# An Interactive Qualifying Project Report: 

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By

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#### Abstract

This Interactive Qualifying Project is a stock market simulation focusing on the three common stock trading strategies: swing trading, reversal, and position trading. Our group worked on a ten-week stock market simulation by using these trading strategies. These strategies were tested on ten companies for the simulation, and each strategy was tested separately. These ten companies were selected by some historical or experimental reasons to help us getting more experience of those three strategies. The goal of this research was to getting some good or bad experience of stock market trading for future use. As we expected, these valuable trading experience helped us deeply analyze the trend of the stock market and will make good investments in the future.


## TABLE OF CONTENTES

ABSTRACT ..... -2-
TABLE OF CONTENTS ..... -3-
LIST OF FIGURES ..... -4-
LIST OF TABLES ..... -6-

1. INTRODUCTION
1.1 Goals, General Plan ..... -7-
1.2 History of Stock Market ..... -7-
2. STOCK MARKET TRADING STRATEGIES
2.1 Breakouts ..... -9-
2.2 Retracements ..... -11-
2.3 Reversals ..... -12-
2.4 Momentum trading ..... -15-
2.5 Position trading ..... -16-
2.6 Swing trading ..... -16-
3. SIMULATION ONE: SWING TRADING
3.1 Company selected ..... -20-
3.2 Choosing the first stocks ..... -25-
3.3 Transactions ..... -26-
3.4 Summary ..... -43-
4. SIMULATION TWO: REVERSAL
4.1 Company selected ..... -44-
4.2 Choosing the first stocks ..... -48-
4.3 Transactions ..... -49-
4.4 Summary ..... -66-
5. SIMULATION THREE: POSITION TRADING
5.1 Company selected ..... -67-
5.2 Choosing the first stocks ..... -70-
5.3 Transactions ..... -71-
5.4 Summary ..... -80-
CONCLUSION AND ANALYSIS ..... -82-
REFERENCES ..... -84-

## LIST OF FIGURES

FIGURE 2.1.1 Breakout Chart 1 ..... -8-
FIGURE 2.1.2 Breakout Chart 2 ..... -9-
FIGURE 2.2.1 Retracement Chart ..... -10-
FIGURE 2.3.1 Reversal Chart 1 ..... -11-
FIGURE 2.3.1 Reversal Chart 2 ..... -12-
FIGURE 2.4.1 Chart of Momentum ..... -13-
FIGURE 2.6.1 Swing Trading Chart 1 ..... -15-
FIGURE 2.6.2 Swing Trading Chart 2 ..... -15-
FIGURE 2.6.3 Swing Trading Chart 3 ..... -16-
FIGURE 2.6.4 Swing Trading Chart 4 ..... -17-
FIGURE 3.1.1 JMEI Stock Chart ..... -21-
FIGURE 3.1.2 FB Stock Chart ..... -22-
FIGURE 3.1.3 AMZN Stock Chart ..... -23-
FIGURE 3.1.4 ORCL Stock Chart ..... -24-
FIGURE 3.2.1 Choosing the first stock- Facebook (FB) ..... -25-
FIGURE 3.3.1 Week 1-FB Chart ..... -26-
FIGURE 3.3.2 Week 1-JMEI Chart ..... -27-
FIGURE 3.3.3 Week 1-AMZN Chart ..... -28-
FIGURE 3.3.4 Week 1-ORCL Chart ..... -28-
FIGURE 3.3.5 Week 2-JMEI Chart ..... -30-
FIGURE 3.3.6 Week 2-FB Chart ..... -31-
FIGURE 3.3.7 Week 2-AMZN Chart ..... -31-
FIGURE 3.3.8 Week 2-ORCL Chart ..... -32-
FIGURE 3.3.9 Week 3-JMEI Chart ..... -33-
FIGURE 3.3.10 Week 3-FB Chart ..... -34-
FIGURE 3.3.11 Week 3-AMZN Chart ..... -35-
FIGURE 3.3.12 Week 3-ORCL Chart ..... -35-
FIGURE 3.3.13 Week 4-JMEI Chart ..... -37-
FIGURE 3.3.14 Week 4-FB Chart ..... -37-
FIGURE 3.3.15 Week 4-AMZN Chart ..... -38-
FIGURE 3.3.16 Week 4-ORCL Chart ..... -39-
FIGURE 3.3.17 Week 5-JMEI Chart ..... -40-
FIGURE 3.3.18 Week 5-FB Chart ..... -41-
FIGURE 3.3.19 Week 5-AMZN Chart ..... -41-
FIGURE 3.3.20 Week 5-ORCL Chart ..... -42-
FIGURE 3.4.1 Cumulative Net Profit for Swing trading ..... -43-
FIGURE 4.1.1 JPM Stock Chart ..... -45-
FIGURE 4.1.2 LEN Stock Chart ..... -46-
FIGURE 4.1.3 SINA Stock Chart ..... -47-
FIGURE 4.1.4 WB Stock Chart ..... -48-
FIGURE 4.2.1 Choosing the first stock-Lennar (LEN) ..... -49-
FIGURE 4.3.1 Week 1-LEN Chart ..... -50-
FIGURE 4.3.2 Week 1-JPM Chart ..... -51-
FIGURE 4.3.3 Week 1- SINA Chart ..... -52-
FIGURE 4.3.4 Week 1-WB Chart ..... -52-
FIGURE 4.3.5 Week 2-JPM Chart ..... -54-
FIGURE 4.3.6 Week 2-LEN Chart ..... -55-
FIGURE 4.3.7 Week 2-SINA Chart ..... -55-
FIGURE 4.3.8 Week 2-WB Chart ..... -56-
FIGURE 4.3.9 Week 3-LEN Chart ..... -57-
FIGURE 4.3.10 Week 3-JPM Chart ..... -58-
FIGURE 4.3.11 Week 3-SINA Chart ..... -58-
FIGURE 4.3.12 Week 3-WB Chart ..... -59-
FIGURE 4.3.13 Week 4-JPM Chart ..... -60-
FIGURE 4.3.14 Week 4-LEN Chart ..... -61-
FIGURE 4.3.15 Week 4-SINA Chart ..... -61-
FIGURE 4.3.16 Week 4-WB Chart ..... -62-
FIGURE 4.3.17 Week 5-JPM Chart ..... -63-
FIGURE 4.3.18 Week 5-LEN Chart ..... -64-
FIGURE 4.3.19 Week 5-SINA Chart ..... -64-
FIGURE 4.3.20 Week 5-WB Chart ..... -65-
FIGURE 4.4.1 Cumulative Net Profit for Reversal trading ..... -66-
FIGURE 5.1.1 GE Stock Chart ..... -68-
FIGURE 5.1.2 GRPN Stock Chart ..... -69-
FIGURE 5.2.1 Choosing the first stock- General Electric (GE) ..... -70-
FIGURE 5.3.1 Week 1-GE Chart ..... -71-
FIGURE 5.3.2 Week 2-GE Chart ..... -73-
FIGURE 5.3.3 Week 3-GE Chart ..... -74-
FIGURE 5.3.4 Week 4-GE Chart ..... -75-
FIGURE 5.3.5 Week 4-GRPN Chart ..... -76-
FIGURE 5.3.6 Week 5-GE Chart ..... -77-
FIGURE 5.3.7 Week 5-GRPN Chart ..... -77-
FIGURE 5.4.1 Cumulative Net Profit for Position trading ..... -78-

## LIST OF TABLES

Table 3.2.1 Choosing the first stock- Facebook (FB) ..... -25-
Table 3.3.1 Week 1-Swing Trading Transactions ..... -29-
Table 3.3.2 Week 2- Swing Trading Transactions ..... -32-
Table 3.3.3 Week 3- Swing Trading Transactions ..... -36-
Table 3.3.4 Week 4- Swing Trading Transactions ..... -39-
Table 3.3.5 Week 5- Swing Trading Transactions ..... -42-
Table 4.2.1 Choosing the first stock-LEN ..... -49-
Table 4.3.1 Week 1-Reversal Transactions ..... -53-
Table 4.3.2 Week 2- Reversal Transactions ..... -56-
Table 4.3.3 Week 3- Reversal Transactions ..... -59-
Table 4.3.4 Week 4- Reversal Transactions ..... -62-
Table 4.3.5 Week 5- Reversal Transactions ..... -65-
Table 5.2.1 Choosing the first stock-GE ..... -70-
Table 5.3.1 Week 1- Position Trading Transactions ..... -72-
Table 5.3.3 Week 2- Position Trading Transactions ..... -73-
Table 5.3.3 Week 3- Position Trading Transactions ..... -75-
Table 5.3.4 Week 5- Position Trading Transactions ..... -78-

## 1. INTRODUCTION

### 1.1 Goals, General Plan

The main purposes of this IQP are to understand how the stock market operates and how to apply trading strategies. Different situations need different strategies to deal with. We are going to introduce breakouts, retracements, reversals, momentum trading, position trading, and other strategies in the following article. We plan to simulate total ten stocks and each person manages five stocks. We open two accounts on the website of Investopedia and each member pretends to have $\$ 10,000$ to invest. We will report each buy and sell for five-weeks and see if we can make profits at the end. At the last, the group will compare those strategies and make an analysis.

### 1.2 History of the Stock Market

The stock market has been around the human history for hundreds of years. There are some arguments about when was the stock market first came out and where the origin of the stocks are. The most of people believe that the first stock market appeared in 1600 s, while the Dutch, British, and French governments were doing trade from Europe to East Asia. Because of the high risk of trading overseas, they have to find some investors to average the risk of perils of the seas. Those investors are the early limited liability companies.

Years later when the Dutch East India Company were established, they changed and found another way to do the business. They decided to have a number of stocks and pay the dividends to the investor. That was the first joint-stock company. However, there are always some people who want to trade their stocks for money or other stuff instead of keeping them. So people went
to a place called Magere Brug to trade their stocks. This was the first stock market in the world.

As time passed, The British East India Company has become to one of the most important and beneficial companies. It had one of the biggest competitive advantages in financial historya government-backed monopoly. When the investors who bought the stocks of the British East India Company began to receive huge dividends and sell their shares for fortunes, other investors were hungry for a piece of the action. Since the stocks are written on the paper, people have to seat down and trade with the other people. Quickly, people found out the coffeehouse would be a good place to do the trading. In 1773 , the first stock exchange was officially formed in a coffeehouse in London. This stock exchange has been proved by the British government in 1802 and become the LSE (London Stock Exchange) today.

For the United States, the first stock exchange was founded in 1790 , which was called the Philadelphia Stock Exchange. However, Philadelphia Stock Exchange is not the largest stock exchange of the US. NYSE (New York Stock Exchange), which was formed in 1792, Wall Street and it quickly raised to be the largest stock exchange of the nation. It is also the most influential stock exchange in the world. As the technology growing, The Nasdaq was established. NASDAQ is different from the previous stock exchange because it does not need a physical space. It is an internet stock exchange.

## 2. STRATEGIES

Stock investing is a high risky investment method. The reason why it attracts so many people to involve in the stock market is because it has high returns. As the saying goes, "high risk makes high return." However, the stock market is extremely changeable and complicated. Nobody can exactly predict how the stock going next. In the following paragraphs, we are going to introduce six common strategies, which can help investors to analyze the stock trend.

### 2.1 Breakouts

Breakout is a trading strategy used in early stages by active investors. Breakouts occur when a stock price moves out of the support or resistance level. According to Jeff Kohler, "the most explosive price movements are a result of channel breakouts and price pattern breakouts such as triangles, flags or head and shoulders patterns". The graph below shows a triangle breakout. The stock price moves up and down multiple times and then breaks through the resistance line, but sometimes the price will move down to break the support line. When the more times a stock price hits the support and resistance level, the more significant outcome occurs.


Figure 2.1.1 Breakout Chart 1(Prophet.net)

Once a stock price close to the support level, investors buy in stocks and the price goes up; in contrast, when the price close to the resistance level, investors will sell their stocks.

However, the stock market is volatile, so people do not know when it will break out. There is a concept of "fake out". It is different with breakout and always leads to misunderstandings. As Jeff Kohler explained, "a fake out occurs when prices open beyond a support or resistance level, but by the end of the day, wind up moving back within a prior trading range". Therefore, investors should think carefully to make decisions and compare to previous prices

Investors need to set up targets that when to exit. There are two ways to establish targets. The first method is based on the recent price. For example, the following graph indicates that the recent price range is from 63 to 69 , which is 6 points wide. It means after breakouts, when price range reaches 6 points again, investors should exit with a profit. The other way to set up target is to average recent price swings.


Figure 2.1.2 Breakout Chart 2 (Prophet.net)

It is important to avoid breakouts trading when the trade failed. Once "old resistance levels act as new support and old support levels act as new resistance" (Kohler) determines a trade has failed. At this time, traders should exit as quickly as possible.

### 2.2 Retracement

Another strategy is called retracement. This strategy is a little bit complicated because retracement needs people to do some analysis. Firstly, we are going to talk about what retracement is. Retracement means that after the stock price makes a long sustained moving in one direction, the market will retrace a certain percentage of amounts before continue on moving further.


Figure 2.2.1 Retracement Chart (Investopedia.com)

When we try to use this strategy, we have to set an initial point, and focus on the various price levels that already break through from the initial point. We also pay attention to the key levels of support and resistance level. These levels are the levels we look to buy or sell. We also should notice that this strategy is normally used when economic events or news cause the market shocked, which will result in retracement from its original direction.

By following this pattern, we can set a price as the point of origin and do the trade around the price we set. By using this strategy we can buy at the low price when price rises, or sell at the high price when the price falls.

### 2.3 Reversal

Reversal is a situation that changes the direction of price trend. Reversal could be positive or negative. For instance, an upward price trend turns to downward; in contrast, a downtrend
reverses into an uptrend. Reversal is the most risky trading method. There are three kinds of reversal patterns: double bottom, double tops, and head-and- shoulders.


Figure 2.3.1 Reversal Chart1 (Dummies.com)

The above graph shows a double bottom pattern. It looks like a "W". The confirmation line is drawn between the peak of "W" and the bottom point. The price has to be above the confirmation line and predict to continue growing. The pullback here is a retracement, which "occurs 68 percent of the time in confirmed double bottoms". According to Dummies.com states, "variation between the two lows should not be more than 4 percent and a center up move of at least 10 percent from the lower of the two bottoms". Ten days is the minimum time between the two lows and sometimes it is last for two or three months.

The double top is opposite to the double bottom. The pattern of double tops is like "M". Double tops always cause a falling volume after the second top. Investors always fail to buy stocks surpass the first top because they do not consider that the price will drop down.

The last pattern is the ultimate triple top, also called head-and-shoulders. It has three tops and the middle one is the highest. The confirmation line connects two lows is called neckline. Once the price breaks the neckline, it predicts a price decline, whether the neckline is upward or downward. As the article "How to spot trading chart classic reversal patterns" explains, "The head-and-shoulders pattern is the most widely recognized of all the patterns because when the price surpasses the confirmation line, it delivers the expected down move a whopping 93 percent of the time".


Figure 2.3.2 Reversal Chart2 (Dummies.com)

When to trade reversals is extremely hard because whether enter too early or too late will make traders lose money. Alan Farley, who is the author of The Master Swing Trader and founder of www.hardrightedge.com, said that he entered the market when the volume had dropped and the market was not moving. Thus, investors should not enter when the price hits the top or the bottoms. It is the better to wait until the stock is stable.

### 2.4 Momentum

Another trading strategy that we will use is called momentum. This strategy is not as hard as others, momentum trading does not need to look for a good price to enter, but enter from a start of one direction moving.


Figure 2.4.1 Chart of Momentum (incredilecharts.com)

As shown on the chart above, we will enter when we find out that one stock is about to rise, and hold the stock for a period of time. And we exit when this stock is about to fall. Although this momentum trading is really simple, if we want make a good profit from this also need to do some research on the news and do some analysis to decide when and which stock we will be enter.

### 2.5 Position trading

Position trading is similar to buy-and-hold strategy and it takes the momentum style of trading. Positions traders often hold stocks for several weeks or years long depending on the
trend of the stock. According to Dean Peters-Wright, who is the Trading Education Manager of tradimo.com, "The main component of this strategy is a confidence in the prevailing fundamental conditions driving the price, and the anticipation that the market will eventually move in the desired direction. Position traders will determine the direction of the market moving and make investments when the trend is established; however, traders will exit the position once the trend breaks. During the long term, there will be short term retracements and confusion happened, but this is benefit for position traders that "trading the asset as it pills back against the overall move".

### 2.6 Swing trading

Swing trading is also a common active trading strategy. Swing trading is always lasting for more than a day but shorter than position trading. Swing traders enter in when the trend breaks and the price is volatile. There are four types of patterns for swing trading.

The first pattern is called "T-30". The name refers to "tail" that slices down through the " 30 " period exponential moving average. Looking at the graph below, the pattern looks like a hammer. The best timing to enter is near the end of the day of the hammer because the price is at a support level and the demand is increasing.


Figure 2.6.1 Swing Trading Chart1 (Swing-trade-stocks.com)

The second pattern is Ghost Town chart pattern. It refers to a low volatility situation. From the chart pattern, we can see there is a pullback, and then going up again. There are also some narrow range candles. Those are features to recognize the Ghost Town. Investors should remember to avoid putting buy stop above the highest narrow range candle. In the cycle below, there are three candles and the middle one is the highest. So traders should stop buying above the middle candle.


Figure 2.6.2 Swing Trading Chart 2 (Swing-trade-stocks.com)

The next swing pattern is swing trap pattern and is known as A-B-C pattern. There is a big pullback happens, but later on it rallies up. However, the final swing drops down a lot. The final swing always end in a hammer. At this moment, most of traders will take out their stop loss orders. This is also the time to enter because the price will rise up but traders should pay attention to when the price will fall.


Figure 2.6.3 Swing trading Chart3 (Swing-trade-stocks.com)

The side trap pattern has three phases: consolidation, breakdown, and reversal. When the price is in a sideways consolidation, it will be breakout soon. Most of traders will choose to stop out under the low of the consolidation. However, when there is no more sellers left, the price reversals. The sideways consolidation can be long or short. Traders can enter the market on the day of reversal or after halfway of the range of the breakdown.


Swing traders should focus on how the direction of the overall market goes. Traders enter in when pullbacks or breakdowns happen and wait for reversals.

## 3. Simulation One: Swing Trading

We are going to simulate on swing trading in this chapter. As we already introduced in the last chapter that swing trading has four kinds of patterns and it is a short term trading. We are going to choose four companies (Jumei International Holding Limited, Facebook, Amazon.com, and Oracle Corporation) for the simulation. We hope through five weeks transaction to have a deep understanding how to use the swing trading.

### 3.1 Company Selected

## Jumei International Holding Limited (JMEI)

Jumei International Holding Limited is the first and the largest Chinese cosmetic group-buying website. It was established by Ou Chen and Yuseng Dai in March 2010. Only in one year, Jumei from monthly revenue of less than $\$ 16,000$ to the net profit over $\$ 25$ million a year now. The Jumei.com has 10.5 million customers signed up and mostly are women. Jumei focuses on authentic guarantee and 30-days free return to attract customers.

Jumei International Holding Limited was listed on NASDAQ and priced on NYSE on May 16, 2014. Jumei started at price of $\$ 22$. In this one month, the price rise to $\$ 29$, but it stays at $\$ 27.5$ now. We believe in Jumei's excellent creative team, perfect service system, and strong investment team. Jumei will be a potential stock to invest. The price keeps constant now and we predict it may breakdown a little bit and then rise up, so we plan to put it in the swing trading.


Figure 3.1.1 JMEI Stock Chart (finance.yahoo.com)

## Facebook (FB)

Facebook is a social networking website, which is founded by Mark Zuckerberg. Mark Zuckerberg was a student in Harvard University and he launched "The Facebook" in February 2004. Only in 24 hours, there were 1,200 students signed up and later on the network extended to other universities, such as Boston University, New York University and the Ivy League. In August 2005, "The Facebook" became to Facebook.com. So far Facebook covers 53\% of Americans and has the largest traffic in the US.

Facebook went public since 2012 and was listed on the NASDAQ. The price of Facebook stock changed from $\$ 28-\$ 35$ per share to $\$ 34-\$ 38$ per share and total shares changed from 337.4 million to 421.2 million. Thus, Facebook can raise 18.4 billion dollars and this is over General Motors' IPO in 2010. However, on the first trading day, the price dropped $11 \%$. From the following graph, it shows the price even fell to $\$ 18$. The reason was that people over
estimate Facebook performance. Until 2013, the price has been increased from 30 to 70.


Figure 3.1.2 FB Stock Chart (finance.yahoo.com)
We choose Facebook because we think Facebook is the largest social media company now and it may beyond Google in the future. On Feb. $19^{\text {th }} 2014$, Facebook spent $\$ 19$ billion to purchase WhatsApp, which has over 450 million users and was much popular in Europe, Latin America and Australia (Chatterjee and Ahmed). Therefore, we believe Facebook will make more profits.

## Amazon.com, Inc. (AMZN)

Amazon.com, Inc. is an American international electronic commerce company with headquarters in Seattle, Washington. It is the largest and oldest online retailer in the world. The company was founded in 1994 by Jeff Bezos. The company originally sells books online start at July 1995. Within two month, Amazon sold to all of 50 states and over 45 countries and sales about $\$ 20,000$ per week.

After years of competition with Borders and Barnes\&Noble, Amazon finally became the
biggest bookstore in the world. In 1997, Amazon joined the NASDAQ market. In the meantime, Bezos started the business of all kinds of groceries and in 2000 Amazon already became to the most powerful online retailer. After that, Amazon was more concentrated on the customers. Amazon was also doing marketplace, Prime service, Fulfillment, and other services. It became an integrated service company.

From the graph below, we realized the price of Amazon hit the highest in 2013. Nowadays, it dropped down a little and keeps shifting. Amazon may publish new delivery technology in the future, and this can help Amazon make more profits. Therefore, we choose to invest in Amazon.


Figure 3.1.3 AMZN Stock Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)

Oracle Corporation is a U.S. based multinational computer-technology corporation, headquartered in Redwood City, California, United States. The company specializes in developing and marketing computer systems and enterprise software products - particularly its own brands of database management systems. Oracle is the second-largest software maker by
revenue, besides Microsoft. Oracle was a Software Development Lab formed in 1977, but in 1978 it changed the name to RSI, and then changed back to Oracle again in 1982. In 1986, Oracle joined to the NASDAQ and the total revenue quickly increases to $\$ 55$ million. In 1987, Oracle became to the fourth biggest software company in the world and its income increased to $\$ 131$ million. In 1992, Oracle 7 was out and this year the income of Oracle is almost \$1.2 billion. In July 2013 Oracle joined to NYSE and kept the symbol of "ORCL". In the same year, Oracle became to the $2^{\text {nd }}$ largest software company in the world.

After analyze the stock value chart below, Oracle Corporation had a dramatic shifting in the past 28 years. In 2000, the stock price reached $\$ 45$; however, after that the price plummeted to only $\$ 8$. Since 2002 , the price started increasing slowly and recently it near $\$ 45$ again. We think Oracle would be a great company that will make more profits.


Figure 3.1.4 ORCL Stock Chart (finance.yahoo.com)

### 3.2 Choosing the first stock

For the swing trading, I firstly picked up Facebook (FB). On Jun. $3^{\text {rd }}$, I bought 400 shares at the price of $\$ 62.96$. Since there was 20 minutes transaction time, I made a bid at a low price, but after 20 minutes the price went up, so I ended up trading on $\$ 62.96$. It was almost near the moving average. Later on, the price did not move up too much and it even dropped down in the afternoon. Thus, I held the stock and hoped to sell at a higher price on the next day.

| Date | Symbol | Buy/ <br> Sell | Price | Shares | Commission <br> fee | Net Cost/ <br> Proceeds | Profit/ <br> Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  | $\$ 100,000.00$ |  |
| $6 / 3 / 2014$ | FB | Buy | $\$ 62.96$ | 400 | $\$ 19.99$ | $-25,203.99$ |  | $\$ 74,796.01$ |  |

Table 3.2.1 Choosing the first stock- Facebook (FB)


Figure Table 3.2.1 Choosing the first stock- Facebook (FB) (finance.yahoo.com)

### 3.3 Transactions

## Week 1

6/2/14-6/6/14

## Facebook (FB)

In this week, the price of Facebook was relatively stable and moved around $\$ 62.50$ to $\$ 64.00$. Especially, on Thursday the price broke through $\$ 64.00$. On Jun. $3^{\text {rd }}$, I bought in 400 shares of Facebook stocks with the price of $\$ 62.96$ and total cost $\$ 25,203.99$. The swing trading tells us to trade when the price is low, but I missed the trading time. So I hold the stocks and wait for a higher price on the next day. Then, I sold out all of the stocks at the price of $\$ 63.43$. At this time, I earned $\$ 148.02$. However, on Jun. $6^{\text {th }}$ the price was all the way down and I bought 300 shares at a high price level. Since the price showing on the yahoo.com is different with the trading price, it is very hard to determine when to trade stocks.


## Jumei International Holding Limited (JMEI)



Figure 3.3.2 Week 1-JMEI Chart (finance.yahoo.com)

The price of JMEI was increased from initially $\$ 23.00$ to $\$ 30.00$ now. This is a good prospect for a start-up company. There was a big volatility in this week. On Wednesday, the price dropped to $\$ 28.00$ and in the following two days the price reached to $\$ 30.00$ again. Thus, I bought in stocks on Jun. $4^{\text {th }}$, which with the lowest price. I held on Friday and sold out 100 shares when the price reached to the top. I could not forecast how the price goes in next week.

## Amazon.com, Inc. (AMZN)

This week, I firstly tried to buy Amazon a little bit. Since the price of Amazon is expensive, I only bought 50 shares on the first day. I decide to hold it for a day or two days. After two days of dropping, I don't think the price would go down any more, so I bought 100 more shares to average loses for the first day. On the next day the price went up as I expected, and according to some news I believed the price would keep rising so I bought 50 more shares. On Friday, the price still kept rising. I thought it was the time to sell some of the shares. Thus, I sold at a high
price of $\$ 329.06$ and made $\$ 1036.11$ profits.


Figure 3.3.3 Week 1-AMZN Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)



Figure 3.3.4 Week 1-ORCL Chart (finance.yahoo.com)

| Date | Symbol | Buy/ <br> Sell | Price | Shar es | Comm <br> Fee | Net Cost/ Proceeds | Profit/ Loss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$100,000 |  |
| 6/2/14 | ORCL | Buy | \$41.70 | 400 | \$1.99 | -\$16,681.99 |  | \$83,318.01 |  |
| 6/2/14 | AMZN | Buy | \$308.26 | 50 | \$1.99 | -\$15,414.99 |  | \$67,903.02 |  |
| 6/3/14 | FB | Buy | \$62.96 | 400 | \$19.99 | -\$25,203.99 |  | \$42,699.03 |  |
| 6/4/14 | FB | Sell | \$63.43 | 400 | \$19.99 | \$25,352.01 | \$148.02 | \$68,051.04 | \$148.02 |
| 6/4/14 | JMEI | Buy | \$27.93 | 300 | \$19.99 | -\$8,398.99 |  | \$59,652.05 |  |
| 6/4/14 | AMZN | Buy | \$304.80 | 100 | \$1.99 | -\$30,481.99 |  | \$29,170.06 |  |
| 6/5/14 | AMZN | Buy | \$315.26 | 50 | \$1.99 | -\$15,764.99 |  | \$13,405.07 |  |
| 6/6/14 | JMEI | Sell | \$29.56 | 100 | \$19.99 | \$2,936.01 | \$123.02 | \$16,341.08 | \$271.04 |
| 6/6/14 | AMZN | Sell | \$329.06 | 50 | \$1.99 | \$16,451.01 | \$1,036.02 | \$32,792.09 | \$1,307.06 |
| 6/6/14 | ORCL | Sell | \$42.51 | 400 | \$1.99 | \$17,002.01 | \$320.02 | \$49,794.10 | \$1,627.08 |
| 6/6/14 | FB | Buy | \$63.28 | 300 | \$19.99 | -\$19,003.99 |  | \$30,790.11 |  |

Table 3.3.1 Week 1- Swing Trading Transactions

## Week 2

6/9/14-6/13/14

## Jumei International Holding Limited (JMEI)

In this week, JMEI kept high on Jun. $9^{\text {th }}, 10^{\text {th }}$, and $11^{\text {th }}$, and on Thursday and Friday the price dropped down. I changed the commission fee to $\$ 1.99$ because $\$ 19.99$ was too expensive. I held 200 shares of JEMI in last week, which with the price of $\$ 27.93$. On Wednesday, the price was relatively stable at the price of $\$ 31$. Since JMEI was public in the market, it reached the highest price of $\$ 32$, so I think this was the best time to sell it. Finally, I sold it at the price of $\$ 30.75$ and made $\$ 560.02$ profits. This is the largest money I made so far. Therefore, following to the swing trading, basically I buy at a low price and sell at a high price.


Figure 3.3.5 Week 2-JMEI Chart (finance.yahoo.com)

## Facebook (FB)

In general, the Facebook had a better performance than last week. It got the highest price of $\$ 66.40$ and on Friday it decreased to $\$ 64.50$. On Jun. $11^{\text {th }}$, I traded 100 shares of FB and with the price of $\$ 65.40$. I expected the price would go up; however, it did not rise too much and on next day the price kept declining. So far the price was stop at $\$ 64.50$ and I lost $\$ 54$, so I only can hold it. Besides, I held 300 shares on hand from last week. I bought in at $\$ 63.28$ and sold out at $\$ 64.50$ on Friday. I also made good revenue of $\$ 362.0$.


Figure 3.3.6 Week 2-FB Chart (finance.yahoo.com)

## Amazon.com, Inc. (AMZN)

This week I kept watching on the Amazon. On Wednesday the price went to the highest, which reached to $\$ 340$. On Jun. $12^{\text {th }}$ the price of amazon started falling back again, so I decide to sell the rest of 150 shares. I just kept 50 shares to make sure I earn a lot from this transaction. I totally earned $\$ 3810$ after sold 150 shares. Until Friday the price did not rise up to anymore. This was a good experience for me that buy low and sell high.


Figure 3.3.7 Week 2-AMZN Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)

According to the experience of the first week simulation, I decided not to buy even 1 share of Oracle. Because I did not think there would be any big moves for Oracle, and even though we can make a profit from Oracle. It won't be a good choice to do this. And the main reason was because we did not have enough money to operate this. Thus, there was no transaction in this week. Believe or not, what we thought was true. When we look back to the chart for this week below, there wasn't any good chance that we will make profits.


Figure 3.3.8 Week 2-ORCL Chart (finance.yahoo.com)

| Date | Symbol | Buy/ <br> Sell | Price | Shar es | Comm ission Fee | Net Cost/Proce eds | Profit/Los <br> S | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$30,790.11 | \$1,627.08 |
| 6/11/14 | JMEI | Sell | \$30.75 | 200 | \$1.99 | \$6,148.01 | \$542.02 | \$36,938.12 | \$2,169.10 |
| 6/11/14 | FB | Buy | \$65.40 | 100 | \$1.99 | -\$6,541.99 |  | \$30,396.13 |  |
| 6/12/14 | AMZN | Sell | \$337.26 | 150 | \$1.99 | \$50,587.01 | \$4,342.02 | \$80,983.14 | \$6,511.12 |
| 6/13/14 | FB | Sell | \$64.50 | 300 | \$1.99 | \$19,348.01 | \$344.02 | \$100,331.15 | \$6,855.14 |

Table 3.3.2 Week 2- Swing Trading Transactions

## Week 3

6/9/14-6/13/14

## Jumei International Holding Limited (JMEI)

During this week, JMEI did not perform as good as last week. On first three days, the price stayed between $\$ 26$ and $\$ 27$, and from Thursday it started dropping down. On Friday, JMEI even was close to $\$ 23$, which was the lowest price ever. I made three moves in this week. The first move was on Jun. $17^{\text {th }}$, I bought 600 shares at $\$ 26.18$. On the next day, the price was a little bit higher, so I sold 400 shares with the price of $\$ 27.30$. I gained $\$ 444.02$. The last move was on Jun. $20^{\text {th }}$. When the price was low, I made a trade on 400 shares at $\$ 23.33$. However, the price did not move up at the end, so I have to wait until next week.


Figure 3.3.9 Week 3-JMEI Chart (finance.yahoo.com)

## Facebook (FB)

FB had big variations on Wednesday and Friday. On Wednesday, the price rose up to $\$ 65.71$, but on Friday, it suddenly declined to $\$ 63.40$. I made three transactions in this week. I bought 200 shares of FB with the price of $\$ 63.91$ on Jun. $16^{\text {th }}$. On the next day, I sold all 300 shares, which including 100 shares from the last week. So I got $\$ 99.02$ profits during this transaction. Besides, I bought 250 shares on Jun.19 ${ }^{\text {th }}$. However, the price kept decreasing and I lost $\$ 80$ already. Thus, I only can wait to see how the direction goes in next week.


Figure 3.3.10 Week 3-FB Chart (finance.yahoo.com)

## Amazon.com, Inc. (AMZN)

In this week, most stocks had a big rising on Thursday. This big rising helped us get a good profit in the week. However, on Friday the stock quickly fell down. On Friday, we bought a lot at a low price and we can make more profits in next week. The bellowing is the chart for this week.


Figure 3.3.11 Week 3- AMZN Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)

At the first, we didn't think we will buy any of Oracle in this week, but as you can see on the chart below, the price have a big change on Friday. Because of that I bought some Oracles, I thought the price would be back up again. The reason is that Oracle didn't really change that much, it will back to the price at the first place.


Figure 3.3.12 Week 3- ORCL Chart (finance.yahoo.com)

| Date | Symbo 1 | Buy/ <br> Sell | Price | Shar es | Comm <br> Fee | Net Cost/ Proceeds | Profit/ <br> Loss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$100,331.15 | \$6,855.14 |
| 6/16/14 | FB | Buy | \$63.91 | 200 | \$1.99 | -\$12,783.99 |  | \$87,547.16 |  |
| 6/16/14 | AMZN | Buy | \$324.52 | 50 | \$1.99 | -\$16,227.99 |  | \$71,319.17 |  |
| 6/17/14 | JMEI | Buy | \$26.18 | 600 | \$1.99 | -\$15,709.99 |  | \$55,609.18 |  |
| 6/17/14 | FB | Sell | \$64.63 | 300 | \$1.99 | \$19,387.01 | \$61.03 | \$74,996.19 | \$6,916.17 |
| 6/18/14 | JMEI | Sell | \$27.30 | 400 | \$1.99 | \$10,918.01 | \$444.02 | \$85,914.20 | \$7,360.19 |
| 6/19/14 | FB | Buy | \$64.82 | 250 | \$1.99 | -\$16,206.99 |  | \$69,707.21 |  |
| 6/19/14 | AMZN | Sell | \$335.63 | 50 | \$1.99 | \$16,779.51 | \$551.52 | \$86,486.72 | \$7,911.71 |
| 6/20/14 | JMEI | Buy | \$23.33 | 400 | \$1.99 | -\$9,333.99 |  | \$77,152.73 |  |
| 6/20/14 | AMZN | Buy | \$321.42 | 75 | \$1.99 | -\$24,108.49 |  | \$53,044.24 |  |
| 6/20/14 | ORCL | Buy | \$40.20 | 500 | \$1.99 | -\$20,101.99 |  | \$32,944.24 |  |
| 6/20/14 | ORCL | Sell | \$40.82 | 500 | \$1.99 | \$20,408.01 | \$308.01 | \$53,352.25 | \$8,219.72 |

Table 3.3.3 Week 3- Swing Trading Transactions

## Week 4

6/23/14-6/27/14

## Jumei International Holding Limited (JMEI)

On the first three days, the price of JMEI was remarkably low. I bought another 200 shares on Jun. $23^{\text {rd }}$. Plus the 200 shares left from the last week, I owned total 400 shares of JMEI now. On Thursday, the price started rising, but it did not reach the high level like the past. On Friday, the price stayed at $\$ 26$, so I sold off all 400 shares with the price of $\$ 26.06$. Since half of the stocks with $\$ 26.18$ when I bought, I lost $\$ 24$ of that. The rest of the stocks gained $\$ 412$, so I finally got $\$ 384.02$ profits.


Figure 3.3.13 Week 4-JMEI Chart (finance.yahoo.com)

## Facebook (FB)

Facebook was operated well in this week. The price was climbed from $\$ 64.36$ to $\$ 67.59$. I made three moves during the week. The first move was on Monday that I sold 250 shares by $\$ 65.61$. Comparing with the buying price, I gained $\$ 193.52$. Until Thursday, I bought in 300 shares of FB because I saw the price was stable. Nonetheless, the price on Friday did not go up; in contrast, it was a little lower. I decided to sell the stocks because the price already had reached the highest in recent three month and it had a downward trend.


Figure 3.3.14 Week 4-FB Chart (finance.yahoo.com)

## Amazon.com, Inc. (AMZN)

This week amazon had a huge jump from the first two days. Please see the chart below. I bought 100 shares at first, and then the price stating flying up, for the whole day until Tuesday noon. I saw the price starting to fall back again, so I sold all the shares I have and got a really good pay back.


Figure 3.3.15 Week 4- AMZN Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)

I think I was wrong last week, as we can see the chart below, the price of Oracle didn't back up any more, and it even fell down a little bit, so I decide to keep watching this for another week to make sure that I won't lose too much money.


Figure 3.3.16 Week 4- ORCL Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Shar <br> es | Comm ission Fee | Net Cost/Procee ds | Profit/Los <br> s | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$53,210.51 | \$8,219.72 |
| 6/23/14 | JMEI | Buy | \$24.00 | 200 | \$1.99 | -\$4,801.99 |  | \$48,408.52 |  |
| 6/23/14 | FB | Sell | \$65.61 | 250 | \$1.99 | \$16,400.51 | \$193.52 | \$64,809.03 | \$8,413.24 |
| 6/23/14 | AMZN | Buy | \$323.96 | 100 | \$1.99 | -\$32,397.99 |  | \$32,411.04 |  |
| 6/24/14 | AMZN | Sell | \$329.05 | 175 | \$1.99 | \$57,581.76 | \$1,075.28 | \$89,992.80 | \$9,488.52 |
| 6/26/14 | FB | Buy | \$67.23 | 300 | \$1.99 | -\$20,170.99 |  | \$69,821.81 |  |
| 6/27/14 | JMEI | Sell | \$26.06 | 400 | \$1.99 | \$10,422.01 | \$518.02 | \$80,243.82 | \$10,006.54 |
| 6/27/14 | FB | Sell | \$67.38 | 300 | \$1.99 | \$20,212.01 | \$41.02 | \$100,455.83 | \$10,047.56 |

Table 3.3.4 Week 4- Swing Trading Transactions

## Week 5

6/30/14-7/3/14

## Jumei International Holding Limited (JMEI)

Because of the Independence Day the stock market was close on Jul. 3rd. As the graph below, JMEI was increasing during the week. The price jumped from $\$ 26$ to $\$ 28.88$. On

Monday, I bought 600 shares of JMEI with the price of $\$ 26.70$. On the next day, when the price increased, I sold 300 shares and made $\$ 353.02$ profits. On Thursday, the price kept increasing and I held the rest of 300 shares. Until on Friday JMEI declined, so I decided to sell at $\$ 28.16$. I totally gained $\$ 787.04$.


Figure 3.3.17 Week 5- JMEI Chart (finance.yahoo.com)

## Facebook (FB)

Facebook performed pretty well on Monday and Tuesday, but on Thursday the price decreased $\$ 2$ per share. I made two transactions. I bought in FB by $\$ 67.32$ per share on Monday. On the next day, the price rose up to $\$ 68$. I sold off 200 shares and earned $\$ 180.02$.


Figure 3.3.18 Week 5- FB Chart (finance.yahoo.com)

## Amazon.com, Inc. (AMZN)

According to the chart below, Amazon had a rising since on Monday. I bought some Amazon on Monday, and on Wednesday as well. I almost got $\$ 10 /$ share back, so I sold all I had and finished my simulation for Amazon.


Figure 3.3.19 Week 5- AMZN Chart (finance.yahoo.com)

## Oracle Corporation (ORCL)

As we can see on the chart below, Oracle still didn't change a lot this week, I bought some at first, but after 2 days, I didn't see any bigger profit from this company, so I just sold it and finish the simulation for Oracle.


Figure 3.3.20 Week 5- ORCL Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Sha <br> res | Comm ission Fee | Net <br> Cost/Procee ds | Profit/Los <br> S | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$100,455.83 | \$10,047.56 |
| 6/30/14 | FB | Buy | \$67.32 | 200 | \$1.99 | -\$13,465.99 |  | \$86,989.84 |  |
| 6/30/14 | AMZN | Buy | \$325.24 | 100 | \$1.99 | -\$32,525.99 |  | \$54,463.85 |  |
| 6/30/14 | ORCL | Buy | \$40.60 | 300 | \$1.99 | -\$12,181.99 |  | \$42,281.86 |  |
| 7/1/14 | JMEI | Sell | \$27.89 | 400 | \$1.99 | \$11,154.01 | \$1,686.02 | \$53,435.87 | \$11,733.58 |
| 7/1/14 | FB | Sell | \$68.24 | 200 | \$1.99 | \$13,646.01 | \$180.02 | \$67,081.88 | \$11,913.60 |
| 7/2/14 | AMZN | Sell | \$334.15 | 100 | \$1.99 | \$33,413.01 | \$887.02 | \$100,494.89 | \$12,800.62 |
| 7/2/14 | ORCL | Sell | \$41.03 | 300 | \$1.99 | \$12,307.01 | \$125.02 | \$112,801.90 | \$12,925.64 |

Table 3.3.5 Week 5- Swing Trading Transactions

### 3.4 Summary

After five weeks simulation, we totally gained $\$ 12,925.64$ for the swing trading. This is
better than what we expected. According to the Figure 3.4.1, we made the most profits in the first week, and since in the third and fourth weeks, the stock market dropped down a little, so we did not gain that much, but the total profit still kept growing. The swing trading is not too hard to operate. We bought at a low price and sell at a high price. It is a short term trading. Sometimes if the price dropped down, we would hold for a longer time to wait for the price rising.


Figure 3.4.1-Cumulative Net Profit for Swing trading

## 4. Simulation Two: Reversal

Reversal is another strategy we choose to use. We selected four companies to do the reversal: JPMorgan, Lennar, Sina and Weibo. Because we think these four stocks are the most appropriate for this strategy, we are going to do some transactions depending on this strategy. In the following section we are going to introduce backgrounds of these companies and reported our transactions that how we understand the reversal trading by doing the transactions.

### 4.1 Company Selected

## JPMorgan Chase \& Co. (JPM)

JPMorgan Chase \& Co. is one of the largest financial institutions in the world, providing banking, wealth management and treasury and securities services. JP Morgan has total assets of $\$ 2.415$ trillion. At the beginning, JPMorgan is an England bank and founded by J. Pierpont Morgan's father by 1959. During the half century, JPMorgan \& Co. merged with other banks and invested in big companies. In 2000, JPMorgan \& Co. merged with The Chase Manhattan Corp., which combined JPMorgan, Chase, Chemical and Manufacturers Hanover these four largest and oldest banking systems into one firm and named JPMorgan Chase \& Co.


Figure 4.1.1 JPM Stock Chart (finance.yahoo.com)

The graph above shows the stock price since 1983. Before 1995, the price was shifting around $\$ 10$, but after that it became to increase. In 2000 , the price reached $\$ 60$, which was the highest historical price, and then until this year, it reached that high again. JPMorgan Chase \& Co. is related to the whole economy. Once the economy shifts, JPMorgan must be influenced. Thus, we put JPM under the swing trading, which is a short term trading, and we need to change decisions immediately.

## Lennar Corp. (LEN)

Lennar Corp. is one of four biggest real estate companies (Pulte Homes, Centex, D.R. Horton) in the US. Lennar is founded in 1954 by Leonard Miller, and it is located in Miami. Lennar's total asset is over $\$ 6.7$ billion and the revenue is over $\$ 8.9$ billion. Leonard Miller graduated from Harvard University and used $\$ 10,000$ to engage in real estate. He cooperated with Arnold P. Rosen to established F \& R Builder Company. Miller was very keen on education and charity, and made a great contribution.


Figure 4.1.2 LEN Stock Chart (finance.yahoo.com)

In 1971, Lennar was public on NYSE. In 2005, Lennar got over $\$ 60$ per share. Because of the financial crisis in 2008 , the price sank to only $\$ 6$, but recently it goes up. The total revenue in 2004 was double than 2000. In five years, earning per shares (EPS) was also doubled. We are going to buy Lennar stock because we think real estate is recovering. The interest rate is very low now and it will stimulate economic development that more people will buy homes.

## Sina Corporation (SINA)

SINA Corporation is an Internet company and it is one of the biggest direct-industry sites in China. The company was founded in December 1998 by Zhidong Wang. The SINA joined the NASDAQ market in 2000. After years of evolution, SINA now have almost everything you would think, and most things you would need.

Why we choose this company is because when we looked at the stock value chart, we find
out that the stock value of SINA is recently decreasing. However, we believe after a long time decreasing, it will rise up again. The pattern of SINA shows double bottom "W", so we put it under reversal.


Figure 4.1.3 SINA Stock Chart (finance.yahoo.com)

## Weibo Corporation (WB)

Weibo Corporation is also an Internet company. Weibo is the largest micro-blog in Peoples Republic of China. It was founded by SINA in August 2009. It firstly called Sina Weibo, and it changed name to Weibo in March 2013. When Weibo first open to public, the number of users quickly increasing. Until 2010 the average blog that people sent on Weibo was more than 25 million per day. And up to March 2014 the user of Weibo was already more than $\$ 550$ million and more than $\$ 66$ million people use Weibo every day. Weibo recently joined to NASDAQ in April 2014.

Since the large number of users and our experience of using Weibo, we think Weibo would be a good company for investing. The following graph is the stock value chart of Weibo. The
price was opening at $\$ 20$, and then rose to $\$ 23$, but later on it dropped to $\$ 18$. We believe that the Weibo stock price will move up in the future.


Figure 4.1.4 WB Stock Chart (finance.yahoo.com)

### 4.2 Choosing the first stock

Here is the first stock I brought. I have initially $\$ 100,000$ to invest. Recently, the price of Lennar Corp. is moving around the moving average. The stock shows the ultimate triple tops, which is also called head-and-shoulders. I brought in 250 shares for $\$ 40.61$ per share, which was at the lowest price on Jun. $3^{\text {rd }}$. I chose to trade in Lennar first because on Jun. 3th Lennar had the largest volatility, which comparing to JPMorgan Chase \& Co., Sina, and Weibo. This was my first time to buy stocks, so I only brought 250 shares. I tried to simulate when the best time to buy in was and when to sell out.

| Date | Sym <br> bol | Buy/ <br> Sell | Price | Shares | Commis <br> sion fee | Net Cost/ <br> Proceeds | Profit <br> /Loss | Total <br> Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $6 / 3 / 2014$ |  |  |  |  |  |  |  | $\$ 100,000.00$ |  |
| $6 / 3 / 2014$ | LEN | Buy | $\$ 40.61$ | 250 | $\$ 19.99$ | $-\$ 10172.49$ |  | $\$ 89827.51$ |  |

Table 4.2.1 Choosing the first stock-LEN


Figure 4.2.1 Choosing the first stock-LEN (finance.yahoo.com)

### 4.3 Transactions

## Week 1

6/2/14-6/6/14

## Lennar Corp. (LEN)

The LEN stock kept relatively the same level on June $2^{\text {nd }}$ and June $3^{\text {rd }}$, but on June $4^{\text {th }}$ the price went down a little. Until on June $5^{\text {th }}$ and June $6^{\text {th }}$, the price rose up again and even reached to $\$ 41.80$, which was also the highest during this month. On June $3^{\text {rd }} \mathrm{I}$ traded on 250 shares of

LEN at the price of $\$ 40.61$. Including the commission fee, it totally cost $\$ 10172.49$. Fortunately, I waited for one and half hours, the price rose to $\$ 40.91$. Comparing to the price on last day, I considered the price would not increase too much anymore. Then, I sold all of the 250 shares at the price of $\$ 40.91$. Deducting the commission fees, I totally earned $\$ 35.02$. Although it was not that much, this was my first successful experience to trade stocks.

On Friday, I bought in 400 shares of LEN stocks. Since the open price was higher than Thursday's, I made a guess that the price would keep increasing. However, I traded in at a high price of $\$ 41.67$. Later on, the price was decreased. Though it was rose back in the afternoon, I only made $\$ 4.00$ profits. So I decided to hold it.


Figure 4.3.1 Week 1-LEN Chart (finance.yahoo.com)

## JPMorgan Chase \& Co. (JPM)

According to the chart above, the price of JPM was increased from $\$ 55.00$ to $\$ 57.00$. This was a big increasing. Jun. $5^{\text {th }}$ was the best time to invest. However, I made two trading on Jun. $4^{\text {th }}$ and Jun. $6^{\text {th }}$ and I lost money. Firstly, I bought 300 shares of the price of $\$ 55.50$, but then it did
not rise too much. So I decided to sell it at the price of $\$ 55.60$ but lost $\$ 9.98$. On the second time, I traded on 400 shares of JPM with a high price; unfortunately, the price went down. I also realized it reached the highest in this month. Thus, I did not want to lose too much, so I sold all the stocks and lost \$59.98.

I summarized two reasons why I lost money. The first reason was that I did not get the best time to buy stocks. Usually, the opening price is higher, so I have to wait when the piece goes down. Otherwise, after 20 minutes transaction time, the price reaches to the top and I buy in stocks, but later on the price goes down and I lose money. So it is better to trade when the price is low. The next reason was that I am lack of patience to wait for a longer time. For example, if I hold JPM stocks to Jun. $5^{\text {th }}$, I will make more profits.


Figure 4.3.2 Week 1-JPM Chart (finance.yahoo.com)

## Sina Corporation (SINA)

I only bought 100 shares of Sina on Tuesday in this week. On Friday the price up to $\$ 45$, I sold all of the shares and earn a little. Although I sold all the shares I have, I think next week

Sina will still rise a little bit.


Figure 4.3.3 Week 1-SINA Chart (finance.yahoo.com)

## Weibo Corporation (WB)



Figure 4.3.4 Week 1-WB Chart (finance.yahoo.com)

When the simulation starts, I planned to buy 1000 shares of Weibo, but I did not have enough money to buy that much, so I bought 900 shares instead. After a week of slightly rising,
on Friday I sold 500 shares only for get some money back. I think I will buy some more shares in next week.

| Date | $\begin{aligned} & \text { Symb } \\ & \text { ol } \end{aligned}$ | Buy/ <br> Sell | Price | Sha <br> res | Commis sion Fee | Net Cost/Procee ds | Profit/Los <br> S | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$100,000.00 |  |
| 6/2/14 | WB | Buy | \$18.30 | 900 | \$1.99 | -\$16,471.99 |  | \$83,528.01 |  |
| 6/3/14 | LEN | Buy | \$40.61 | 250 | \$19.99 | -\$10,172.49 |  | \$73,355.52 |  |
| 6/3/14 | LEN | Sell | \$40.91 | 250 | \$19.99 | \$10,207.51 | \$35.02 | \$83,563.03 | \$35.02 |
| 6/3/14 | SINA | Buy | \$43.61 | 100 | \$1.99 | -\$4,362.99 |  | \$79,200.04 |  |
| 6/4/14 | JPM | Buy | \$55.50 | 300 | \$19.99 | -\$16,669.99 |  | \$62,530.05 |  |
| 6/4/14 | JPM | Sell | \$55.60 | 300 | \$19.99 | \$16,660.01 | -\$9.98 | \$79,190.06 | \$25.04 |
| 6/6/14 | LEN | Buy | \$41.67 | 400 | \$19.99 | -\$16,687.99 |  | \$62,502.07 |  |
| 6/6/14 | JPM | Buy | \$56.99 | 400 | \$19.99 | -\$22,815.99 |  | \$39,686.08 |  |
| 6/6/14 | JPM | Sell | \$56.94 | 400 | \$19.99 | \$22,756.01 | -\$59.98 | \$62,442.09 | -\$34.94 |
| 6/6/14 | SINA | Sell | \$45.12 | 100 | \$1.99 | \$4,510.01 | \$147.02 | \$66,952.10 | \$112.08 |
| 6/6/14 | WB | Sell | \$19.10 | 500 | \$1.99 | \$9,548.01 | \$396.02 | \$76,500.11 | \$508.10 |

Table 4.3.1 Week 1- Reversal Transaction

## Week 2

6/9/14-6/13/14

## JPMorgan Chase \& Co. (JPM)

JPM always has big variations. In this week, the price even reached to $\$ 57.90$, which was the highest in this month. I bought 350 shares of JPM when the price decreased. Looking at the graph above, there is a double top pattern on Jun. $9^{\text {th }}$. I made a trading when the price almost got the bottom because I believed the price would rise up later. As expected, the price went up. I sold out shares on Jun. $10^{\text {th }}$ when the price got the same level as yesterday. If I held it longer when it reached the top, I would make more money.

Since Wednesday, the price started declining. I bought 400 shares at the price of $\$ 57.09$, which was near the lowest on Jun. $11^{\text {th }}$. I held stocks until Friday because the price on Thursday was not very high. I sold shares with $\$ 57.40$ before the price dropped to lower.


Figure 4.3.5 Week 2-JPM Chart (finance.yahoo.com)

## Lennar Corp. (LEN)

The LEN had a bad performance in this week. The price decreased from $\$ 42$ to $\$ 40$. It presented to a negative line. I remained 400 shares with the price of $\$ 41.67$ in last week, which was at a high price level. On Wednesday, the price already dropped to $\$ 41$, so I decided to sold out and stop right there. I sold stocks at the price of $\$ 41.12$ and I lose $\$ 223.98$. Stock trading is like a gamble game. Sometimes we need to learn to stop immediately and avoid losing more money.


Figure 4.3.6 Week 2-LEN Chart (finance.yahoo.com)

## Sina Corporation (SINA)

This week Sina Corporation had a good movement in the middle of the week. We bought some shares of Sina on the beginning of the Tuesday, and when the Thursday comes we sold all the shares we have. But it just bring us about $\$ 200$, it is just about $1 \%$ pay back. We are not really happy with this pay back though.


Figure 4.3.7 Week 2-SINA Chart (finance.yahoo.com)

## Weibo Corporation (WB)

Weibo Corporation gives us a great pay back this week. As you can see the chart below, Weibo had a huge jump during the whole week. We bought more than thousand shares on Monday, and when Thursday the price starting to fall, we sold all the shares we have and get more than $7 \%$ pay back. That is much more than what we expected.


Figure 4.3.8 Week 2-WB Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Shar <br> es | Commis sion Fee | Net <br> Cost/Procee ds | Profit/Los <br> s | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$43,321.64 | \$508.10 |
| 6/9/14 | JPM | Buy | \$57.30 | 350 | \$1.99 | -\$20,056.99 |  | \$23,264.65 |  |
| 6/9/14 | SINA | Buy | \$45.00 | 100 | \$1.99 | -\$4,501.99 |  | \$18,762.66 |  |
| 6/9/14 | WB | Buy | \$18.60 | 1500 | \$1.99 | -\$27,901.99 |  | -\$9,139.33 |  |
| 6/10/14 | JPM | Sell | \$57.61 | 350 | \$1.99 | \$20,161.51 | \$104.52 | \$11,022.18 | \$612.62 |
| 6/11/14 | LEN | Sell | \$41.12 | 400 | \$1.99 | \$16,446.01 | -\$241.98 | \$27,468.19 | \$370.64 |
| 6/11/14 | JPM | Buy | \$57.09 | 400 | \$1.99 | -\$22,837.99 |  | \$4,630.20 |  |
| 6/12/14 | SINA | Sell | \$47.03 | 100 | \$1.99 | \$4,701.01 | \$199.02 | \$9,331.21 | \$569.66 |
| 6/12/14 | WB | Sell | \$20.00 | 1900 | \$1.99 | \$37,998.01 | \$2,454.03 | \$47,329.22 | \$3,023.69 |
| 6/13/14 | JPM | Sell | \$57.40 | 400 | \$1.99 | \$22,958.01 | \$120.02 | \$70,287.23 | \$3,143.71 |

Table 4.3.2 Week 2- Reversal Transactions

## Week 3

6/16/14-6/20/14

## JPMorgan Chase \& Co. (JPM)

JPM revealed an increasing tendency. Since Monday, the price kept increasing, and on Thursday and Friday, it was stable at a horizontal level. It started the week at $\$ 56.58$ per share and finished at $\$ 57.5$ a share. On Jun. $18^{\text {th }}$, I invested 200 shares in JPM and the price was $\$ 57.33$. I should sell off when the price got to the top at the end of the day; however, I missed the opportunity. So I am going to hold stocks for the time being.


Figure 4.3.9 Week 3-JPM Chart (finance.yahoo.com)

## Lennar Corp. (LEN)

According to the lowing graph, Lennar Corp. was very volatile in this week. It was changed from the range of $\$ 40.08$ to $\$ 41.77$. I made a transaction on Jun $17^{\text {th }}$. I bought 300 shares with $\$ 40.48$ per share when the price was low on that day. After one day, I sold off all of the shares because I realized the price went down. I only gained $\$ 38.02$ this time. The stock market is hard
to forecast. After I sold stocks, the price suddenly rose up.


Figure 4.3.10 Week 3-LEN Chart (finance.yahoo.com)

## Sina Corporation (SINA)

As we can see on the chart below, most company reach the top price on Wednesday. For Sina Corporation, we bought some shares of this company on Monday. Because of the shortage of the money, we didn't bought enough shares of this company. And on Thursday we sold all 250 shares of them. Because the changes are not that much, we only got about $4 \%$ of the pay back.


Figure 4.3.11 Week 3-SINA Chart (finance.yahoo.com)

## Weibo Corporation (WB)

As we said last week, this week Weibo did had a great rise during the first half of the week.

We bought just 500 shares of this company on Monday, and we sold it on the noon of the Wednesday. The pay back of this week is also about $8 \%$.


Figure 4.3.12 Week 3-WB Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Shar <br> es | Comm ission Fee | Net Cost/Procee ds | Profit/L oss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$54,127.24 | \$3,143.71 |
| 6/16/14 | WB | Buy | \$19.16 | 500 | \$1.99 | -\$9,581.99 |  | \$44,545.25 |  |
| 6/16/14 | SINA | Buy | \$44.96 | 250 | \$1.99 | -\$11,241.99 |  | \$33,303.26 |  |
| 6/17/14 | LEN | Buy | \$40.48 | 300 | \$1.99 | -\$12,145.99 |  | \$21,157.27 |  |
| 6/18/14 | LEN | Sell | \$40.62 | 300 | \$1.99 | \$12,184.01 | \$38.02 | \$33,341.28 | \$3,181.73 |
| 6/18/14 | JPM | Buy | \$57.33 | 200 | \$1.99 | -\$11,467.99 |  | \$21,873.29 |  |
| 6/19/14 | WB | Sell | \$20.81 | 500 | \$1.99 | \$10,403.01 | \$821.02 | \$32,276.30 | \$4,002.75 |
| 6/19/14 | SINA | Sell | \$46.83 | 250 | \$1.99 | \$11,705.51 | \$463.52 | \$43,981.81 | \$4,466.27 |

Table 4.3.3 Week 3- Reversal Transactions

## Week 4

6/23/14-6/27/14

JPMorgan Chase \& Co. (JPM)
On Jun. $23^{\text {rd }}$, JPM increased to $\$ 58.20$, but on the following four days the price declined rapidly. I sold off 200 shares on Monday because the price was the highest on that day. With this transaction, I made $\$ 120.02$ profits. On Jun. $25^{\text {th }}$, I bought 250 shares with the price of $\$ 57.31$ when the price was in the rising trend. However, the price did not go up as I expected, so I sold all of the shares on Friday at $\$ 57.42$. The pattern of this week was like a "W". According to the reversal trading, the price may have a pullback in the future, but it will rise up.


Figure 4.3.13 Week 4-JPM Chart (finance.yahoo.com)

## Lennar Corp. (LEN)

LEN presented a trend of increasing during the week. LEN was started at $\$ 40.88$ and finished at $\$ 41.59$ and it reached the highest at $\$ 42.37$. I bought 250 shares on Jun. $25^{\text {th }}$ when the price was low. On the next day, I sold off at $\$ 41.43$ and only made a little profit. I should hold it for a longer time, which the price would move to the top.


Figure 4.3.14 Week 4-LEN Chart (finance.yahoo.com)

## Sina Corporation (SINA)

Sina Corp. did pretty well in this week. I bought some shares on Monday. And the price jumped up about $\$ 4$ on the next two days. I thought that price isn't the top price for Sina, but I was wrong about that, so I ended up sold that on Friday, but I still got about \$3/share to earn.


Figure 4.3.15 Week 4-SINA Chart (finance.yahoo.com)

## Weibo Corporation (WB)

As we can see the chart below, Weibo Corp. also did a great job this week. I bought some shares on Monday, and after that the price keep rising for rest of the week. So I sold all the shares I have to get a good pay back.


Figure 4.3.16 Week 4 -WB Chart (finance.yahoo.com)

| Date | Symb ol | $\begin{aligned} & \text { Buy/ } \\ & \text { Sell } \end{aligned}$ | Price | Shar es | Comm ission Fee | Net Cost/Procee ds | Profit/Los <br> S | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$44,139.83 | \$4,466.27 |
| 6/23/14 | JPM | Sell | \$57.95 | 200 | \$1.99 | \$11,588.01 | \$120.02 | \$55,727.84 | \$4,586.29 |
| 6/23/14 | WB | Buy | \$19.56 | 300 | \$1.99 | -\$5,869.99 |  | \$49,857.85 |  |
| 6/23/14 | SINA | Buy | \$45.00 | 500 | \$1.99 | -\$22,501.99 |  | \$27,355.86 |  |
| 6/25/14 | JPM | Buy | \$57.31 | 250 | \$1.99 | -\$14,329.49 |  | \$13,026.37 |  |
| 6/25/14 | LEN | Buy | \$41.02 | 250 | \$1.99 | -\$10,256.99 |  | \$2,769.38 |  |
| 6/26/14 | SINA | Sell | \$48.77 | 500 | \$1.99 | \$24,383.01 | \$1,881.02 | \$27,152.39 | \$6,467.31 |
| 6/26/14 | LEN | Sell | \$41.43 | 250 | \$1.99 | \$10,355.51 | \$98.52 | \$37,507.90 | \$6,565.83 |
| 6/27/14 | JPM | Sell | \$57.42 | 250 | \$1.99 | \$14,353.01 | \$23.52 | \$51,860.91 | \$6,589.35 |
| 6/27/14 | WB | Sell | \$20.51 | 300 | \$1.99 | \$6,151.01 | \$281.02 | \$58,011.92 | \$6,870.37 |

Table 4.3.4 Week 4- Reversal Transactions

## Week 5

6/30/14-7/3/14

## JPMorgan Chase \& Co. (JPM)

JPM was on a downward path on Jul. $2^{\text {nd }}$. I was very lucky that I made a transaction before the price fell down. On Jun. $30^{\text {th }}$, I bought 200 shares of JPM and the price was $\$ 57.42$ per share. Later on, the price rose to $\$ 57.77$ on that day, but I thought it would go higher so I did not sell
off. On Jul. 1 st JPM kept rising as my expected. When the price reached to $\$ 57.88$, I sold off all of the 200 shares.


Figure 4.3.17 Week 5-JPM Chart (finance.yahoo.com)

## Lennar Corp. (LEN)

LEN was just like JPM that increased on Monday and Tuesday and decreased on Thursday.
I made the first move on Jul. $1^{\text {st }}$ that I bought 200 shares of LEN. However, I sold off when the price started declining on Thursday. I sold at the price of $\$ 43.52$, which was higher than the buying price. I gained $\$ 266.04$ in this transaction.


Figure 4.3.18 Week 5-LEN Chart (finance.yahoo.com)

## Weibo Corporation (WB)

When we look back last week's price chart, we decide not to buy any Weibo this week, because we believe we wouldn't get any money back. But we can see the chart below, the price of Weibo had a rise about $\$ 1.5 /$ share, we really did wrong for this judgment. So we ended up with doing no simulation for the last week of Weibo.


Figure 4.3.19 Week 5-WB Chart (finance.yahoo.com)

## Sina Corporation (SINA)

Sina made a good progress for this week. As we can see on the chart below, Sina had two jump-ups in three days, although our simulation for this company is over, but I think the price of Sina will go up again in next week.


Figure 4.3.20 Week 5 -SINA Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Share <br> S | Com <br> missi <br> on <br> Fee | Net Cost/Procee ds | Profit/L oss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$58,011.92 | \$6,870.37 |
| 6/30/14 | JPM | Buy | \$57.42 | 200 | \$1.99 | -\$11,485.99 |  | \$46,525.93 |  |
| 6/30/14 | SINA | Buy | \$48.00 | 200 | \$1.99 | -\$9,601.99 |  | \$36,923.94 |  |
| 7/1/14 | JPM | Sell | \$57.88 | 200 | \$1.99 | \$11,574.01 | \$88.02 | \$48,497.95 | \$6,958.39 |
| 7/1/14 | LEN | Buy | \$42.15 | 200 | \$1.99 | -\$8,431.99 |  | \$40,065.96 |  |
| 7/1/14 | SINA | Sell | \$50.00 | 200 | \$1.99 | \$9,998.01 | \$396.02 | \$50,063.97 | \$7,354.41 |
| 7/2/14 | LEN | Sell | \$43.52 | 200 | \$1.99 | \$8,702.01 | \$266.04 | \$58,765.98 | \$7,624.43 |

Table 4.3.5 Week 5- Reversal Transactions

### 4.4 Summary

As we can see on the chart below, through all five weeks we totally earned more than $\$ 7000$.

This is a really good pay back. And we can also see that we earned almost half of the money in first two weeks. The reason of this is because we did encounter a really good time to enter the stock market, and we did choose some good stock to start with. After first two weeks, the stock market not rising that much as first two weeks. So we sometimes need to watch the market for more time to do the transactions.


Figure 4.4.1 Cumulative Net Profit for Reversal Trading

## 5. Simulation Three: Position Trading

Position trading is an easiest strategy to apply, comparing to other strategies. We selected two companies to buy and hold: one is General Electric and the other one is Groupon Inc. Since we think this two stocks are relatively stable, we can hold for one week or several weeks. In the following article we are going to introduce backgrounds of two companies and reported our transactions that how we make profits by using position trading strategy.

### 5.1 Company Selected

## General Electric (GE)

General Electric is the largest diversified services company in the world. It includes energy, technology, capital finance and other industries. GE has business in more than 100 countries and has 300,000 employees. By 1890, Thomas Edison founded the Edison General Electric Company and in 1892, the other two companies combined and the GE Company was established. GE is the forth-largest company in the world among the Forbes Global 2000.

In 1896, GE was public in New York Stock Exchange. "GE was one of the original 12 companies listed on the newly formed Dow Jones Industrial Average and GE is the only one that still remains today" (Smart90.com). GE is the second largest market value in the history except Microsoft. GE broke through $\$ 6$ trillion in 2000. Microsoft, Apple and GE are only three companies reached $\$ 6$ trillion.


Figure 5.1.1 GE Stock Chart (finance.yahoo.com)

We think GE is a large company and is operated over 100 years, so it will not have a big change. Since the economy is recovering gradually, GE will make more revenue and the price of stock will keep increasing. Thus, we plan to put it under the position trading to hold it.

## Groupon, Inc. (GRPN)

Groupon, Inc. was founded in 2008 and it is headquartered in Chicago, Illinois. The company was formerly known as The Point.com, Inc. and changed its name to Groupon, Inc. in October 2008. Groupon, Inc. operates online local commerce marketplaces that connect merchants to consumers by offering goods and services at a discount price. It also offers deals on products for which it acts as the merchant of record. The company offers deals to all kinds of categories, such as travel offers that include hotels, airfare, and package deals, which covers domestic and international travel; and tools, such as payments and credit card payment processing service, as well as point-of-sale solutions to merchants. It distributes deals to customers through mobile applications and mobile browsers that enable consumers to browse,
purchase, manage, and redeem deals on their mobile devices. Websites and emails are targeted by location, purchase history, and personal preferences. Groupon, Inc. publishes its deals through various social networks.

The stock chart indicates variations in past two and half years. In recent years, the price is relatively stable, so we think it is better to put in position trading.


Figure 5.1.2 GRPN Stock Chart (finance.yahoo.com)

### 5.2 Choosing the first stocks

| Date | Symb <br> ol | Buy/Se <br> ll | Price | Shares | Commis <br> sion <br> Fee | Net Cost/ <br> Proceeds | Profit <br> /Loss | Total Cash | Total <br> Profit |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :--- | :--- |
| $6 / 4 / 2014$ | GE | Buy | $\$ 26.67$ | 750 | $\$ 19.99$ | $-\$ 20,022.49$ |  | $\$ 38,138.95$ |  |

Table 5.2.1 Choosing the first stock-GE


Figure 5.2.1 choosing the first stock-GE (finance.yahoo.com)

I firstly chose General Electric (GE) for the position trading. According to the graph above, it shows the price changing in this week. On Jun. $4^{\text {th }}$, the price was the lowest. I bought in 750 shares at a low price of $\$ 26.67$ per share. It cost $\$ 20022.49$ plus the commission fee. The position trading is similar to the buy-and-hold strategy, so I bought stocks and held it. On the next day, the price rose up and on Jun. $6^{\text {th }}$ the price reached to the highest.

### 5.3 Transactions

## Week 1

6/2/14-6/6/14

## General Electric (GE)

The price of General Electric (GE) had a big declining on Wednesday and rose back on Friday. I bought 750 shares at the price of $\$ 26.67$ and held it until Friday. The position trading is easier than other strategies. I only need to hold it and when the price gets higher I will sell it out. On Jun. $6^{\text {th }}$, the price reached to $\$ 27.20$, which was almost the highest in this month. I worried the price will go down in next week, so I sold 550 shares and left 200 shares. I have made $\$ 207.52$ revenues from this trading. Therefore, sometimes holding for long time can make more money.


Figure 5.3.1 Week 1-GE Chart (finance.yahoo.com)

## Groupon, Inc. (GRPN)

Since we are doing Position trading on the Groupon, and Groupon isn't an expensive stock, I bought 5000 shares at the first day. And I think I'm going to keep this shares for several weeks if the price is keep rising. For this week the price of Groupon is mostly rising, so I will keep Groupon until the share start to fall back.

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | Buy/ <br> Sell | Price | Shares | Commis sion Fee | Net Cost/Procee ds | Profit/L oss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$76,500.11 |  |
| 6/2/14 | GRPN | Buy | \$5.61 | 5000 | \$1.99 | -\$28,052.99 |  | \$48,448.12 |  |
| 6/4/14 | GE | Buy | \$26.67 | 750 | \$19.99 | -\$20,022.49 |  | \$28,425.63 |  |
| 6/6/14 | GE | Sell | \$27.12 | 550 | \$19.99 | \$14,896.01 | \$207.52 | \$43,321.64 | \$207.52 |

Table 5.3.1 Week 1- Position Trading Transactions

## Week 2

6/9/14-6/13/14

## General Electric (GE)

On Monday and Tuesday, GE operated pretty well. I still held 200 shares. However, I missed the opportunity to sell with a high price. Since Wednesday most of stocks declined, I bought 600 shares of GE when the price was $\$ 26.93$. On Friday, the price did not change too much. So far I have totally 800 shares on the hand and I want to hold for another week.


Figure 5.3.2 Week 2-GE Chart (finance.yahoo.com)

## Groupon, Inc. (GRPN)

This week the Groupon started to fall at first, since mostly all the stock is falling. I didn't sell it and I was right. However, from Thursday the price started rising again. And according to some news I read, the price would keep rising next week, so I decided to keep watching.

| Date | $\begin{aligned} & \text { Symb } \\ & \text { ol } \end{aligned}$ | Buy/S ell | Price | Shar <br> es | Commis sion Fee | Net Cost/Procee ds | Profit/L oss | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$70,287.23 | \$207.52 |
| 6/12/14 | GE | Buy | \$26.93 | 600 | \$1.99 | -\$16,159.99 |  | \$54,127.24 |  |

Table 5.3.2 Week 2- Position Trading Transactions

## Week 3

6/16/14-6/20/14

## General Electric (GE)

Looking at the graph below, GE had a good trend in this week. The price always increased
in the afternoon. It kept a slow increasing. Since we are simulating on the position trading, I bought 600 shares on Tuesday and hold it for the whole week. Until Friday, the price was finished at $\$ 26.97$, so I earned $\$ 150.06$ so far. I decided to hold it for longer time. Because I hold 1400 shares on hand, I sold 600 shares with $\$ 26.99$ and I made $\$ 96.02$ revenue.


Figure 5.3.3 Week 3-GE Chart (finance.yahoo.com)

## Groupon, Inc. (GRPN)

As I said last week, the price of Groupon started rising a little bit. However, before Friday the price did fall back to the price from last Friday. And on Friday, the price had a big jump. I'm looking forward to see what will happen next week.

| Date | Symb <br> ol | Buy/ <br> Sell | Price | Sha <br> res | Commiss <br> ion Fee | Net Cost/ <br> Proceeds | Profit/Lo <br> ss | Total Cash | Total Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\$ 43,981.81$ | $\$ 207.52$ |
| $6 / 17 / 14$ | GE | Buy | $\$ 26.72$ | 600 | $\$ 1.99$ | $-\$ 16,033.99$ |  | $\$ 27,951.82$ |  |
| $6 / 20 / 14$ | GE | Sell | $\$ 26.99$ | 600 | $\$ 1.99$ | $\$ 16,192.01$ | $\$ 158.02$ | $\$ 44,139.83$ | $\$ 365.54$ |

## Week 4

6/23/14-6/27/14

## General Electric (GE)

Since I hold 600 shares of GE on the hand, I did not make any transactions in this week. I wanted to hold it for few weeks. Unfortunately, the price went down since Wednesday, and on Thursday it got the lowest. I already lost $\$ 173.94$ so far. Thus, I have to hold it for a longer time to wait for rising.


Figure 5.3.4 Week 4-GE Chart (finance.yahoo.com)

## Groupon, Inc. (GRPN)

This week the price kept rising at first, but fell down after that. When we look at the price of Groupon for the past three weeks, the price mostly had a trend of rising. For the experimental concern, we keep the shares we have, and we will see if the price can keep rising next week.


Figure 5.3.5 Week 4-GRPN Chart (finance.yahoo.com)

## Week 5

6/30/14-7/3/14

## General Electric (GE)

Finally, I sold 850 shares of GE, which already held for three weeks. On Jul. $3^{\text {rd }}$ the price jumped to the level of $\$ 26.80$. I sold with the price of $\$ 26.85$. I only earned $\$ 54.02$ because the price of GE is not high. GE is relatively stable and growth slowly, so it is fit for position trading.


Figure 5.3.6 Week 5-GE Chart (finance.yahoo.com)

## Groupon, Inc. (GRPN)

Let us look at the chart below. This week the price was curving for the whole week. But for our team, when we looked at the Monday's price chart, we decided to sell all of the shares we have, and actually we did earn a good amount of money.


Figure 5.3.7 Week 5-GRPN Chart (finance.yahoo.com)

| Date | $\begin{aligned} & \text { Symbo } \\ & 1 \end{aligned}$ | $\begin{aligned} & \text { Buy/ } \\ & \text { Sell } \end{aligned}$ | Price | Shar <br> es | Commis sion Fee | Net <br> Cost/Proce <br> eds | Profit/Los <br> S | Total Cash | Total <br> Profit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | \$58,765.98 | \$365.54 |
| 7/1/14 | GRPN | Sell | \$6.70 | 5000 | \$1.99 | \$33,498.01 | \$5,446.02 | \$92,263.99 | \$5,811.56 |
| 7/3/14 | GE | Sell | \$26.85 | 850 | \$1.99 | \$21,478.01 | \$-15.98 | \$113,742.00 | \$5,795.58 |

Table 5.3.4 Week 5- Position Trading Transactions

### 5.4 Summary

We totally earned $\$ 5,795.58$ in the position trading. Since we only simulated on two stocks, the profits was not as much as other two methods. The position trading teaches us to buy and
hold. When the price rose to another level, then we sell stocks at a high price. The position trading is the easiest one comparing to others. We made few transactions on GE in the first and the third weeks, but we held GRPN for five weeks. In the last week, we sold out all of the shares.


Figure 5.4.1 Cumulative Net Profit for Position Trading

## Conclusion and Analysis

By the end of five-weeks of simulation using Swing-trading, Reversal, and Position trading, all three strategies has made a really good amount of positive profits. During these five weeks of simulation, the total money we spend for the Swing trading were about $\$ 367,512$ and the profit for the Swing trading is about $\$ 12,526$. This is about $3.4 \%$ pay back of the total money spend on the Swing trading. The total money spent for the Reversal trading were about $\$ 289,397$ and the total profit for five weeks was about $\$ 7,625$. This is about $2.63 \%$ pay back of what we spent on Reversal trading. Also the total amount spent for the position trading is only around $\$ 80,269$, but the profit was about $\$ 5,956$. Compare to how much we spent on the Position trading, the pay back is around $7.42 \%$. Overall the total money we spent for this five weeks of simulation were about $\$ 737,178$ and the total profit is around $\$ 26,107$. The percentage of the money spent and the profit is about $3.54 \%$, it is closer to $4 \%$ which was what we expected at the first place. Thinking about we only have $\$ 200,000$ at first place, the $\$ 26,107$ of the profit is more than $13 \%$. This is a great amount of profit for us, and we are satisfied for this outcome after all.

In conclusion, after finishing the analysis above, we consider this experimental simulation to be successful. We are satisfied with the profit we make and we believe that the result of this five-week simulation is reliable and also accurate. We also believe that after five weeks of simulation, all three strategies were fully tested and proved that the strategies we used are reliable for our future using. But we realized that only five weeks of simulation cannot makes us to be an expert in the stock market, we would need more studies and more trading experience
for applying the strategies.

## References

1. Beattie, Andrew. 2009. The Birth of Stock Exchanges.
[http://www.investopedia.com/articles/07/stock-exchange-history.asp](http://www.investopedia.com/articles/07/stock-exchange-history.asp)
2. Chatterjee, Soham and Saqib Iqbal Ahmed. 2014. Wall Street Sees Sense in Facebook’s \$19 Billion WhatsApp buy. <http://www.reuters.com/article/2014/02/20/us-whatsapp-facebook-research-idUSBREA1J1 4A20140220>
3. Dummies.com. How to Spot Trading Chart Classic Reversal Patterns. <http://www.dummies.com/how-to/content/how-to-spot-trading-chart-classic-reversal-patter n.html>.
4. Finance.yahoo.com. Groupon, Inc. [http://finance.yahoo.com/q/pr?s=GRPN+Profile](http://finance.yahoo.com/q/pr?s=GRPN+Profile).
5. Investopedia.com. Definition of Reversal.
< http://www.investopedia.com/terms/r/reversal.asp>
6. Kohler, Jeff. 2009. The Anatomy of Trading Breakouts.
[http://www.investopedia.com/articles/trading/08/trading-breakouts.asp](http://www.investopedia.com/articles/trading/08/trading-breakouts.asp)
7. MichaelSincere.com. Volatile Markets: Insight on Trading Reversals. <http://www.michaelsincere.com/articles/3-articles/10-volatile-markets-insight-on-trading-r eversals>
8. Peters-Wright, Dean. 2013. Top 5 Popular Trading Strategies.
<http://www.tradingmarkets.com/featured_contributors/top-5-popular-trading-strategies-158
4260.html/3>
9. Smart90.com. Hot Events of the Year. [http://www.smart90.com/timeline/1890\#1896DowJones](http://www.smart90.com/timeline/1890%5C#1896DowJones).
10. Swing-trade-stock.com. 4 Profitable Chart Patterns for Swing Traders. [http://www.swing-trade-stocks.com/chart-patterns.html](http://www.swing-trade-stocks.com/chart-patterns.html)
11. Zucchi, Kristina. 2011. 4 Common Active Trading Strategies. [http://www.investopedia.com/articles/active-trading/11/four-types-of-active-traders.asp](http://www.investopedia.com/articles/active-trading/11/four-types-of-active-traders.asp)
