Earthquake Safety: A Digital Solution For Romanian Children

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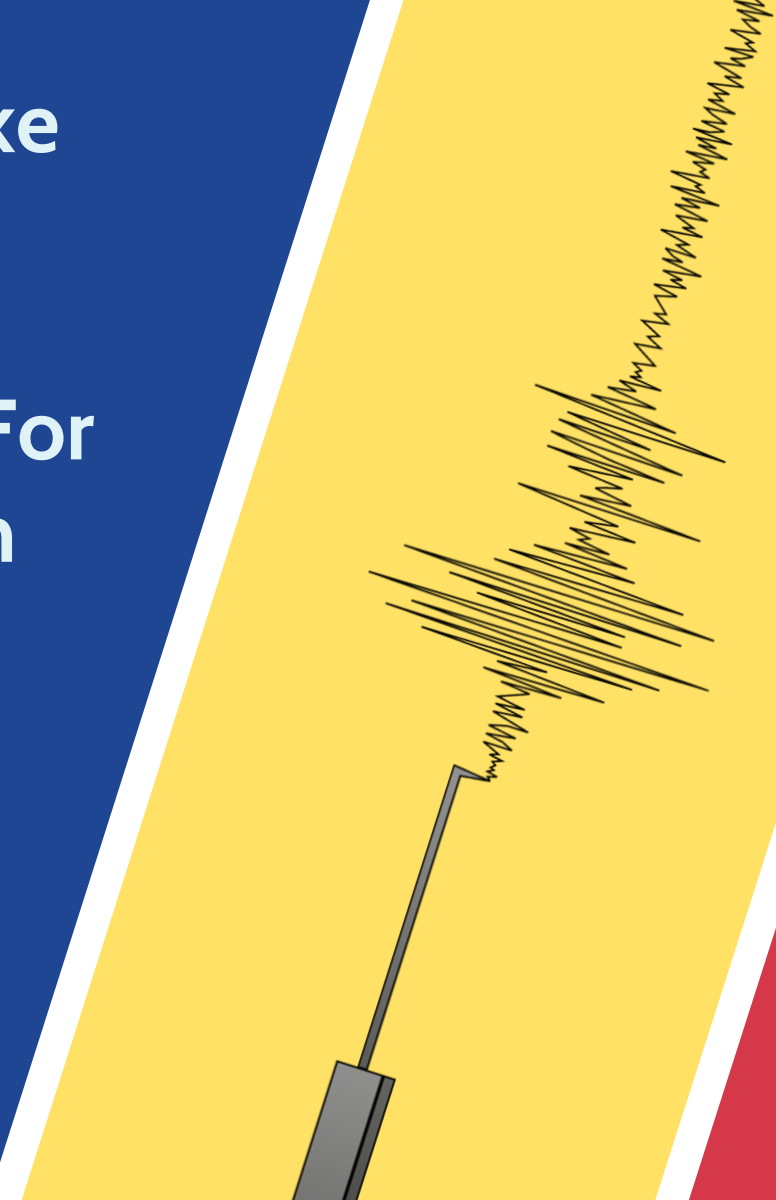
Timory Goggin
Eric Randolph
Adam Spencer



Code for Romania

Earthquakes have had devastating consequences

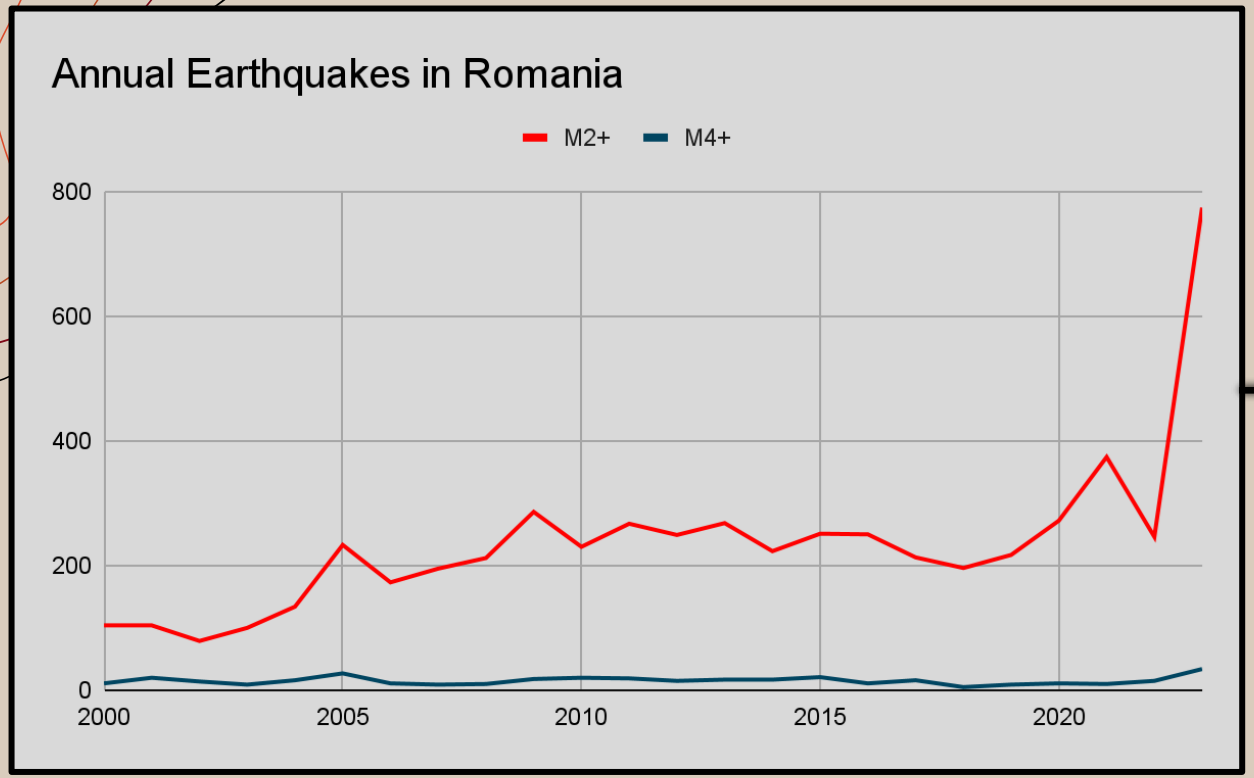
$5 Billion

Average annual affected GDP in Romania

400,000

Romanian citizens affected in the last century

Romania is at high risk for earthquakes

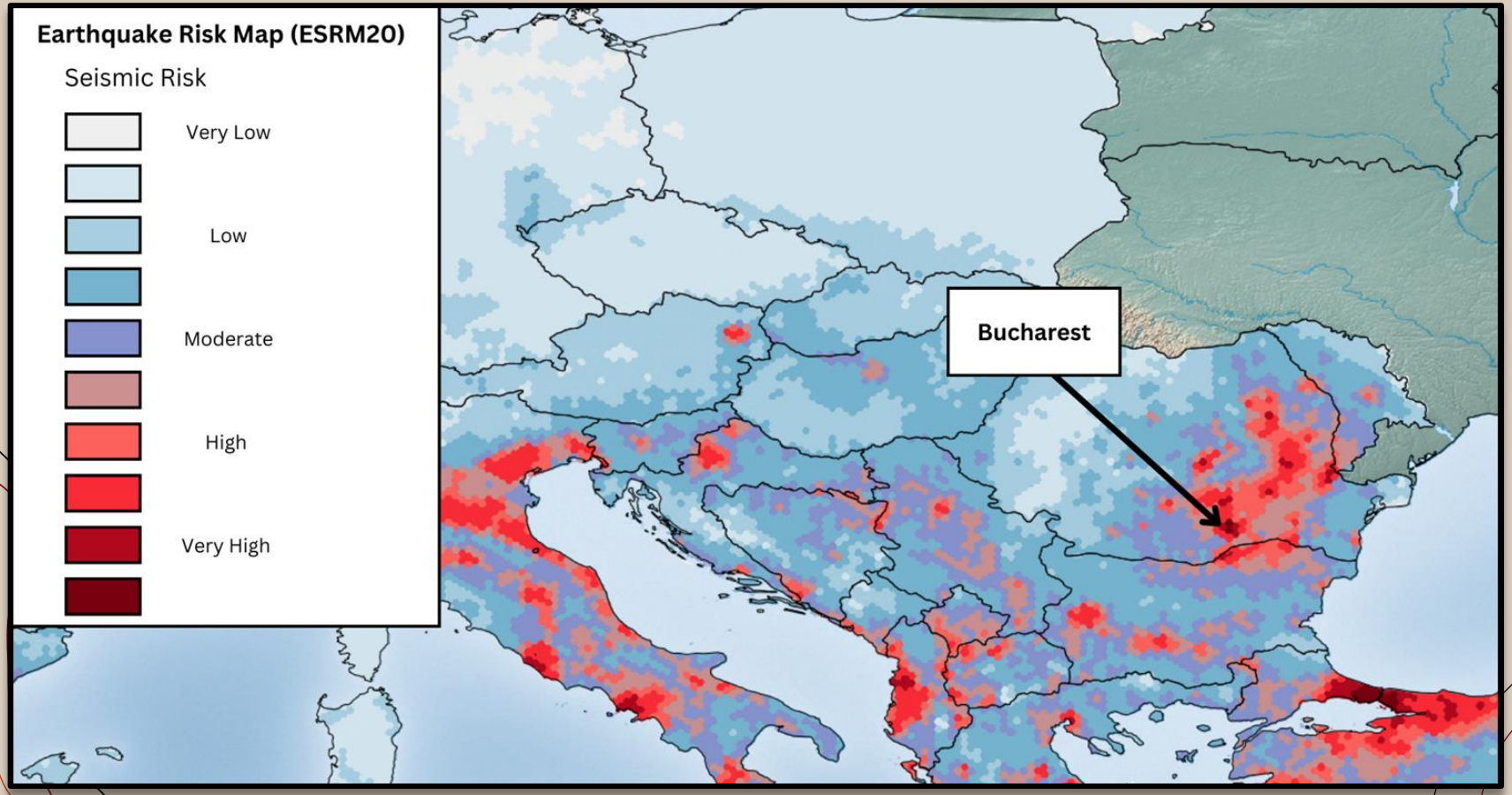


Average **15.2** M4+ earthquakes per year

Strongest since 2000: **M5.9**

Strongest since 1900: **M7.5**

Bucharest is located in a region with high seismic risk



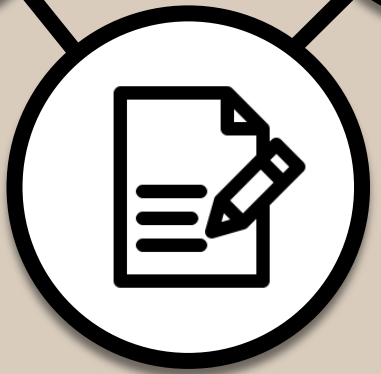
Seismic risk is determined by geographic and historical factors

Geological and Tectonic Data

Density of People and Buildings

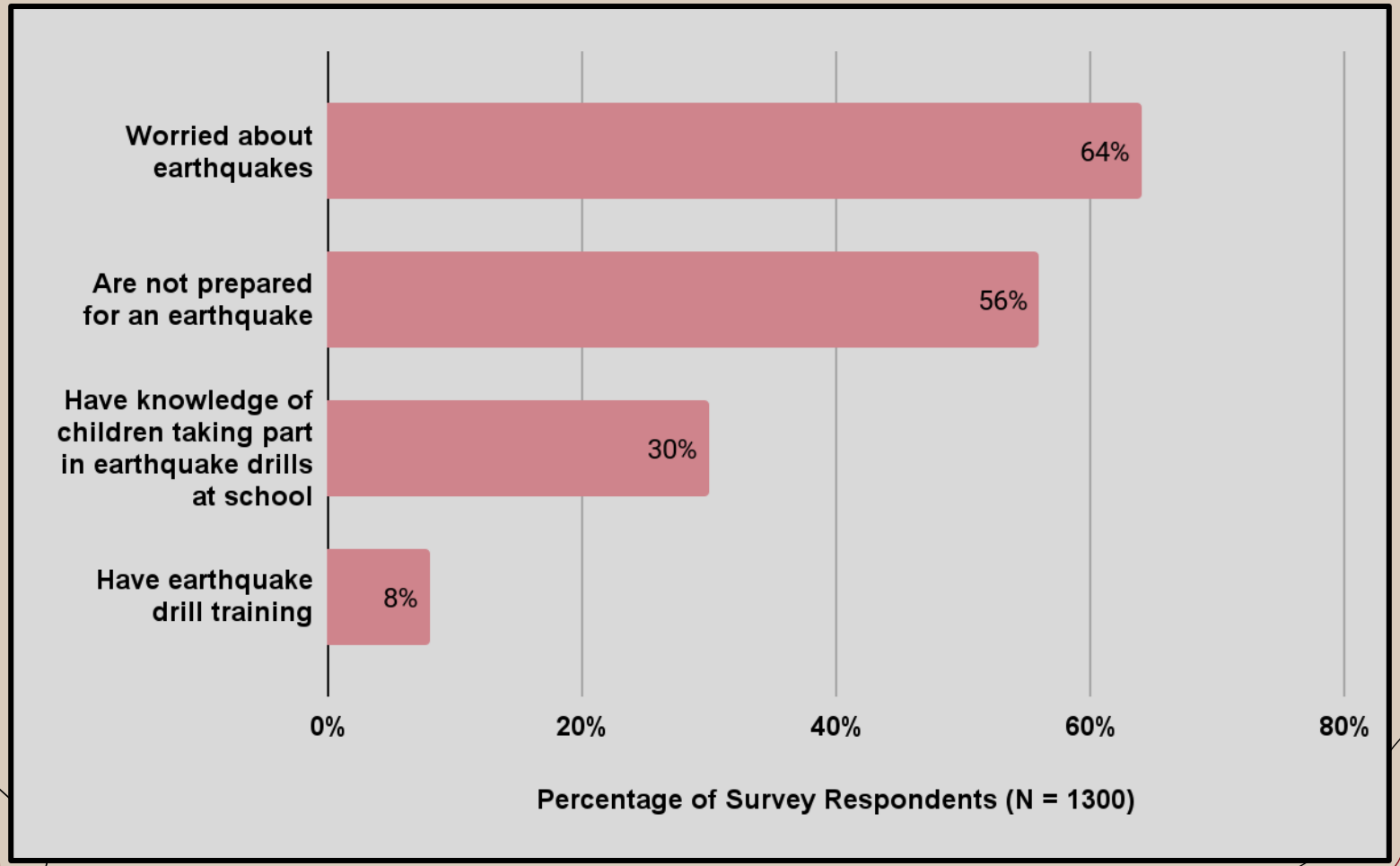
Infrastructure

Contemporary History of Earthquakes



Local Soil Conditions

Despite the risk, a recent study suggests some citizens in Bucharest feel unprepared for an earthquake



The public can get information about earthquakes from multiple sources

Schools

Government

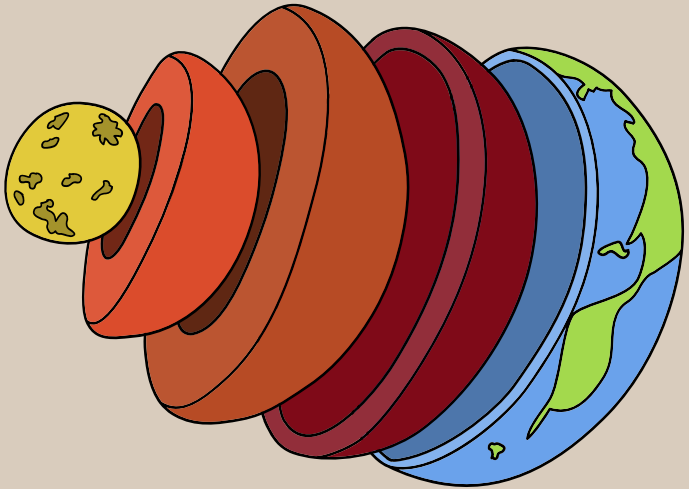
Disaster-related NGOs

Code for Romania is developing digital earthquake education tools that can be used in multiple contexts

Commit GLOBAL

Code for Romania

Our Goal:



Develop content for a digital platform that teaches Romanian children about earthquake safety.

Objective 1:
Identify Earthquake Safety CONTENT

Objective 2:
Find appropriate DELIVERY FORMATS for children

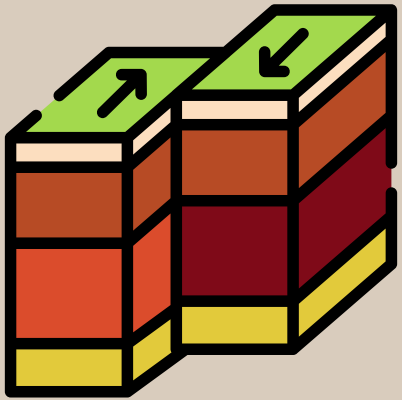
Objective 3:
Identify and apply EXPERT DESIGN TOOLS

Desktop Research

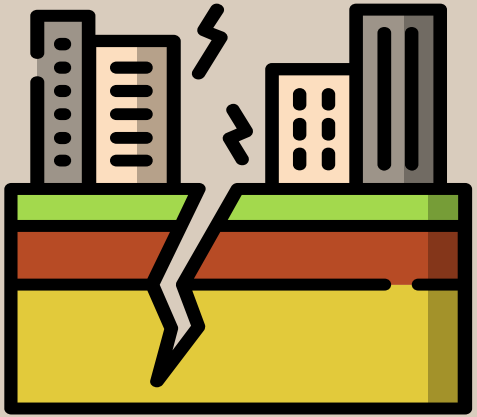
Expert Interviews

Results:
What content should be used for children's earthquake safety education?

Education about earthquakes includes their causes and effects



Causes

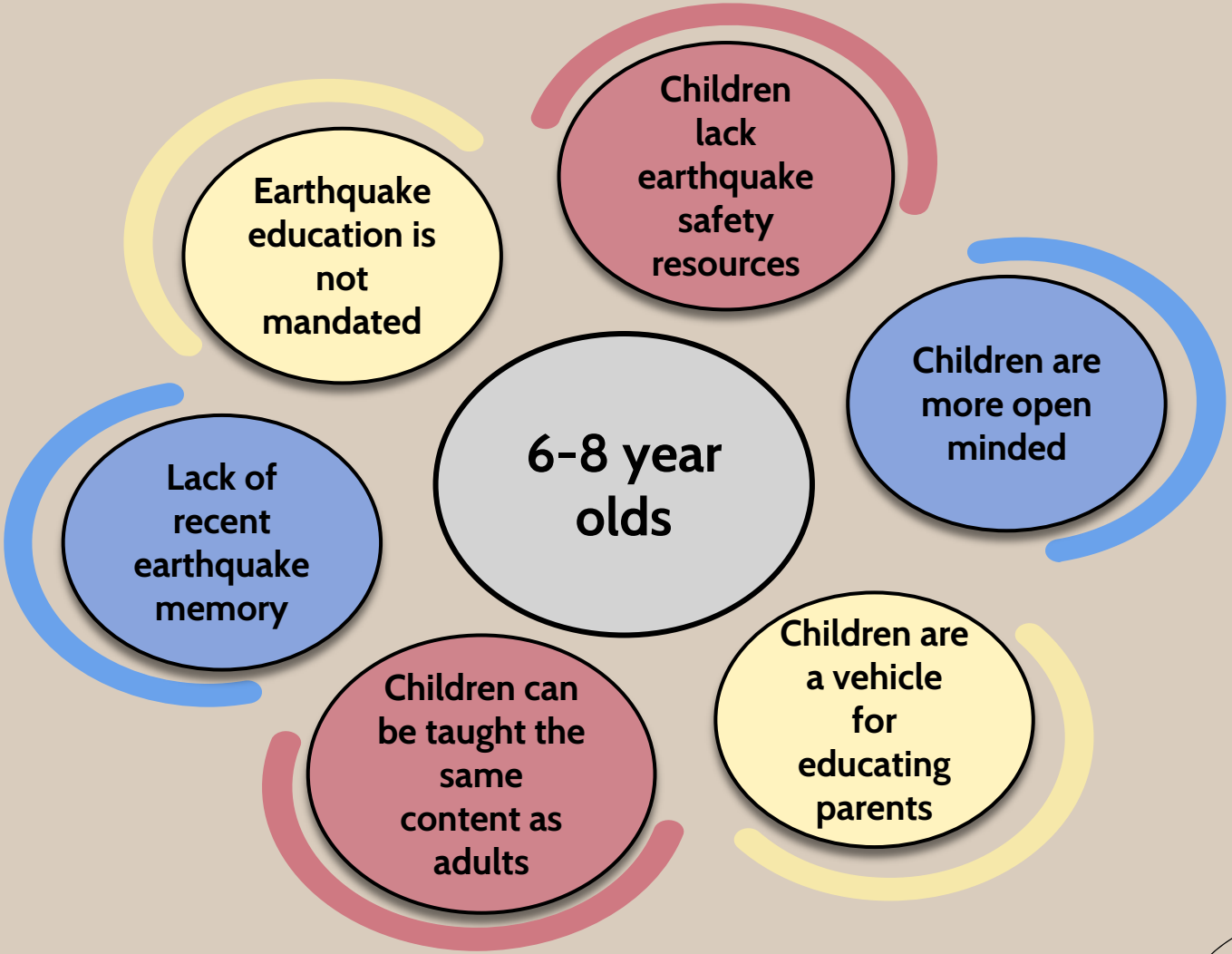


Effects

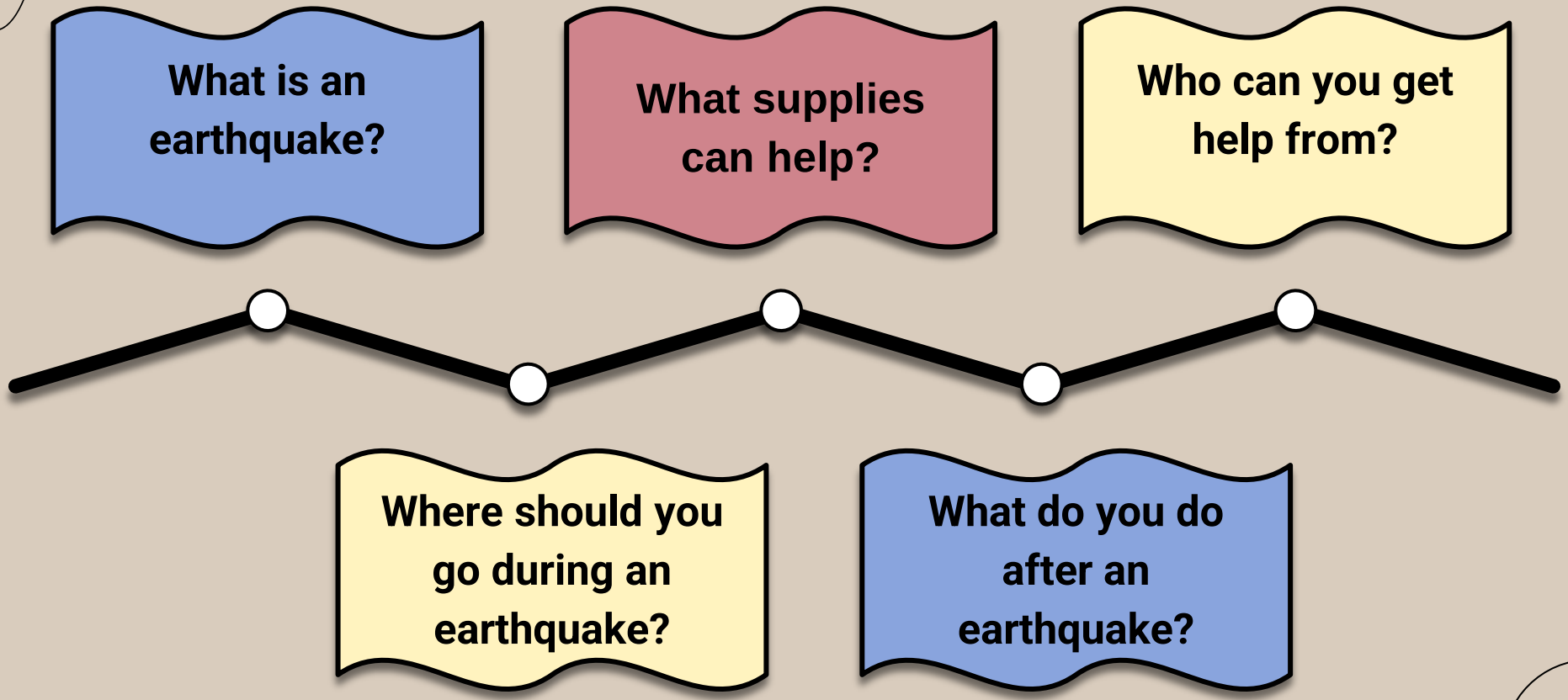
Earthquake education involves procedures for before, during, and after an earthquake

Before | **During** | **After**

Content should be adapted for 6-8 year olds



Adapted content was divided into 5 categories



Results:
What delivery formats should be used for children's earthquake safety education?

Earthquake protocols are commonly taught through interactive practices

Simulations

Stories

\+

Physical Models

Games

=

Digital Platform

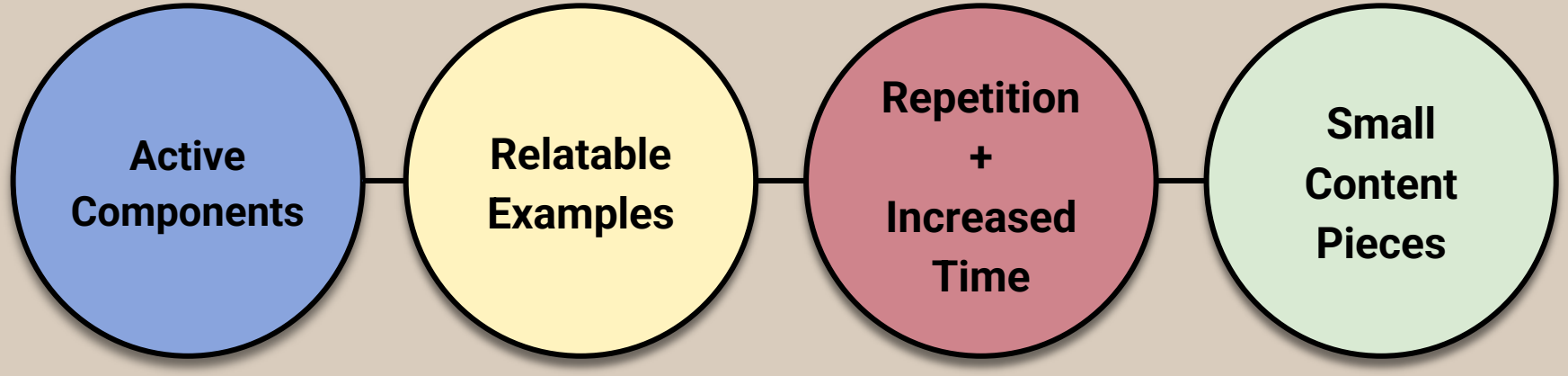
Immersion
Mistake Correction

Vibrant Visuals
Relatable Characters

Cause and Effect

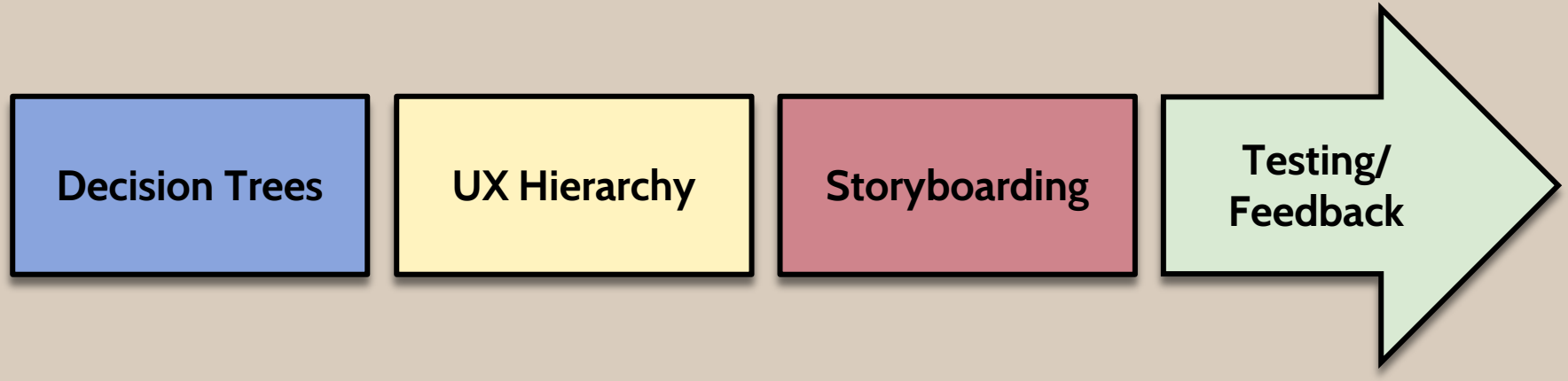
Immersion
Rewards & Motivators
Goals/Rules

Educating children involves additional techniques to increase retention

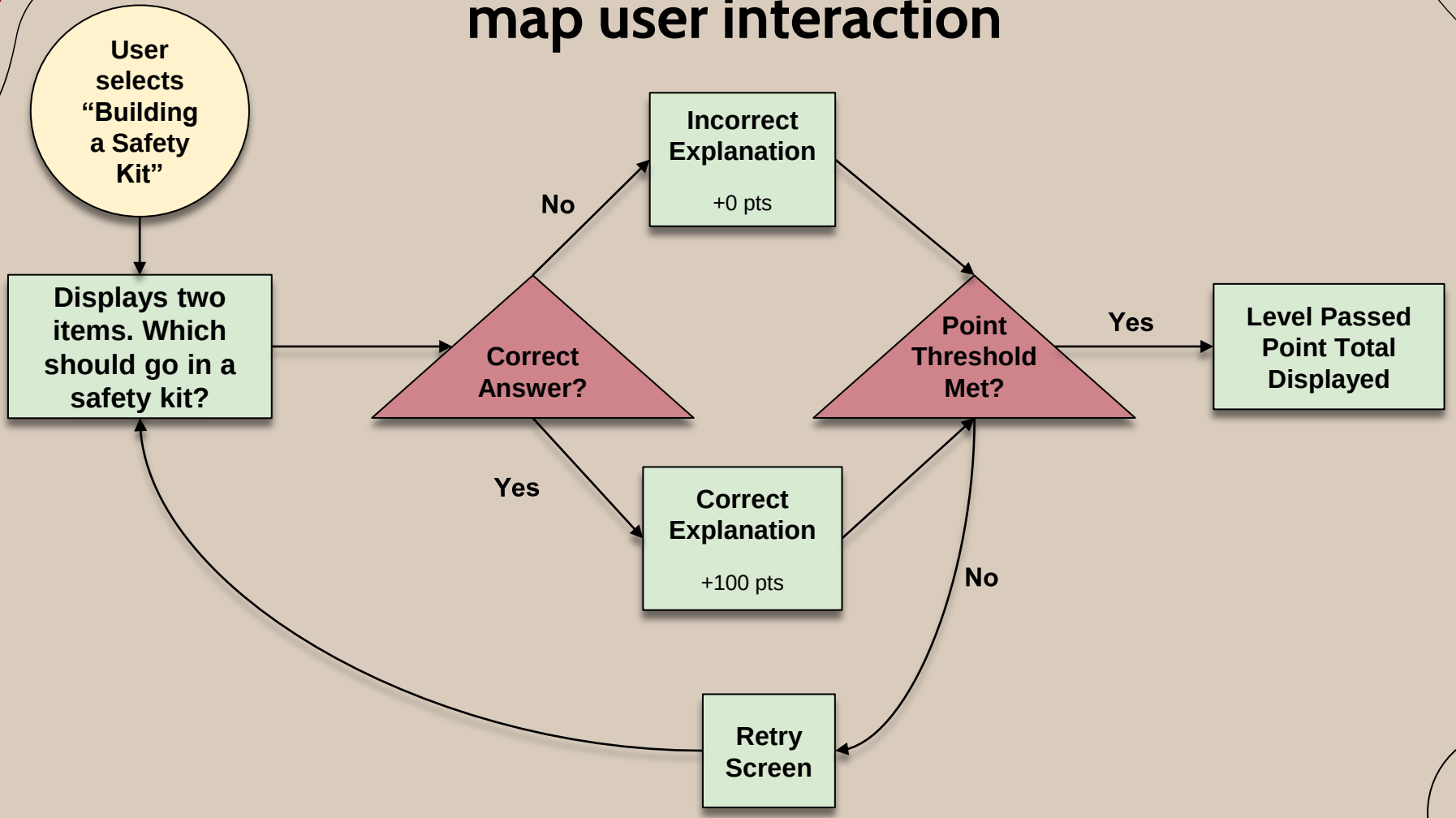


Results:
What design process and tools did we learn and employ?

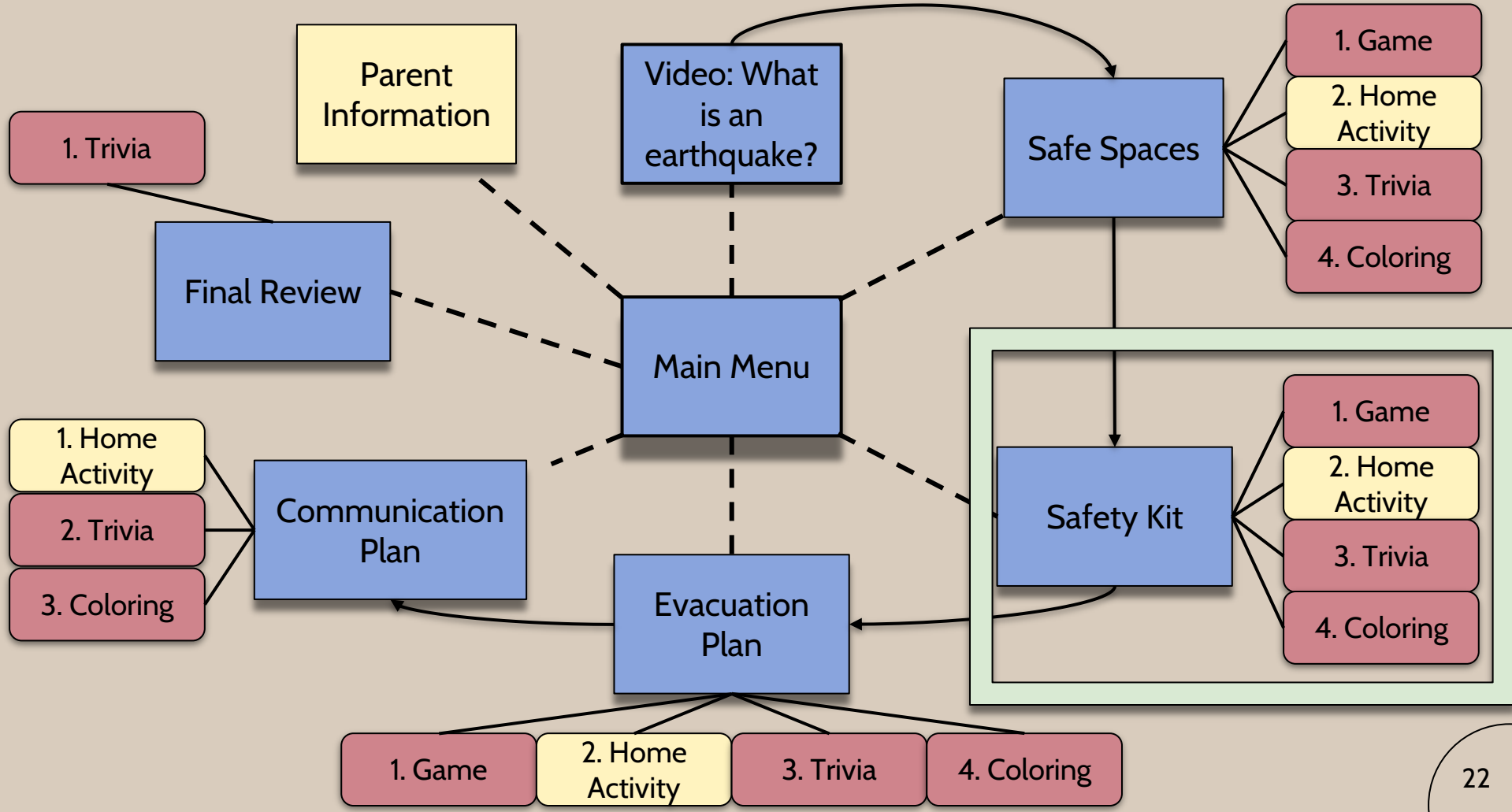
To finalize deliverables, the team followed a 4-step design process



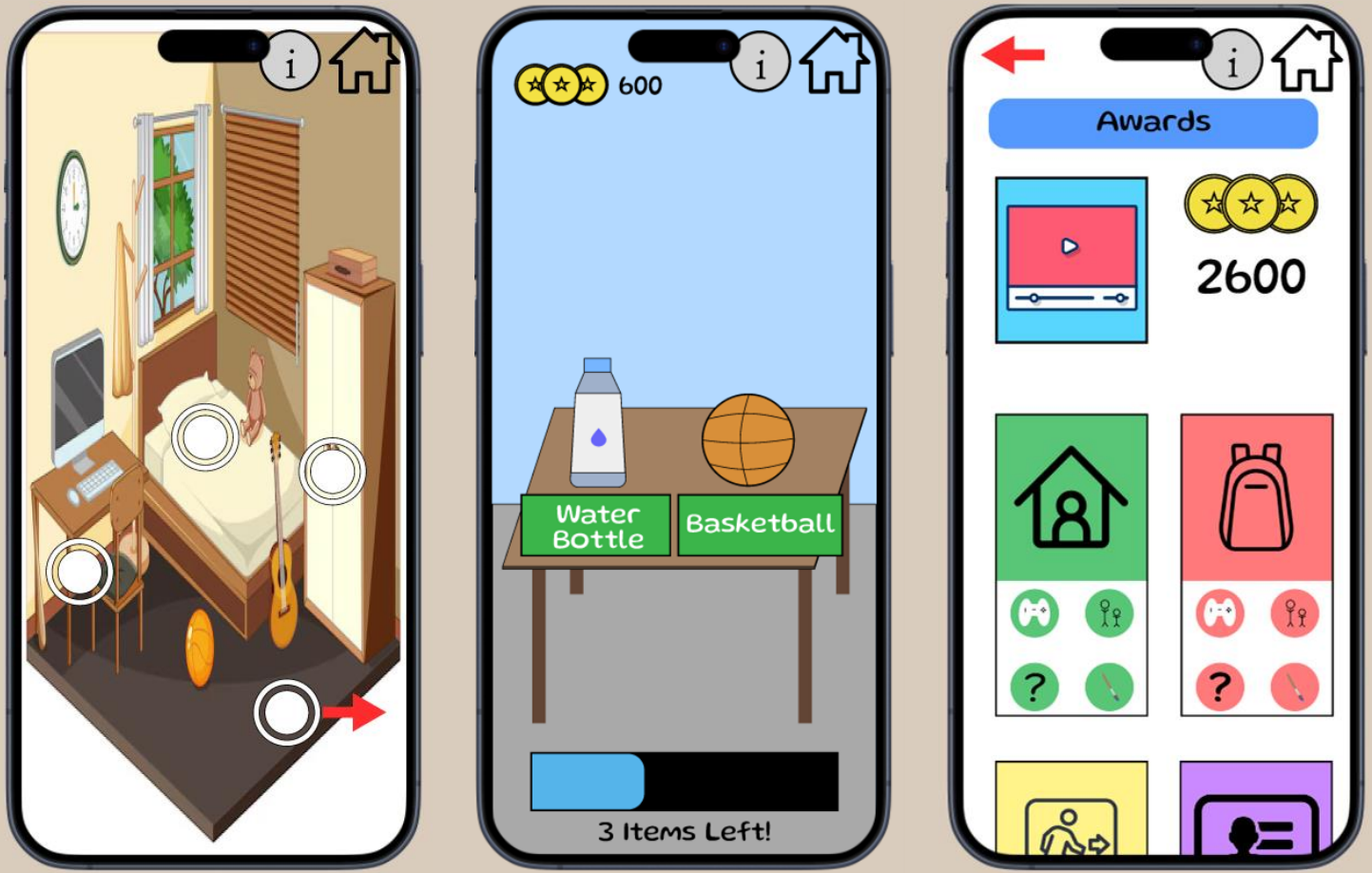
Decision trees were used to map user interaction



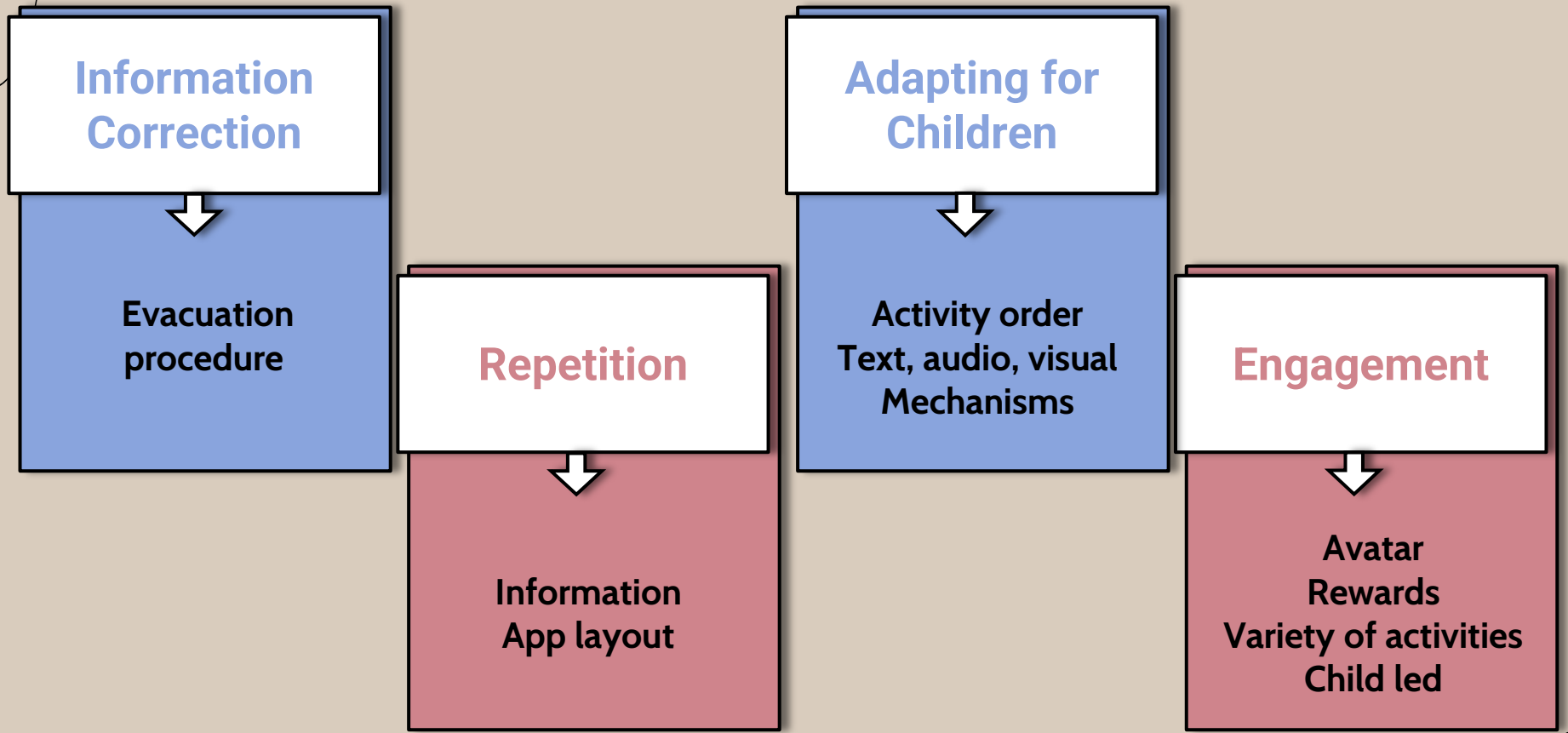
UX Hierarchy was used to outline the flow of the app



Storyboards were used to visualize low-fidelity designs



Feedback was crucial for adapting designs



The results of the design process were used to create a prototype

Recommendations and Conclusion

User Testing

Extrinsic Motivators

Accessibility and Inclusion

Expanding the Scope

Questions?

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Slide	Citation
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