quincy and Adams Families

Quincy is home to two great families involved in this nation's conception: the Quincys and the Adams. The Quincys were the most prominent family in Braintree, many members of the family going into law and public service. Three Quincys served as mayors of Boston, and one served as a president of Harvard. Boston's famous Quincy Market is named in honor of mayor Josiah Quincy, who set the land aside for trade. The Adams family's prominence started with John Adams, who married Abigail Smith, a member of the Quincy Family. John was already familiar with the Quincy family, being aided in setting up his legal practice by Josiah Quincy. He would later work with Josiah Quincy, Jr. in the defense of the British troops involved in the Boston Massacre. John founded a family that remained involved in the development of the United States. He served in the Continental Congress, where he was a fierce proponent of independence. He wrote the Constitution of Massachusetts, a document that would greatly influence the United States Constitution, and he served as 2nd President of the United States. His son John Quincy Adams was an important diplomat, serving as Secretary of State under Monroe, writing the Monroe Doctrine, one of the most important

diplomatic policies of the United States having influence well into the 20th Century.

John Quincy, though not necessarily liked by the rest of the union, was an advocate for many ideals, particularly those near and dear to the residents of New England. Largely for this reason, he spent 18 years in the House of Representatives after finishing his term as president.

Charles Francis Adams, John Quincy's son, was ambassador to England during the Civil War. The importance of this could not be overemphasized, at least according to the history written by Henry Adams. Henry Brooks Adams, a wealthy and well-read gentleman of the old school, wrote strongly opinionated works about his family and the politics of the time. His Education is perhaps the best example of this.

2.4 Organizations

There are several organizations that deal with history in Quincy, all of them well entrenched in their own histories. They draw power from their age and circumstances, for like any old city, there are establishments that are important and deferred to by nature of their age alone. They have become important institutions over the years. To demonstrate the various levels of government involved, have selected 3 organization's histories. The Historical Society is local, the MDC is state, and the NPS is federal.

2.4.1 A History of the Quincy Historical Society

The Quincy Historical Society was founded in 1893 by Charles Francis Adams II. It was an important time in Quincy's History, 1892 being the centennial of North Precinct's break with Braintree and 1888, marking the establishment of Quincy as a city. The Centennial, along with the heated debate that accompanied the decision to become a city, caused a great deal of interest in the history of Quincy. Currently housed in the Adams Academy, former site of Hancock's birthplace, the society continues to promote education about Quincy's history.

2.4.2 The Metro District Commission

On June 3, 1893, the Metropolitan Park Commission (renamed the Metropolitan District Commission in 1919) was established by the Massachusetts state legislature to oversee and maintain the Metropolitan Park System. Some metropolitan Boston's most scenic and historic sites are part of the Metropolitan Park System, including the River Esplanade and the Blue Hills Reservation.

This system was the first regional organization of public open space in the United States and is recognized as a model for multi-jurisdictional park systems designed to encourage public appreciation of open space. As a whole, the Metropolitan Park System is currently eligible for listing on the National Register of Places.

The creation of the parks system in 1893 resulted from the efforts of Charles Eliot, son of a Harvard president, and Sylvester Baxter, a Malden resident who wrote for the Boston Daily Advertiser. Baxter and Eliot based their design on the influences and planning theories of America's first generation of landscapers including Frederick Law Olmsted, H.W.S. Cleveland and Robert Morris Copeland. It was Copeland who envisioned a circular boulevard following the ring of hills surrounding Boston. Bridges and ferries to the Harbor Islands would complete the loop. In fact, the

first parcel of land acquired as part of the Metropolitan Park was Beaver Brook in Waltham, very close to where Copeland lived for 15 years.

The MDC now operates many sites in and around Boston. The Dorothy Quincy House, the Josiah Quincy House, and the Granite Quarries and Railway are maintained and operated by the MDC.

2.4.5 The National Parks Service

The National Parks Service was officially created August 25, 1916 to manage those areas then assigned to the U.S. Department of the Interior. Congress made the first National Park when they set aside Yellowstone in 1872.

"There is created in the Department of the Interior a service to be the National Park Service, which shall be under the charge of a director.... The service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified, except as are under the jurisdiction of the Secretary of the Army, as provided by law, by such means and measures as conform to the fundamental purpose to conserve the and the natural and historic objects and the wild life therein and to provide for the enjoyment for the same in such manner and by such

means as will leave them unimpaired the enjoyment of future generations." (National Parks Act, 1916)

The National Park Service still strives to meet those original goals, while many other roles as well: guardian of our diverse cultural and recreational resources; environmental advocate; world leader in the parks and preservation community; and pioneer in the drive to protect America's open space.

The National Park System of the United States comprises 378 areas over more than 83 million acres in 49 States, the District of Columbia, Samoa, Guam, Puerto Rico, Saipan, and the Virgin Islands. These areas are of such national significance as to justify special recognition and protection accordance with various acts of Congress.

The National Parks Service took charge of the Adams Historic Site in 1946. After the death of Brooks Adams in 1927, the Old House was to be held by a trust, managed by the Adams family. It was opened in March of 1927 to the public. The family realized it lacked the resources to preserve the site, so in 1946 they donated it to the National Parks Service. The NPS did extensive repair to the house and cataloged all the artifacts therein. The also repatriated artifacts that Adams family members and

lost over the years. The Parks Service started running regular tours, which they still do to this day.

2.5 Historical Sites

Quincy's History is multifaceted. The Adams family contributed many things, but these were typically national in scope. Industry also shaped Quincy into what it is today, bringing people who in turn brought their own cultures, churches, and customs.

2.5.1 Adams Family

The Adams family was certainly the most influential in Quincy during period from 1780 to about 1900. Their influence and wealth lead to the purchase and construction of many buildings in the Quincy area. Simply being associated by the family is cause enough for many sites to become valuable landmarks.

2.5.1.1 Old House

After returning from France in 1787, the John and Abigail Adams required much more space. They decided to buy a house built by a sugar plantation owner in 1731. The house was actually purchased while the Adams' were still in France. Periodic additions were added to the home, with the final configuration becoming stable by the early part of this century.

Residents of the home included John and Abigail Adams, then later John Quincy and Louisa Catherine Adams. Charles Francis Adams, son of John Quincy, lived in the home, followed by his children Henry and Brooks Adams. After the death of Henry Adams, the home was given to the National Parks to be preserved as a historical landmark.

The home has a small stone library adjacent to the house that contains the books belonging to John Quincy. A great reader, John Quincy owned more than 10,000 books in more than 7 languages. He never had the resources to build such a library, but Charles Francis constructed it after his death. The library contains many priceless artifacts, and countless rare books. Henry and Brooks Adams, who were both historians, added more to the already impressive collection.

2.5.1.2 Birthplaces

The Adams birthplaces are located about 1 mile south of the old house. The construction was typical of the period, and the houses look like other farmhouses from the period.

The designs of the two houses were each in two parts. The reason for this was economic. A farmer would build a small farmhouse, and when he needed more space built an

extension of the current house leading against the original.

2.5.1.3 Adams Academy

In the will of John Adams, he left funds for the construction of a school and a church. The school was to become the Adams Academy. It was built on the site of Reverend John Hancock's homestead and was the birthplace of John Hancock, most famous for being President of the Continental Congress and first signer of the Declaration of Independence. After the school closed, it became the home for the Quincy Historical Society in the 1970s.

2.5.1.4 United First Parish Church

John Adams also left money for the construction of a church meeting house for the United First Parish. The fourth meeting place of the congregation, the Stone Temple continues to be an active Unitarian Universalist congregation to this day.

Built of Quincy granite, the church is one of the tallest buildings in downtown Quincy. The view from the belfry is impressive, and some say that on a clear day one can see Rhode Island. Alexander Paris, who also designed Quincy Market in Boston, designed the church. In fact the plaster ceiling of the church is similar to the ceiling of Quincy Market.

The United First Parish Church is also the final resting place of John and John Quincy Adams. They are buried in a crypt under the granite church. This is the only church to hold the remains of two U.S. Presidents.

2.5.2 Quincy Industry

Like most urban areas, industry was responsible for shaping much of the history of Quincy. The shipbuilding and granite industries attracted many laborers, bringing their own cultures and traditions to the area.

The granite industry provided a necessary product to a nation that was rapidly building its infrastructure in the 1800s. The shipbuilding industry aided in building both the commercial and military fleets.

2.5.2.1 Granite Railway

The Granite Railway is the oldest commercial railway in the country. Commercial Railway Number 1 was built by Gridley Bryant in 1826 to ship granite for the Bunker Hill Monument, it has been declared a Historic Monument by many Civil Engineering Societies and Railway enthusiasts.

The name 'granite railway' is applicable for two reasons: Its function was to ship granite, but it was also made of granite. The ties and tracks imbedded into the ground were originally granite.

2.5.2.2 Iron Furnace

The first manufacturing enterprise in Quincy, or in fact in all of Mass Bay, was an iron furnace. John

Winthrop, Jr., son of the governor, formed a company in England to raise funds for an iron works in Boston in 1644. The town of Boston granted the use of Braintree land for the project. The furnace was built along a brook that still bears its name. Unfortunately for Winthrop, the Furnace Brook was so under powered that iron cost more to make in Quincy than it did to import from England. The company went bankrupt in 1653. The furnace that produced the first commercial iron in America was excavated in West Quincy by Roland Wells Robbins.

2.5.2.3 Quincy City Hall

Shortly before Quincy opted to become a city, a town hall was constructed directly across from the United First Parish Church. This building was constructed of granite, and designed by Solomon Willard. Solomon Willard is better known as the architect of the Bunker Hill Monument, which became the model for the Washington Monument.

The City Hall opened November 1, 1844 and is still in use today. Rather than tear down the building in the 1970s when more space was needed, an addition was built adjoining the City Hall.

2.5.2.4 Bunker Hill Quarry

The 1826 quarry that supplied the granite used in the construction of the Bunker Hill Monument. Willard's shops for shaping the stone sill exist here. Called the birthplace of the 'Father of the Granite Industry.'

2.5.2.5 General Dynamics Fore River Shipyard

The General Dynamics Shipyard stands on the site where there has been a shipyard since the 1700s. The Fore River Shipyard (or yards) has produced ships throughout Americas History.

2.5.2.6 U.S.S. Salem

The U.S.S. Salem was built at the Fore River Shipyard by the General Dynamics Corporation. A historic site in its own right, it stands at the shipyard where it is open to the public.

2.5.3 Hancock Cemetery

Across the street from the First Parish Church, and immediately next to the City Hall is the Hancock Cemetery. This cemetery contains the graves of colonial residents, including the Reverend John Hancock and many revolutionary war veterans. The cemetery is typical of the period, with very simplistic ornamentation on the grave markers. The grave makers were typically of slate or granite, as these stones were plentiful in the area.

2.5.4 Thomas Crane Public Library

Built with money left in the will of Thomas Crane, the Thomas Crane Public Library is an excellent example of Romanesque architecture. The library is located directly in back of the United First Parish Church. Designed by H.H. Richardson, the library is a mix of brownstone and local granite.

It is perhaps one of the best Romanesque Richardson buildings in existence. The stained glass also is in excellent condition. There was an addition built in the 1930s, in the same style but with some variations. The ceiling was modified from the Romanesque style to improve internal lighting. The external brick of the addition was coated with mica to match the texture of the original

building. The library is currently undergoing a restoration and expansion to include a new wing.

2.5.5 Quincy Stone Bank

In 1836, the first financial establishment of Quincy was founded and called the Stone Bank. Capitalized at \$100,000 it became the largest bank in the South Shore. In 1865 it was rechartered as the National Granite Bank. In the year of the Great Crash, 1929, the granite tower that now stands in Quincy Square was erected.

2.5.6 Abigail Adams Cairn

It was erected in 1896 to mark the location where Abigail Adams and her son, future president, John Quincy watched the battle of Breed's hill in Boston [Commemorated with the Bunker's Hill monument]. It stands on Penn's hill in Quincy, where on a clear day one can still see the Charlestown heights. The Adams family watched smoke from the burning town and listened to the cannon on June 17, 1775. Abigail wrote of the battle to John, who was attending the Second Continental Congress in Philadelphia. Abigail's letters to the John proved to be the best military intelligence reports the Congress received until Washington became Commander-in-Chief. Even though her letter took three weeks to travel from Braintree to

Philadelphia, it was the first the Congress heard of the attack.

2.5.7 Nantucket Lightship

The Nantucket Lightship is the last remaining light ship in the U.S. The Coast Guard used it until it was retired and docked at Marina Bay in Quincy.

2.5.8 Col. Josiah Quincy House

This building was the homestead of the famous Josiah Quincy family. Built in 1770, it was the handsome mansion of a large country estate. Here many members of the Quincy family lived, including 4 mayors of Boston.

2.5.9 Moswetuset Hummock

Seat of the Massachusetts Indians, for whom the Commonwealth originally derived its name. Virtually unchanged since pre-colonial times, it is the oldest recognized historic site in Massachusetts. It remains situated at the end of Wollaston Beach in Squantum.

2.5.10 Merrymount

Site of the trading post of Captain Wollaston in 1625 and location of Thomas Morton's maypole. The celebration at the maypole erected here gives the site its name 'Merry Mount' and was the cause of Morton's banishment.

2.6 The Use of Historic Sites as a teaching tool

According to the National Parks Service, "Places around us lift events and people off the pages of textbooks, helping students connect history to their own lives. Studying places as evidence from the past requires active involvement, imparts a sense of discovery, and makes learning exciting." A historic site or landmark allows students of history to connect to the past, reminding them that they are learning about real events, people, and places. These things existed in the past, and continue to exist today. The Adams National Historic Site remains much in the same form as when the presidents lived in it. To see it is to realize that history is not just an interesting story, but the story that caused our nation to be. By visiting, people realize that they are experiencing something that the founders of our country experienced. At a historic site, one does not simply learn history, they commune with it.

2.6.1 The Internet as a Medium

The Internet's popularity has been increasing rapidly. Of its many uses, the most important is the dissemination of information. It allows information to travel faster than ever before, speeding up research and

allowing a wide variety of topics to be explored. Access to information has changed and is changing faster by the day. To keep up with the changing informational demands, historical sources must be adapted to meet the needs of modern society. By the use of a virtual reality tour, many people who would otherwise not be able to visit the historic site may do so, if only in an abstract way. It would provide quick and easy access to historical data that the modern researcher requires. The project serves as a model for a modern, interactive way to access history that would be as engaging as first hand observation.

2.7 History of the Internet

We have researched the Internet and other technical issues because it is important to understand the medium we are using. Visualized as a network of networks, the Internet was not created as it stands today, but was assembled in an ad hoc manner.

2.7.1 The Internet

The Internet is the result of U.S. government funded research done in the 1960s and 1970s. Originally called APRANET, after the Defense Advanced Projects Research Agency Network, it was used to connect research computers at schools and government sites. In the early days of computers, the devices were so expensive that an organization could only afford one or two of them, and they were large expenses.

By late 1960s, smaller computers were becoming more prevalent, and a means to connect these systems was necessary. The defense department was the first group to address this need, and by the early 1970s many dozens of computers were exchanging information over leased telephone lines. Schools such as the University of California at Berkeley and companies such as BBN provided many

enhancements the work that was being done, mostly through grants and funded research.

The Internet in its APRANET form was transferred to the National Science Foundation and became known as NFSNET. NFSNET connected schools and research institutions, but did not carry commercial traffic. At this point in time, most non academic use of computer networks was done by large corporations that leased connections from telephone carriers, or leased access to a value added network, or VAN, that could be used to send packet data.

As more and more people gained access to lower cost computers, an increased demand for low cost, decentralized network access was becoming more common. By the end of the 1980s, there were many companies providing access to an alternate Internet backbone known as CIX, or the Commercial Internet Exchange. The corporate use of the Internet grew so quickly that by the early 1990s the NFS decided to get out of the network backbone business and shut down their backbone.

The current Internet consists of a dozen or so major backbone providers, such as MCI-WorldCom, GTE, and UUNet. These providers run fiber optic cable, typically along highway and rail corridors, and provide access to this network for smaller regional access providers. These

backbone connections are very similar to telephone trunks. In fact, the Internet ran over T1 telephone trunks as its main backbone for some time. Now OC-3 and OC-12 rings are common, with OC-48 and OC-192 backbone connections are in the works. OC-3 is an optical carrier with about 45 Mbits of bandwidth. A typical U.S. telephone trunk is 1.5 Mbits.

The reasons for using such high speed interconnects are numerous, but a few applications stand out. Transmitting video or audio is a high bandwidth activity and is expected to become an increasingly larger proportion of the data traffic. Many media companies envision streaming video on demand, where consumers will be able to choose the content that they wish to receive interactively from the broadcaster.

Streaming video also has other applications. A user can request a movie, an individual scene, or a single frame. It is even possible to look closely at an object seen on screen. The technology that makes it feasible to these things has only been around for a short time, but is becoming popular due to its ease of use and myriad of applications.

A virtual tour requires the interaction made possible by this technology to be effective. The user must have the freedom to interact with surroundings. The very concept of

surroundings is key to this application. When reading from a book, one can gain information, but it is in a two dimensional form. There is no perspective, particularly a spatial perspective, to use to relate the information.

2.7.2 The World Wide Web

The World Wide Web is one of the many applications that has come into existence from research on the Internet and has contributed considerably to the information culture. First developed by CERN in the early 1990s, the World Wide Web was presented as a way to electronically distribute documents. The Internet was a large network by the 1980s, but in the 1990s the World Wide Web gave it a standard language to use to distribute information. It has become so popular that many people think of the World Wide Web as the Internet.

The World Wide Web, or WWW as it is more commonly known, distributes information using the Hypertext Transfer Protocol, or HTTP. It is called hypertext because there are contextual links embedded in the document, allowing the user to instantly see cross-referenced information.

Documents are written in a language called HTML or the HyperText Markup Language. The first application to deliver HTML documents was the CERN server. Although the

CERN server is no longer in common use, it was reclaimed into another product called Apache, which is now the most popular web server application. It was called Apache because it was a patched version from many sources.

The first client or browser as these applications are referred to, was written by the National Center for Supercomputing Applications. It was called Mosaic, and allowed users to view documents written in HTML and served by the CERN http server. Mosaic is no longer used, but parts of it live on. Some of the original developers went on to write an enhanced version called Super Mosaic. It was not a commercial success, but became a company called Spyglass. The Microsoft Corporation decided to include a web browser with their software. Rather than write their own, they licensed the code from Spyglass, causing a variant of Mosaic to become very popular.

2.8 Technical Aspects

To make our website work, we must use the tools of the computer age. These languages, applications, and formats are what make the complex world of computing work.

2.8.1 HTML

The basic language that documents on the World Wide Web is HTML. It is a subset of a large and complicated markup language called SGML. HTML provides certain constructs, called tags, to specify the layout of a document. These tags specify things such as section headings, tables, text emphasis, and logical layout. They do not dictate how the document is to be display, which is up to the client web browser, they tell how the information is organized.

The assumption that HTML does not allow formatting information, such as fonts and colors, is both a blessing and a curse. It encourages the presentation of information in a clear form, and frees the author from dealing with the physical layout of the document. Publishers do physical layout, authors generally care about content. Those who want to enforce stylistic rules on the data that they are publishing have a lot of problems. They are forced to fit their data into the tags that HTML has defined. In many

cases, this information is not in a form that makes sense in a text document.

In an application such as the one we have developed, the author needs very fine-grained control over the layout of the document. A map of city would not make much sense if the items were placed randomly around the page. Thus, it is necessary to use other tools to force some rules onto the document.

2.8.2 Static vs. Generated HTML

Web pages come in two forms, static web pages, and dynamically generated ones. Static pages are written in ordinary HTML, and their content is determined when the author writes them. HTML can also be generated by the web server. A program generates the HTML code while it is running. This means that the content can change depending on conditions when the user requests such information.

The expense of dynamically generating an HTML document has three problems that concern us. Mainly, having support on the web server for the program that generates the code is our concern. The web server used must support our program or the work done would be useless.

We are also concerned with the complexity involved. In the case of several hundred web pages being

necessary, generated HTML would greatly simplify the task. But in the case of only a few such pages, it would be easy enough to write them by hand.

The problem with generated HTML is the impact it has on server performance. Processing time is required for each request, so it would be a problem if we were not the exclusive users of the machine hosting the web pages. This issue was mentioned to us repeatedly, therefore we were discouraged from using CGI in any form.

2.8.3 Image Maps

An image map is a special type of HTML link that is an image, not a line of text. There are many ways to implement image maps, but they all work in the same way. The user is presented with a piece of graphical data that is referenced to some other data. Depending on where the user clicks on the image, he is brought to that information.

2.8.4 Server side CGI

CGI, or the Common Gateway Interface, is the traditional way to implement an image map. It works in a somewhat inefficient manner, but is easy to set up and was therefore the first widely used way to publish image maps. It works by using an image as a link that points to a CGI script on the server. Clicking anywhere on the image will activate this script. This image also has a special tag called ISMAP. The ISMAP tag tells the browser that it should pass the coordinates of where the user clicked to the CGI running on the server. The CGI script runs, consults a map file of coordinates for the image map, and compares them to the coordinates that the web browser

passed to it. It then sends the appropriate page to the user.

There are a number of problems with this approach. First, it requires a program to run on the server. Since we did not know if we would be able to use CGI scripts on the server where this web page would ultimately reside, we had apprehension towards using it. A CGI script is executed every time a user clicks on an image map, so there would also be a performance problem on the server should this site ever become very popular. Creating the map files of coordinates would also consume a lot of our resources, and this time could be better spent developing other materials for the tour. Finally, there is no feedback given to the user when this is done. We considered feedback to be essential.

2.8.5 Java

Image maps can also be created in Java. Java is a programming language that is used to embed small applications inside a web page. If the web browser support for any feature is lacking in some way, it is possible to create a Java application to do the same job. The attraction to Java is twofold. Firstly, it would involve no code running on the server. Next, it would allow us to

offer feedback to the user depending upon where he or she puts the mouse. If the user clicked on an area that we had not designated as important, nothing would happen, and the user would continue on looking for another link. The CGI approach would cause the server to send back another page, causing the user to wait. Additionally, if we decided at a later time that we needed to add some functionality, we could add it to the Java applet.

The negative side of the Java approach is the time necessary to write the image map program. While we would have the freedom make the image map work whichever way we pleased, we would also have the responsibility of dealing with all of the things that the web browser would normally do itself. Further examination revealed that writing an applet to do everything that we needed would take more time than the rest of this project. There was no general purpose Java applet for image maps that was freely available, and at this point we ruled out using Java.

2.8.6 Client Side

Client side image maps have only been around for a few years; they are relatively new compared to the other types of image maps. Client side image maps work by embedding the map coordinates into the HTML containing the link to the graphic used in the image map. They have the benefit of all control logic being done in their browser, and feedback given to the user. They also allow for dead spots in the image that do not link to anything. As this function is built into the web browser, it is not necessary to write any code for this technique.

Running in the browser, client side image maps are not dependent on the server for anything. They do require that the browser support client side image maps though. In the past, this was a potential problem. Netscape has supported image maps since version 2.0 of their browser, or since about 1995. Client side image maps have been supported by all versions of Microsoft's Internet Explorer. There is probably more support for this technique than there is for Java, and this is what we decided to go with.

2.9 Digital Cameras

In recent years, digital cameras have been gaining popularity, in much the same way that digital camcorders have largely replaced home movie cameras as well as many professional devices. This has resulted in increased feasibility for interactive projects such as the one detailed in this project.

The benefits of digital cameras are numerous. To begin with, the cost is far less when compared to traditional technology. In the past, it would be necessary to shoot several rolls of film, process the film in a darkroom, and then most likely make a contact sheet. Finding the desired photo on the contact sheet, the photographer would then make proofs. After additional darkroom work to get at the final product, a usable photograph. This task can become quite frustrating because image quality is not known until the film is developed. There are significant expenses, both in the cost of film and chemicals and more importantly in the time spent doing darkroom work. Finally the photos must be scanned into a digital form.

Digital photography solves many of the problems associated with traditional photography. The graphics are ready for immediate inspection, reducing turnaround time

making this mode of photography far more feasible for web design. The major tradeoff is the quality of the images, which for many applications is a serious limitation. For a web page, however, it is not a constraint at all; images can be modified easily. The digital format used by the camera negates the need to scan the images into a readable format

This project centered on two topics, history and photography. No discussion would be complete without mentioning the underlying technology. Digital photography works in a manner that is somewhat different than traditional photography.

Traditional photography is a chemical process. Light is exposed to a layered piece of celluloid containing a silver emulsion that is sensitive to light. When exposed, a "latent image" is stored on the film, and when developed the areas exposed to light will be washed away. The remaining material creates a negative, which is used to make normal prints with an enlarger. This process can be quite difficult, especially for some applications.

Digital photography is almost entirely electronic, and is made feasible by computer storage. A digital still camera works in much the same way as a video camcorder, but stores data as a digital image instead of on

an analog videocassette. The resolution is typically much higher than video. This is why a digital camera typically stores about 25 images, compared to the 6 hours that is typical of a video camcorder.

Both a video camcorder and a digital camera use the same type of device to capture images, called a CCD or Charged Coupled Device. This computer chip reacts to light that falls on it and produces an image to be stored. These devices can also be made with CMOS (the technology used to make memory chips), and this has been responsible for recent decline in the price of digital cameras and other electronic imaging devices.

2.10 Applications to Virtual Tours

Ultimately our concern is the creation of our virtual tour. For that purpose we have decided to use only HTML, though we are making heavy use of more advanced tags added by Netscape, and are relying on images for most of our content. Internet technologies are in a state of constant flux, and decisions made only months ago become outdated as emerging technology changes the playing field.

Most of the tools we experimented with turned out to be unfeasible for a number of reasons. Those that were most useful were the ones that have been around the longest. While VRML and QuickTime VR seemed to be suited to exactly the specifications we were looking for, the drawbacks in cost and complexity made them all but totally unusable. Conversely, the most basic technology, HTML, was also the most useful. It is well supported and contained enhancements that directly benefited our work. It also is the most likely to survive the next several years of development.

2.11 Literature Review

The study of Quincy and the people who contributed to its development has been a widely researched topic. Many of the first historians of the Adams family, for example, were the members of the Adams family themselves. Charles Francis Adams wrote a history of Massachusetts, including a large section on Quincy. In addition, he was the first person to edit his grandfather's Diaries for publication. Since Charles Francis, there has been a long line of historians from Quincy interested in the city in which they lived. Others wrote about the important families of Quincy, including the Adams family and Quincy families. By reading these works, as well as the city pamphlets prepared to promote tourism, we became prepared to create a cohesive tour of the city of Quincy that not only shows the monuments, but also tells the story of Quincy.

We believe that one cannot simply tell the story of a monument without placing it in its context. Without this information, the power and significance of the monument is lost. To that end, there were many resources for information at our disposal. For primary source information (not that the scope of our project required such extensive material) there were the Adams Papers. The Adams Papers are the collected works, letters, and diaries

of the entire Adams family. This is an ongoing project by the Massachusetts Historical society and has been since John Adams donated his works to that institution. For more general purposes there were many works of biography and autobiography surrounding the Adams family.

Examples of this material included The Adams Chronicles, by Shepherd, which spans four generations of the family. The Character of John Adams, by Shaw, Abigail Adams, by Levin, Dearest Friend, by Withey, and The Book of John and Abigail, by Butterfield. These represent sources related to the first generation of Adams. There are many biographies of John Quincy, such as the Life of John Quincy Adams, by Seward. The Education of Henry Adams is an autobiography. Sources available on the Adams Family are many, and not difficult to find. They aided us in learning about the family itself and their place in history.

The Best of these books was the Adams Chronicles. It covered 4 generations of Adams, placing them in history. It shows how the family grew from John Adams's legacy as a statesman and benefactor. It becomes quite clear what "Adams-like" traits existed in common through the generations. The Adams men were very similar. All of them were well-educated men, who believed in continual study throughout life. John studied law and political

philosophy, John Quincy studied science, and Henry was an author. Each of them contributed to the family library, which now exists as an adjunct to the main mansion building, build by Charles Francis.

The Adams family believed in the American Dream, of making life better for their future generations. Father and Son, John and John Quincy both served as President of the United States to follow this goal. They were, however, highly opinionated and followed what they thought was the correct path rather than pandering to their constituents. In the era of Jacksonian Politics, the Adams family's political life was doomed. They were rather high-strung and prone to argument. All the Adams were known to be good debaters in their political and social lives.

The Quincy family is also well documented, having a large impact on early Quincy and Boston History. The life of Josiah Quincy of Massachusetts by Edmund Quincy, and the autobiographies The Memoir of the Life of Josiah Quincy, and The Public Service of Josiah Quincy. One issue needed to be resolved is the occurrence of the name 'Josiah Quincy,' which was used for 6 different people, many of whom were very important to the Cities of Quincy and Boston. In creating this website, we must be mindful of

this and other issues that may be unclear as we describe the history of the City.

For more general histories of Quincy, there is Three Episodes of Massachusetts History, by Charles Francis Adams. Volume two of this work describes 'Old Braintree' and its metamorphosis into Quincy. Quincy: 350 years, was prepared in 1975, 350 years after Captain Wollaston founded the area now known as Quincy. Quincy: a Pictorial History literally offers a look back at what Quincy once looked like. In addition to these works, many organizations have prepared pamphlets to promote tourism and trade. The National Parks service, the Quincy Historical Society, and the City of Quincy have made several of these documents describing many of the local points of historical interest.

Over and above all these references, we have access to the Quincy Historical Society's Archive as well as the National Parks Service's Archives. Through their continued cooperation, we have had access to many documents and other resources that cannot be found elsewhere. The single most important collection of documents we dealt with was the Furnishing reports. These volumes detailed every room in the Mansion as well as every artifact in each room.

3.0 Procedure

This project, as all projects, had to be conceived, planned, carried out, and concluded. Like any good work of engineering, the conception and planning must always be done with an eye for its final product. As circumstances change, so too must plans, making the finished product is different from the first idea. An IQP's story is in many ways more important than the item being created: The final product less important than the road that took it there. This is the story of our IQP.

3.1 Quincy's Multiple Jurisdictions

In doing this IQP, we ran into a very interesting challenge: There is no one single organization in Quincy in charge of the history of the city. There are, in fact, many organizations which control individual aspects of the history and no formal committee or union of these organizations. The crown jewel of Quincy's historical buildings, the Adams Family Mansion, is run and maintained by the National Parks Service, as are the John Adams Birthplace, John Quincy Adams Birthplace, and the Tomb of the Presidents. The First Parish Church is a church, and run as such. The Quincy Historical Society is housed in the Adams Academy, and holds extensive archives and genealogies of Old Braintree and Quincy. The Metro District Commission (of Boston) runs the Josiah Quincy House, the Dorothy Quincy House, and the Quincy Quarries. The Thomas Crane Public Library is an extant library and so managed as such; the historical aspects are done internally. Old City Hall is still the chamber of the City Council of Quincy, and therefore is run by the City of Quincy. The City also manages various monuments and the Hancock street cemetery.

3.1.1 The Need for Compromise

In order to work in Quincy, we had to constantly meet with each organization when their interests were involved. Finding a solution that is agreeable to all was necessary. The best illustration of the challenges one faces when working on Quincy's history is the tomb of the presidents. The tomb houses the remains of Presidents John Adams and John Quincy Adams, and their First Ladies. The National Parks Service runs tours to the crypt. This is, however, located in the basement of the First Parish Church. The First Parish Church is a church and the National Parks Service is a branch of the Department of the Interior of the United States of America. Separation of Church and State being what it is, the organizations are distinct and sometime have differing goals and needs. All in all, although the organizations of Quincy are separate and had to be approached separately, they were all cooperative and in fact very willing to aid us in our project.

3.2 The History of the Future of Quincy's History

Our project, like many others, had to be revised as circumstances warranted. As access to the various historical sites changed, so too did our vision of the website. Negotiation with the various agencies in charge of these historic sites dictated the course of this project.

3.2.1 The Hook

We had a goal: to fulfill the undergraduate requirement of doing an IQP by creating a virtual web tour of our hometown, Quincy, MA. Creation of such a tour was our goal before we had a formal project at WPI, and we were interested in seeing if it was feasible. We knew we had the knowledge necessary to perform the task, and could learn anything we did not know already. What we needed was contacts, people inside Quincy's historical community who would be willing to help us and to indicate others whom we should talk to. We knew that Ed Fitzgerald was the Quincy Historical Society's attaché to many schools in Quincy, so we contacted him in D98. He was very interested in our idea and told us that if we should get a project at WPI he would be glad to give us any aid he could. With that, we felt secure in writing up a description to attract an

advisor. We then received the sponsorship of Professor Hanlan for an IQP to be done A98, B98, and C99. We had our IQP

3.2.2 A Star is Born

Starting in A98, we began the IQP. We spent the better part of that first term researching and writing the formal proposal for WPI. At that time, we also began meeting with the various organizations who would be involved in our project. These two events had to be done concurrently, as the level of cooperation from the various institutions would dictate how the project would be carried out. We were hoping for the best, but planning, initially, for the worst. We learned that the NPS buildings would be closing in November, and so planned on needed to get through them quickly. These building were our main objective from the project's conception; they represent the single largest attraction to the City of Quincy. We sketched out a plan for the tour, which was to have a very detailed Adams Mansion with general outlines of the other sites in Quincy. Our proposal was submitted toward the end of A98, with much of our methodology decided upon.

3.3 The Adams Family's Value

The most important feature of our original plan was the Adams Historic Sites run by the NPS. The most commonly known facts about Quincy involve the Adams family. Also capitalizing on the recent movie *Armistad*, it was hoped many people would be interested in learning more about this family and their many contributions to America. It was decided that other sites in Quincy would be secondary to our including these buildings with as much detail as we could. This would, of course, require a great deal of cooperation on the part of the NPS, in terms of access to the sites and information about them.

3.3.1 Rejection and Reversal

Our first visit to the Visitor's Center lead us to believe we would not be granted such a level of cooperation. The person with whom we spoke told us that we could have access as part of a tour and were allowed to take any pictures we wanted while traveling through the tour. We were disappointed that we could not included the rooms which were not on the tour and that we could not gain access to many of the items not regularly on display. With this belief we decided that to compensate for this, we would increase the scope of the tour to include many more

sites, but with a far more cursory approach than what we had intended originally.

3.3.2 Resignation and Reassessment

We proceeded to widen the scope of our project in B98, while lessening its depth. We strengthened our contacts with other organizations to include them to a greater degree. We had decided that if we could only have the regular tour of the NPS locations on our site, we could round out our city tour with more sites with the same level of coverage. The more we worked with this idea, the more it appealed to us: the more sites we could include, the better a visitor to our webpage would have of the scope of what Quincy had to offer.

3.3.3 Redemption and Restoration

One day while working in B term in Quincy, we stopped in at the NPS visitor's center. We had talked with several of the rangers there about the Adams family and our project, but there was always a different person at the desk and the range of interest in our project varied greatly. On this particular occasion, we were interested in seeing if we could gain greater access to the buildings after the tourist season. Our project was far from

completion and the closing time of the buildings was at hand. The man we spoke with apologized and told us that the buildings would be closed and had to be made ready for the winter. We then told him of our project and as we did he became very interested. He told us of his desire to enhance the NPS website's coverage of the Quincy historic site. After talking with him for some time we came to the conclusion that we could help each other greatly. Through him, we were able to gain greater access to the buildings and holdings of the National Parks Service. It appeared that we could once again focus on these locations and give them the depth and richness they deserved.

After much deliberation and discussion, we decided that the best course of action was to get the other organizations involved in the same manner as the Parks Service. Instead of a superficial website, the result would be a site which included all the sites in Quincy in as much detail as possible. The only problem was we would not be able to complete such a large project ourselves.

3.3.4 The Grand Unifying Theory

The final revision of our plan was to get all the organizations in Quincy to agree to a project, create a framework for that project to grow in, and train members of

these organizations to add to that framework. Once the site was created, it was simply a matter of archival, digitization, and filling in the blanks to add to it. The problem is, a unified page would be huge, requiring the additions of many historic sites and monuments, most of which have no centralized catalog of artifacts to refer to. Once our framework was in place, however, it would simply be a matter of getting the individuals who knew the historic sites best to supply the information. Our model team was our working with the NPS, which already had their artifacts cataloged and which has a full time person devoted to technical aspects as well as history. This prototype could then be used to attract other organizations to join the site.

3.4 NPS on board

With the help of the National Parks Service, we knew we could succeed in creating a tour of the Adams National Historic Site. Through them we had access to restricted areas of the mansion as well as records, catalogs, and slides of artifacts.

3.4.1 Official Aid

Before they could officially help us, we had to submit a proposal for review by the director in Quincy, Caroline Kenneth. This took a week or so, and put us firmly into mid B98. We were then formally recognized as helping the parks service in their creation of a website.

3.4.2 Initial meetings

In our first meetings with John Stanwich, the Park Ranger in charge of technological aspects of the Quincy site, we discussed our ideas for a website. His vision and ours were very similar. The major differences were that he required more 'family oriented' material, for younger audiences: games, puzzles, and other activities to stimulate children's minds about history. Our plan included sites that he was planning to mention only peripherally.

3.4.2.1 Custody battles

Many of our discussions focussed on jurisdiction of the historic sites and the problems that might arise for custody of the website. Although the organizations involved were either public or non-profit, many of them were protective of their own jurisdictions.

The National Parks Service, being a federal organization, represented the group least open to outside custody of their historic sites. Earlier plans for the IQP were framed in a Quincy City sponsored site, given to the local government's Department of Data Processing. As meetings with the National Parks Service progressed, however, it seemed more and more likely that it would have to reside, at least in part, on NPS computers.

3.4.2.2 Plans for the Future

Other talks with Ranger Stanwich included the possibility for further work on the project. There were far too many sites in Quincy for one IQP to cover, but if the NPS, or a conglomerate of Quincy's historic organizations, were to offer a project at WPI in the future, they could continue our work and fill out the tour of Quincy. We recognized the importance of getting Quincy

on the Internet, as did Ranger Stanwich, which made him a perfect contact to have at the Parks Service.

3.4.3 The Tour

To better understand what we were working toward, we took an actual tour of the Adams estate. We had a private tour, with Ranger Stanwich as our guide, and we were granted access to parts of the mansion normally not included on the tour for safety reasons. The building was not constructed at one time, but represents a series of additions and renovations the Adams Family made as they required more space or more modern conveniences. When the Parks Service gained stewardship of the building, they reinforced several sections to accommodate visitors. Due to construction constraints and obtrusiveness of changes, they were unable and unwilling to alter the building significantly. The result is that tours are not allowed into the 1800 addition, nor are they allowed up to the 3rd floor. As we took the tour we were interested in what a normal tour would include and also how to integrate this with a web tour. We decided that the structure of the tour should mimic a regular tour but include items that could not be seen well, or at all, to a regular visitor.

3.4.4 The Furnishing Reports

One of the major advantages of working with the NPS, aside from access to the physical site, was access to their information. The greatest resources in this regard are the furnishing reports. These volumes represent a lifetime of cataloging the rooms and artifacts in the old house. They were compiled by Brooks Adams's secretary after the old house passed out of the family's possession. These reports are very detailed descriptions of each room in the house and the artifacts contained therein. Each room's report consists of a picture of the room, a description of it, and its historical significance. Often the room has several anecdotes attached to it as well, which these reports include. Along with each room, each artifact in the room has its own picture, description, and historical significance. The transfer of these volumes to a computer represents quite a project for the future.

3.4.5 The slides

Another resource which we gained access to is the slide collection of the Parks Service. The rooms of the mansion are poorly lit and many of the artifacts are in glass cases, making photography under normal conditions near impossible. Many of the rooms and artifacts contained

in the house have pictures in slide form that we were able to borrow for a period of time and scan at the IMC. These slides were taken in many seasons and provide much better images than we were capable of obtaining with out professional photography equipment. Our use of the NPS slides was facilitated by Ranger Agnes Smith, with whom we met several times over the course of B98 and C99. A copy of one of the slide release forms is included in the appendix.

3.5 The Adams Birthplaces

One of the sites we are most chagrined at not having is the Adams Birthplaces. Unfortunately they were under renovation this year and we were unable to work with them. We hope that this is one of the areas the NPS will be able to fill in the gaps on, especially as information becomes available for photography again this summer.

3.6 The Church of the Presidents

Dealing with the United First Parish Church required meeting with not one but two representative groups. As a National Historic Site, the Parks Service is responsible for crypt including arranging tours there. At the same time, as a church, the minister is responsible for much of the same duties. This is especially an issue in the winter months, while the congregation is meeting and the building is closed for tours, at least without appointments.

Oddly, while tours are being given, the church is closed, as it does not meet during the summer months. This made it considerably easier to meet with the Parks Service staff than to meet with the rest of the staff. Eventually we did get in touch with the Reverend Sheldon Bennett. He offered us any assistance that we needed, and has agreed to aid in the creation of a detailed tour of the church. To do this, they must catalog their items and create digital images of the Church be included on the Quincy interactive tour.

Dealing with a site that is managed by two organizations is an interesting experience. When a question is asked, one group typically points you to the other

group. Ultimately, however, both have a shared interest in promoting tourism and understanding of history.

3.7 The library

Another of the interesting sites in Quincy is the Thomas Crane Public Library. We met with Mary Clark of the Reference Department, housed in the Richardson building, to put the historic wing of the library into our tour.

3.7.1 Website

The TCPL already had an internal website, used for their card catalog. In addition to this, they have information on the city of Quincy as well as the library itself. After investigating their page, we found that most of it was redundant. Most of the city's pages spent their time talking about the same things, leaving them little time to explore their own piece of history. Talking with staff at the library, they seemed very interested in becoming part of a web tour of the city. Many people do not realize the significance of the library and its inclusion with other buildings would improve its recognition.

3.7.2 Richardson Building

We were able to take pictures of the Richardson building, though parts of the library were obscured due to construction. We focused on the architecture of the building as a classic piece of Richardson's work. We also

took pictures of the LaFarge stained glass windows. We hoped to put these photos together in such a way as to create the feeling of being in the library itself. In addition, we included notes on Richardson's work and outlined plans for the inclusion of a history of the building process itself. The library has excellent records on the city council meetings and of the planning of the building itself that would interest any student of Richardson's work.

3.8 The Alliance

The most important feature of this project was unifying the historical organizations to agree to house their sites in a single website.

3.8.1 History and the Web

As this project continued, more and more of these organizations took advantage of the internet on their own, but no single organization had taken the task of uniting the city. These webpages did not exist when our project started, but as the popularity of the idea grew, other organizations made their own ad hoc pages. Generally, the pages were created around the time we talked with them. For example, the Thomas Crane Library's web site. When we first talked to them, they had a web based card catalog system and a brief page on Quincy's history. There was no attempt to integrate it with any other site. Most of the other organizations created their own sites as our project continued, but they were of limited scope and substance.

3.8.2 Unification

What we did was convince these organizations that it was important to house all the places in one website, so that people from the outside understood that all these

places were actually in the same place. The idea of a single, city wide tour excited people, because that is how the city is presented to a physical visitor. They can go about the city and visit each site and see how it fits in the city as a whole. That is exactly what these autonomous sites lack: Continuity. Also, our 'tour' would give the user a feeling of reality, which the static pages lacked. A user would move from building to building, room to room, and would be able to investigate objects in that room. It was this idea that attracted these organizations to our project.

3.8.3 Informal Union

In the end, the result is an informal agreement between the organizations to share resources to create a unified tour and history of the city of Quincy on the Internet. Now that the participants agreed, we needed to create a framework for these resources to exist.

3.9 Webpage

We created an agreement, but that was only half the battle. What we required was a framework for future growth. To show how the tour should be created, we created a prototype of a web tour, focussing on the NPS run Old House. The Old House is the best documented building in Quincy, full of artifacts, and presents all the challenges that would have to be faced for any other building.

Constructing a web site is not an easy process to describe. Much of the methodology is gained through experience, and is not a well-documented process. The steps we followed are similar to what others have done when presented with the same tasks.

3.9.1 Tools to use and not use

The first step we took was to design as much as the website as we could on paper. This gave us a framework to see what work would be necessary as we progressed. Having a good idea of what we wanted made it easier to decide what would be feasible and what would not. This also helped us when analyzing other web sites that had been designed for similar intents. We were able to take what we thought would be practical, but focus away from tasks that would be prohibitive in terms of time.

3.9.1.1 VRML

We learned from a previously done project that using VRML would be very difficult. Though at first appearance the Virtual Reality Modeling Language seemed to fit in with creating a virtual tour, it also had some flaws. VRML is very difficult to produce, requiring software that we did not have access to. It is also time consuming to produce. In terms of the end product, current web browsers do not support VRML very well. These facts make our decision not to use VRML a wise one.

3.9.1.2 HTML

We decided to use HTML as much as possible in our project. It was the simplest technology to work with, it had the widest potential audience, and was capable of meeting the design criteria that we had established for the site. HTML had other benefits as well, as both members of the team had experience using it.

3.9.2 Image Processing Tools

Preparation of images was integral to the design of the web site. The contrast and colors needed careful adjustment to be usable on the web site. Two tools were

primarily used. These were Adobe Photoshop and the GNU Image Manipulation Program. These represent the state of the art in graphics software for preparation of images for the World Wide Web.

3.9.3 Server Software

Not having access to the computers that would eventually house our work, we were forced to set up our own web site for testing. This was done using Apache on a Solaris workstation. The configuration was eventually moved to a Linux computer when we required additional disk storage. Apache is the most common web server currently in use, so we used it to maximize the potential portability of our work.

3.10 Methodology for Creating Web Pages

The process for creating web pages is not easy to document. It mainly consists of experimentation, trying to find a balance between the many factors that will either attract or deter the end user from the web page's content. The variables that affect this include the size of the page, the amount of time it takes to load, the size of the fonts, the color of the text, but can include any number of other factors as well. It is a subjective gauge, based

purely on personal aesthetic, and experience is most important in making the decision.

3.10.1 Producing Images

Images were produced in 2 different processes. One process was used for the slides, another was used for the digital photos. The slides were professional photographs that did not require much attention, but did need some restoration due to their age. Digital photos did not have any quality issues, as they had not been archived in an environment where they would deteriorate. The digital photographs, however, were not of the same quality as the slides, and required different techniques to make them usable.

The process for using the slides includes several steps. After convincing the National Parks Service to give them to us on loan, we took them to WPI. In the movie lab, we used a Nikon slide scanner to individually acquire each slide digitally. This was a very tedious process. First, the equipment had to be configured, which was a trial and error operation. When all of the components were working, we were able to start scanning the slides.

Each slide had to be loaded manually. After this, it would take 5 minutes to be digitized. After

scanning the slides, some adjustment of colors was done. The most important changes, however, dealt with light levels. There was a great range in the lighting quality of the slides, causing some to be almost black and unusable, while others were very faint as to be invisible. The slide scanner magnified the lighting defects. In many cases, it was necessary to scan the slides more than once, trying to get a better quality image.

The digital images were much easier to deal with, in contrast to the 30-year-old slides. Transferring them to a computer only involved placing a 3-inch floppy disk in a drive and mounting it. We transferred some 50 megabytes of image data this with the average image size was about 15 kilobytes.

Processing the digital images was a different kind of task. These images often had serious flaws, such as shadows or obscured shots. Modifying these photographs using Photoshop eliminated these problems. This is traditionally the more advanced kind of work done in a darkroom. Use of computer programs instead of a darkroom saved weeks of postproduction work.

3.10.2 Accompanying Text and Descriptions

With the images completed and placed on the server, wrote the text that would accompany the graphics. Many of these descriptions were already provided to us, in the form of explanations next to many of the artifacts on display. This was the case at some of the sites, but at others we needed to interview the tour staff to have enough information to properly accompany the images that we had.

Going on tours of the sites was one way to get this information. In the case of the Old House, we took notes from and photocopied large parts of the nine volume furnish reports. These reports provided more information than the casual viewer would ever want to know.

3.10.3 Creating Imagemaps

The primary means for navigating our web site was by means of image maps created on top of images of entire rooms. This allows the user to click on an area of a room and be presented with a more detailed view of an area or object selected. Generating the image maps was a meticulous process. It is necessary to draw a rectangle on the image describing where the hot spot is that points to another web page.

These hot spots are determined by a pair of coordinates in the form X1,Y1,X2,Y2, starting from the top

of the page. We used Netscape Navigator to find these points by displaying an image, and then using the mouse to find the coordinates. The coordinates were then entered by hand into the HTML documents

3.10.4 Layout

The layout of the web page was the combination of the text we had written along with the images that had been produced. The layout involved combining these to elements with enough "glue" to make it look attractive, yet still be functional. This is an ongoing process, as the Parks Service is currently integrating our work with their own site. Due to the nature of this work, it was not possible for us to do all of it.

The goal of the layout process is for all of the pages to have a consistent feel. To this end, we first made a template, and then tried to use that template as we added material.

The first test was done with the Museum of the Quincy Historical Society located at the Adams Academy. Once satisfied with this, we also set up two rooms at the Old House. The Long Room and the Panel room were of the most interest to the Parks Service, so we chose these rooms to do next.

4.0 Results and Analysis

The main result of this project was to create a partnership for webpage creation and maintenance between the organizations of Quincy and thus to provide a framework for a web-based tour of the city. We created a webpage for the National Parks Service that they can use to illustrate the historic sites of Quincy. The project helped get other organizations interested in supporting a web tour of their own sites and to give the NPS a structure into which they can place future additions. Our contribution to the tour includes a tour of the Adams Old House, the First Parish Church, The Adams Academy, The Richardson Building of the Thomas Crane Public Library, and the hummock. This tour, with future additions, will allow people access to the sites of Quincy from anywhere in the world via the Internet. By allowing Quincy to be recognized for its contributions to the nation, the city will be esteemed and tourism will prosper.

4.1 Expandability and Adaptability

The page, as it stands now with the National Parks Service, is not a finished product. It is a prototype for further development. Each organization must donate their resources, knowledge, and expertise in the subject that they are entrusted with caring for. The Parks

Service knows about the Adams houses, the library knows about Richardson, the Historical Society knows about City Hall and the Academy, and the Church knows about itself. Each organization can contribute what it knows about the city to a central spot, which can hold images and text about the locations about the city.

What we developed was a method and form for these resources to be collected. All that needs being done to expand upon our work is filling in the blanks. What now exists on paper must be transmitted to computer and dropped into the slots made for it by us.

4.1.1 Additional Pictures

More artifacts can easily be added to the rooms that we have already done. This would only require photographing the object, writing a description, and adding one line to the current web page. There were many items that could have been included (the Old House has nearly 30,000 artifacts), but were not added due to time constraints. It took several years to catalog these items originally, and it would be naive to believe we could do more working part time for just a few months. Future addition of more content to the framework in place would be immediately beneficial to the site.

4.1.2 Additional Buildings

We did not photograph in detail some of the lesser well-known sites in Quincy. These sites are ideal candidates for later inclusion, since tourists often overlook them in favor of the better known sites. Seeing these places on the Internet may be the only way that many people would ever know about them. With the work we have done as a template, it is not anticipated that it will take very long to expand the tour.

4.1.3 Improve Existing Layout and Design

The lack of individuals with a background in graphic design certainly did not help this project. In the future, professional graphic layout would contribute much to the work already done. It is expected that tools for this type of work will improve rapidly in the next few years, so individuals with less skill in the area may be able to improve upon what we have done. Some work will be done along these lines as the Parks Service integrates our work with their own web site, but there will be much more opportunity in the future.

5.0 Conclusions

We found that the best strategy for creating a web-based tour of Quincy's historical sites was forging an agreement between all organizations involved to work with the Parks Service to make a centralized webpage. The National Parks Service is funded by the Department of the Interior, has park rangers with the necessary expertise in computers, and is dedicated to preserving historic sites of national interest and providing the best public access available.

We have created and given to them a prototype of the virtual tour. We focused on the 1800 addition of the Old House, and used the slide collection and the furnishing reports to supply the content of the prototype. The Parks Service is pleased and is certain that they will be able to continue this project. The other organizations do not have the extensive archives the NPS has on their artifacts, and so are not as ready to be added to the tour. As the other sites catalog their holdings and create images of them, the National Parks Service can easily add them to the website.

The web-based tour makes a good medium for spreading information about Quincy to the rest of the world. With people the world over connected to the Internet, and its growing popularity for educational and recreational

inquiry, it provides millions of people who could learn more about the City and its history. It is easy to use, and easy to modify for future use. It is modular and once information is entered it can be presented in several ways concurrently. Because many people may not realize the importance of Quincy or may not have access to it, they don't know what they are missing. With a web tour, they can experience it without having to go to Quincy, but hopefully they will become inspired to do so.

5.1 Design Considerations

The main issues concerning design were ease of navigation and access to information. For navigation, we adopted the web tour. In this format, the user sees what they would see if they were on a tour in real life. They can walk from room to room and look at specific objects. Accompanying text explains the history of the room they are in, and the object they see. We also provide for a section of straight text access. Users are able to gain information on specific topics without 'taking the tour.' The paintings in the old house, for example, will be accessible all at one web location so one does not have to search the mansion for them. One can also access character sketches of many of the people involved in Quincy's history. All this was done to make our site more navigable and easier to use.

5.2 Overall Feel and Teamwork

This project allowed us to help promote Quincy and its historical sites. We were able to work with many members of the historical community of Quincy, as well as many others in the city. We worked well together and equally divided the required tasks to the best of our individual abilities. In the end, we created a partnership between the historical community and a working prototype of a web tour with several locations already in place.

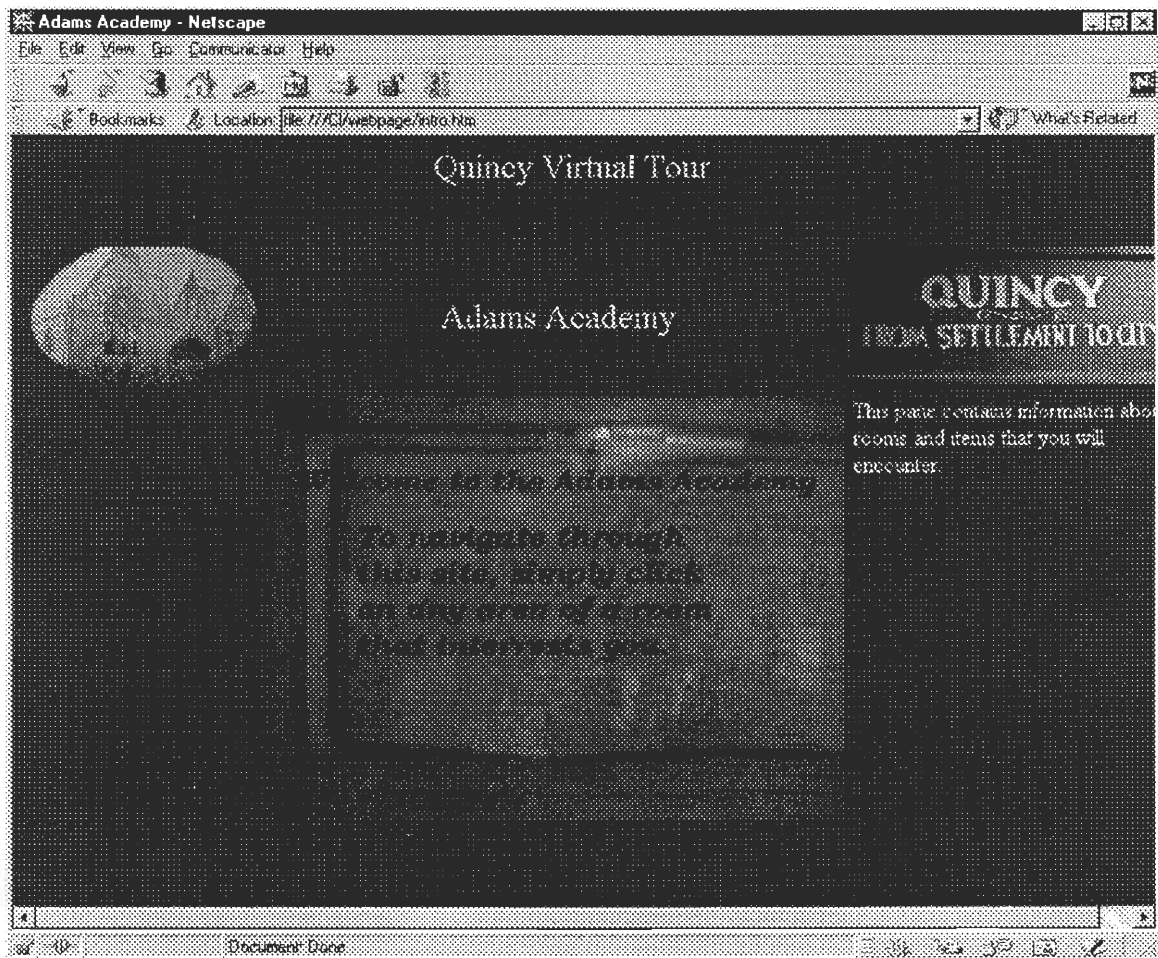
APPENDIX



Appendix

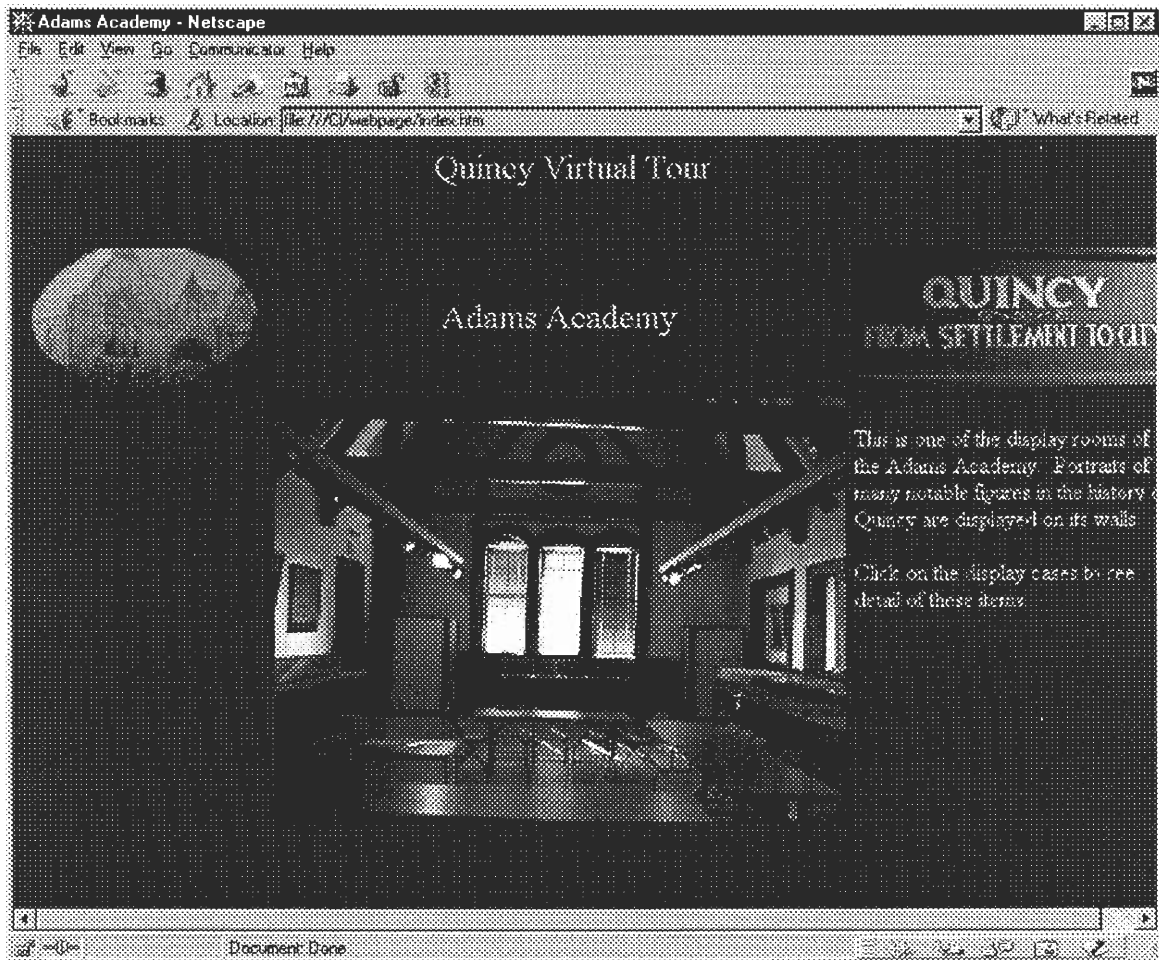
Web Site Walkthrough

Since it is difficult to translate an interactive document such as a virtual tour to printed text, we are providing a screen by screen walk through of one room of the Adams Academy. This provides an example of concepts that can be hard to visualize.

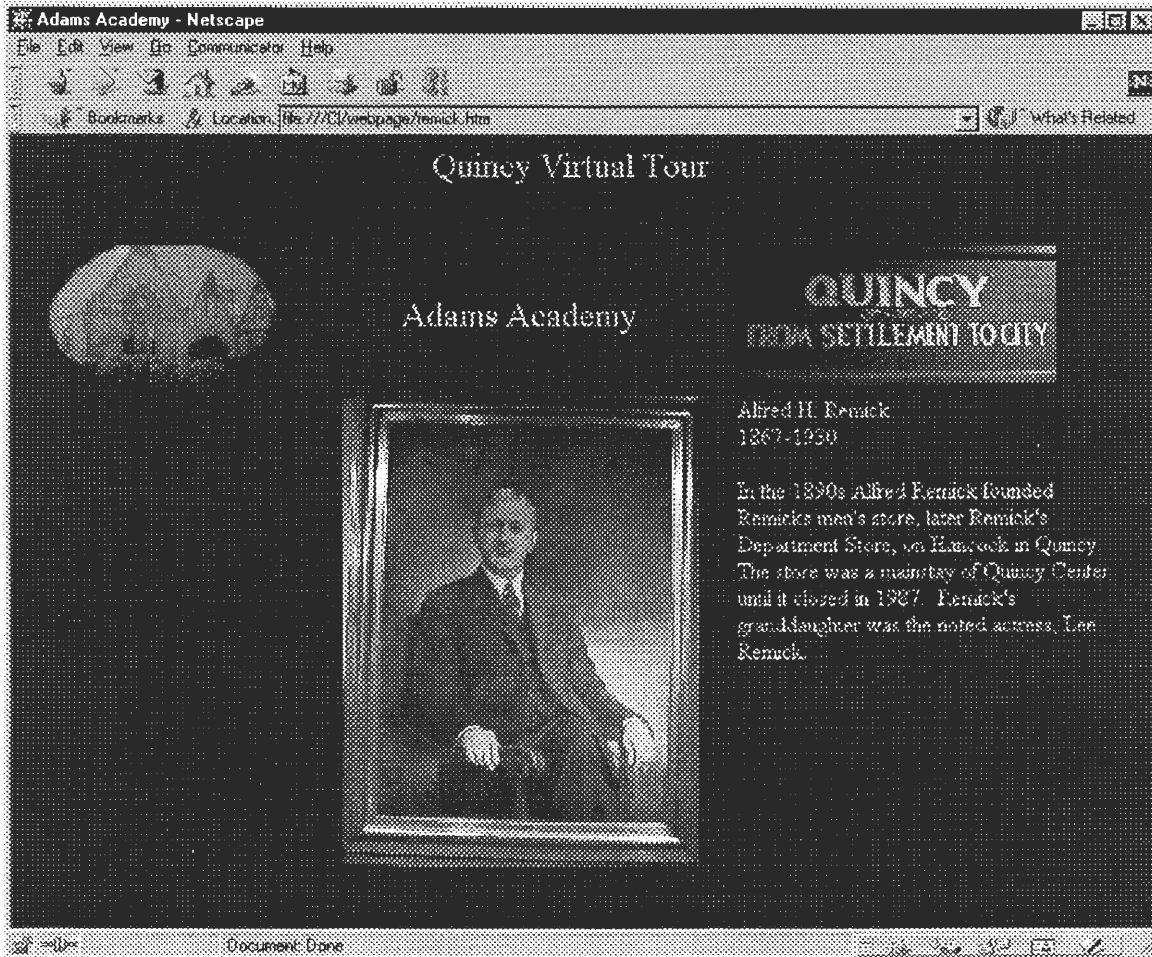


This is Welcome page to the Adams Academy. These were created for all of the sites that were photographed and researched.

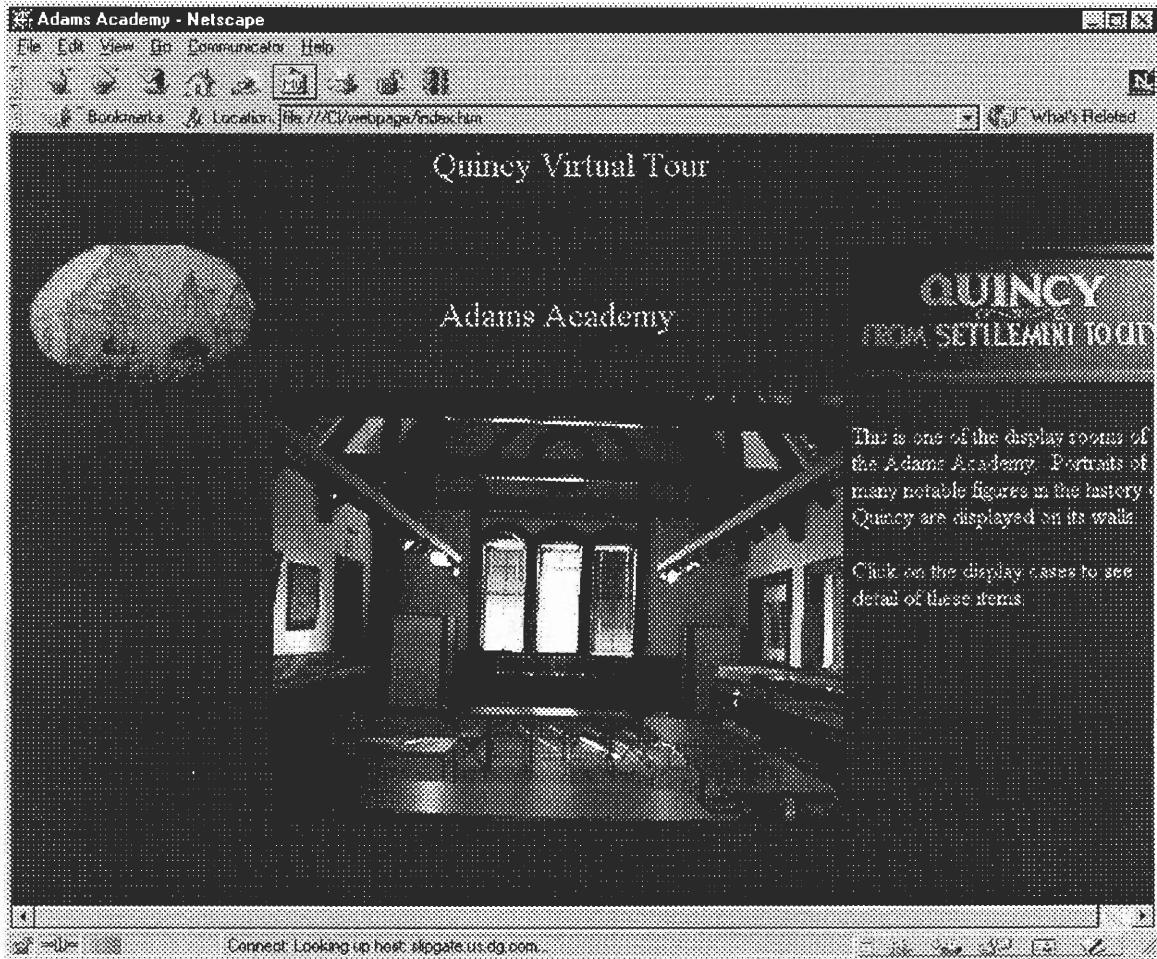
Clicking on the document brings up the first room as one walks into the building, one with paintings of famous Quincy natives.



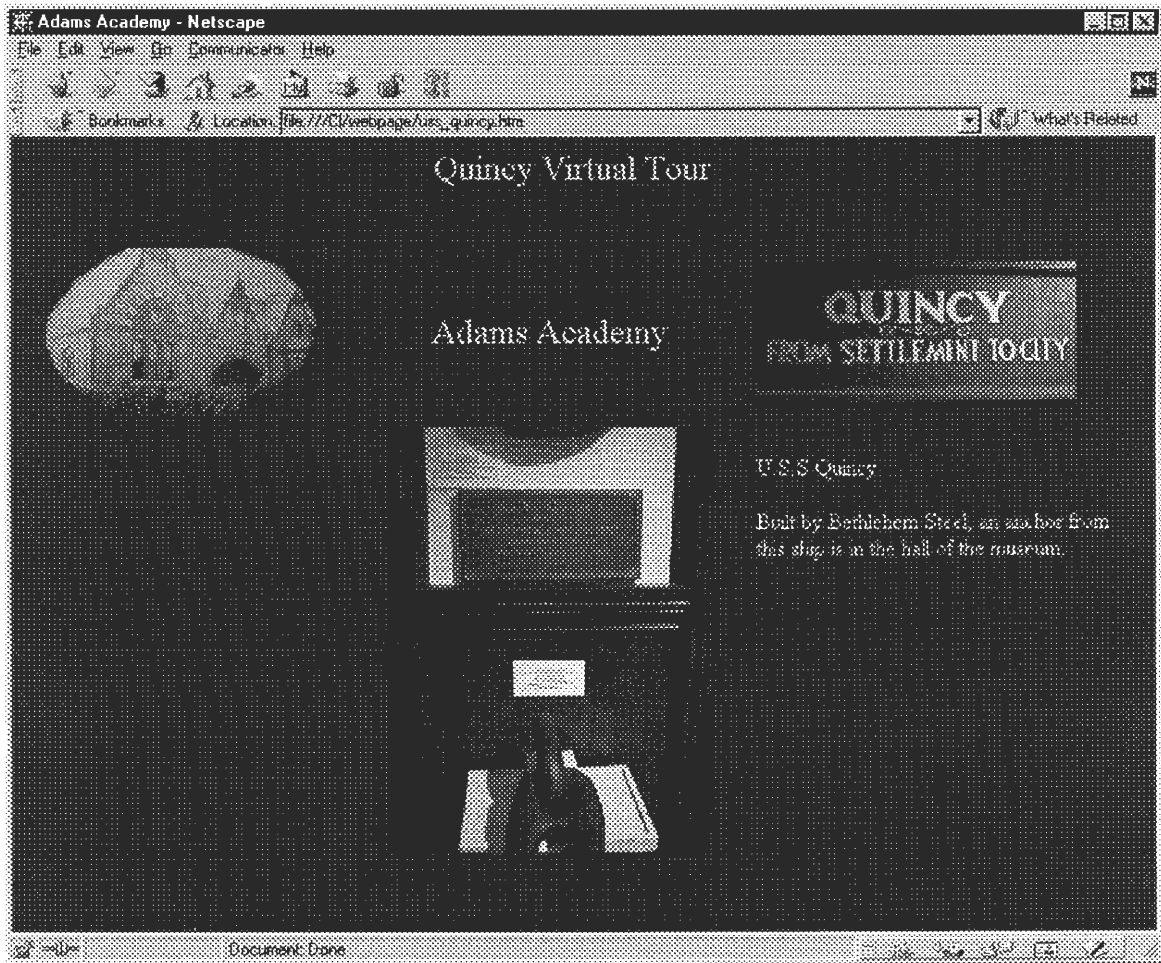
In this room, there are display cases and paintings. Clicking on any of these items brings up a more detailed view...



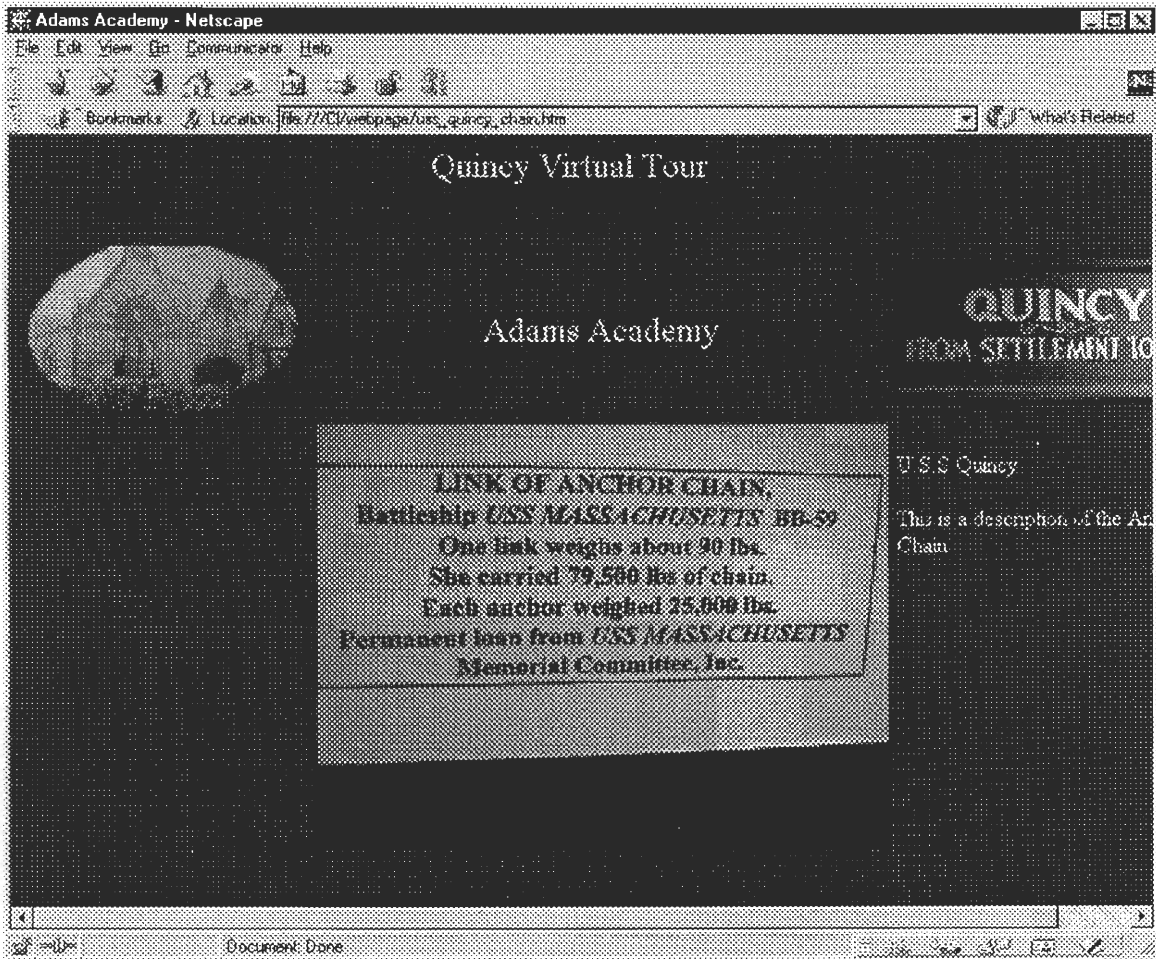
And clicking to the side brings us back to the last view.



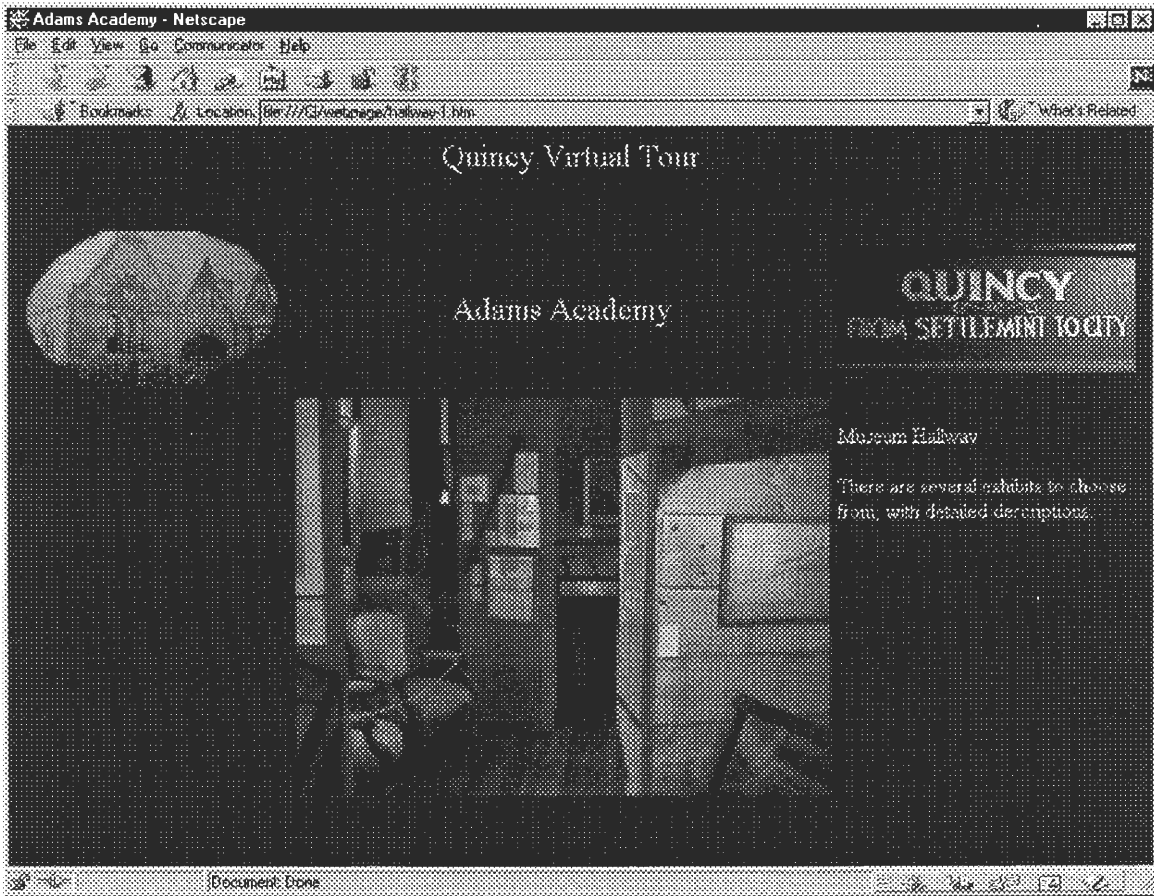
Clicking on any of the doors takes one where that path leads.



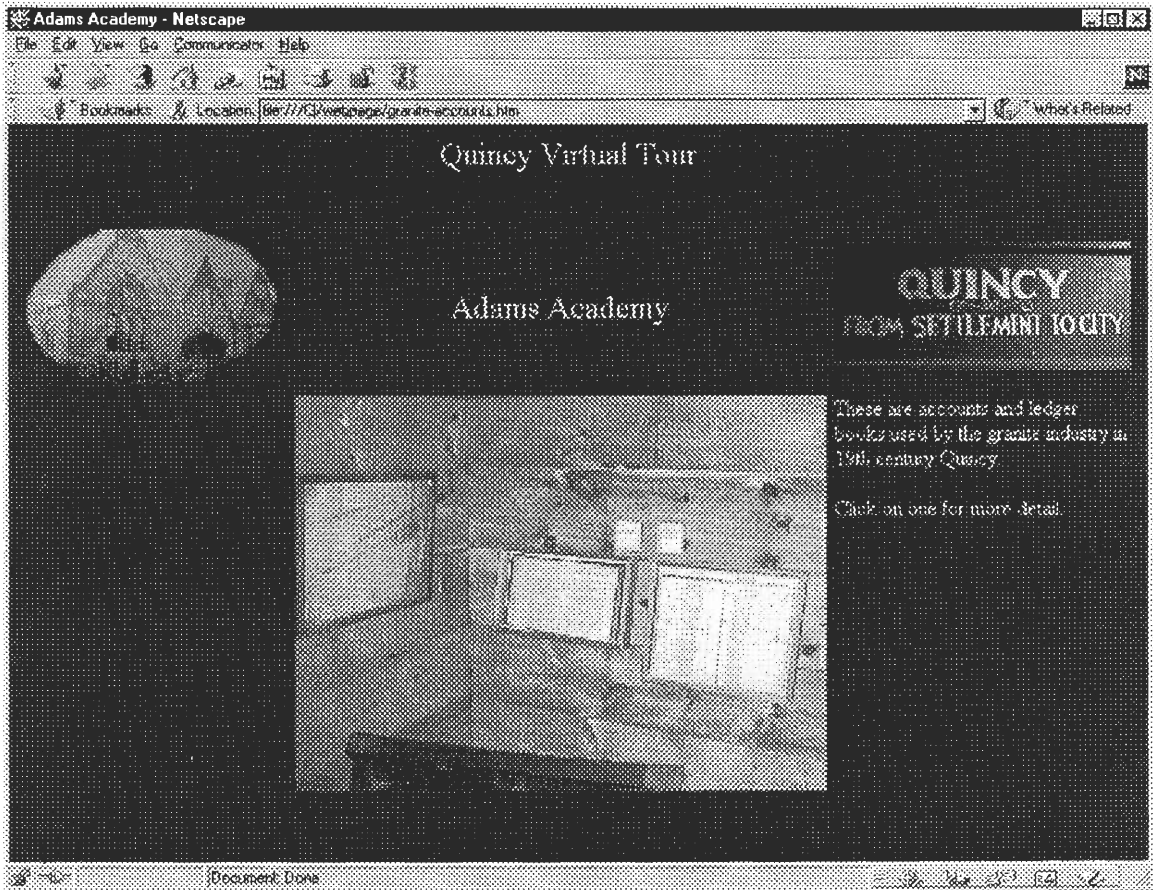
When possible, the actual descriptions of the items were photographed as well.



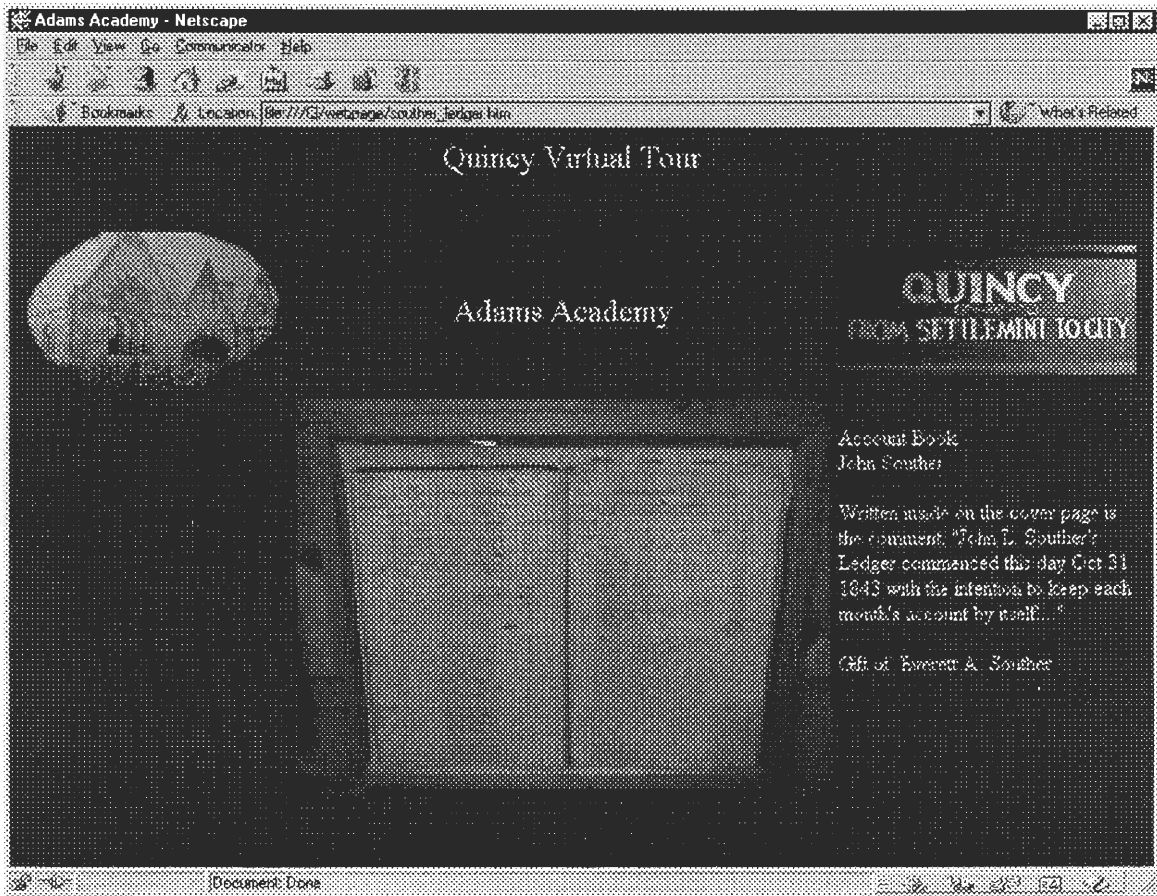
There are many exhibits in this museum.



Clicking towards the account books brings us in closer.



And on a particular book for even more information.



This should serve as only a brief overview of the resources collected, as there are over 500 photographs with the accompanying documentation.

This is a brief page about the history of Quincy. This screenshot contains most of the information on the page.

Quincy - Netscape

File Edit View Go Communicator Help

Bookmarks Location: <http://southshoreserver.com/quincy/quincyindex.html> What's Related

SouthShoreServer.com
Our Historic Community Online

Blackwood Pharmacy Medical Supply
Click for "Holiday Gifts For Health"

Welcome To Quincy

city of presidents

Birthplace of John Adams and John Quincy Adams

Photo of "The Old House" commonly known as the "Adams Mansion"

Quincy (pronounced Quin-zee) is a city rich with natural beauty and historic treasures. It is located just minutes south of Boston and can be easily accessed by public transportation, by car, or by water shuttle. The National Park Service Trolley located at the Visitor Center, (617) 770-1175, operates free trolleys linking the Adams National Historic Park which consists of the "Old House", the "Birthplace Houses," and the "Adams Crypts"--located in the First Parish Church. Quincy is also the birthplace of the First Railroad, the Granite Railway, and the First Ironworks in America.

Dorothy Quincy Homestead

Josiah Quincy House

Presidents Day Celebration! with links to more historic sites in Quincy, and the South Shore History Web Ring

Check our Bulletin Board for area beaches and water quality links.

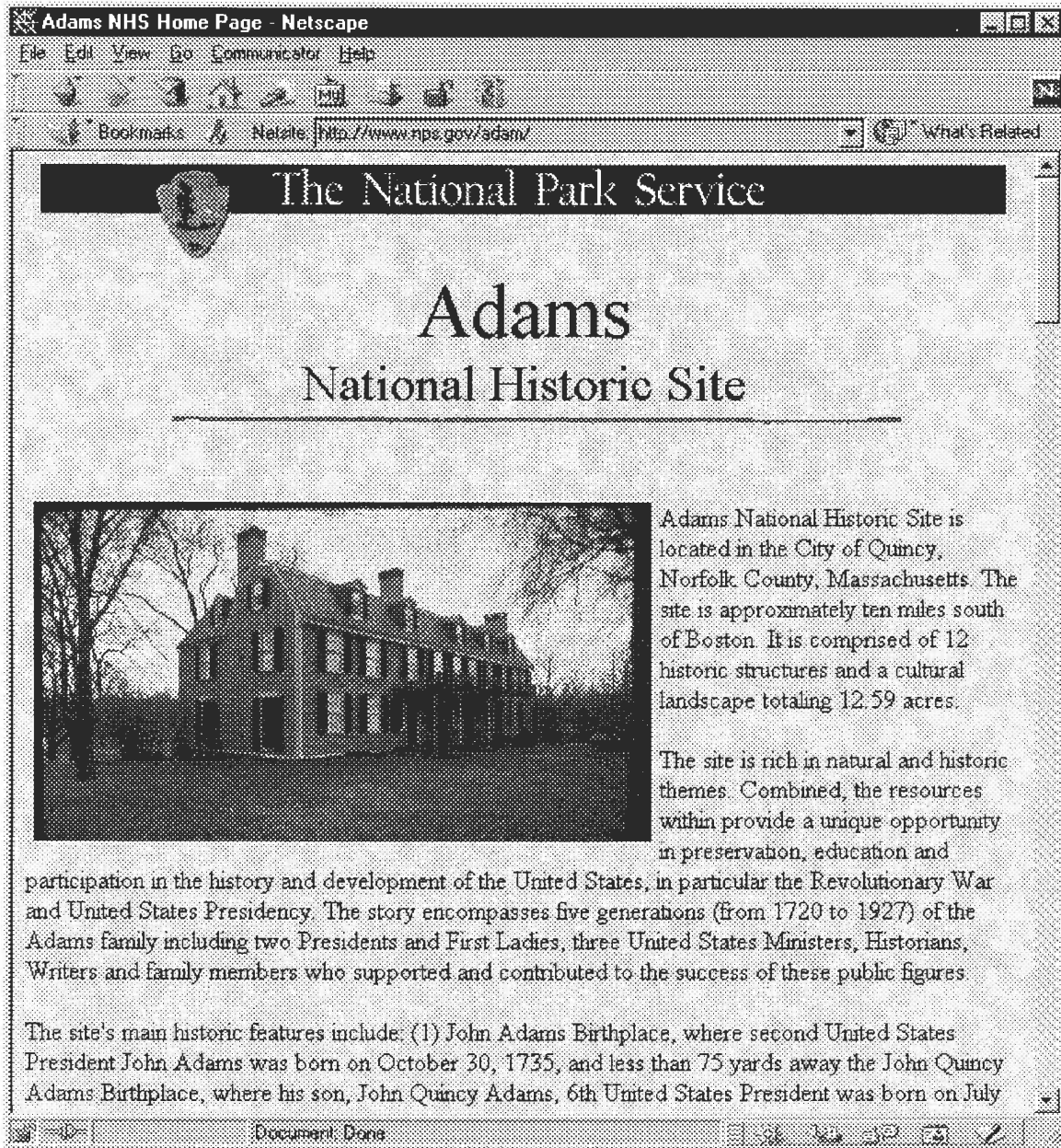
Document Done

State Demographics for the City of Quincy

<http://www.state.ma.us/dls/glance/aag243.htm>

County: NORFOLK	Kind of Community: Urbanized Center
School Structure: K to 12	Regional School Districts: NONE
Form of Government: Mayor, Council	


1996 Population 85,532	1996 Labor Force 48,075
1989 Per Capita Income 17,436	Population Per Square Mile 5,181
1996 Average Unemployment Rate 4.3	1998 EQV Per Capita 54,522



The screenshot shows a Netscape browser window titled "Adams NHS Home Page - Netscape". The address bar displays "http://www.nps.gov/adam/". The page content features the National Park Service logo and the title "Adams National Historic Site". A photograph of a large, multi-story brick building is shown on the left. To the right of the photo, there is a paragraph of text describing the site's location and features. Below the photo, there is a paragraph of text detailing the site's historical significance and a list of main historic features.

The National Park Service

Adams National Historic Site



Adams National Historic Site is located in the City of Quincy, Norfolk County, Massachusetts. The site is approximately ten miles south of Boston. It is comprised of 12 historic structures and a cultural landscape totaling 12.59 acres.

The site is rich in natural and historic themes. Combined, the resources within provide a unique opportunity in preservation, education and participation in the history and development of the United States, in particular the Revolutionary War and United States Presidency. The story encompasses five generations (from 1720 to 1927) of the Adams family including two Presidents and First Ladies, three United States Ministers, Historians, Writers and family members who supported and contributed to the success of these public figures.

The site's main historic features include: (1) John Adams Birthplace, where second United States President John Adams was born on October 30, 1735, and less than 75 yards away the John Quincy Adams Birthplace, where his son, John Quincy Adams, 6th United States President was born on July