

Project Plan Presentation

Machine Learning for Numeracy Training

The Capstone Experience

Team Anthropocene

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*From Students...
...to Professionals*

Anthropocene Institute

- Working towards the mission of solving the climate dilemma
- Partners with educational institutions and companies to advance necessary technologies
- Comprised of people with different backgrounds working together
- Wish to give the world a baseline of knowledge to enable more critical thinking



Project Functional Specifications

- Critical thinking is a key tool
- Many people lack numeracy skills
- Make the content easy to digest
- Gamify the learning process
- Retain users
- Help create a better informed public

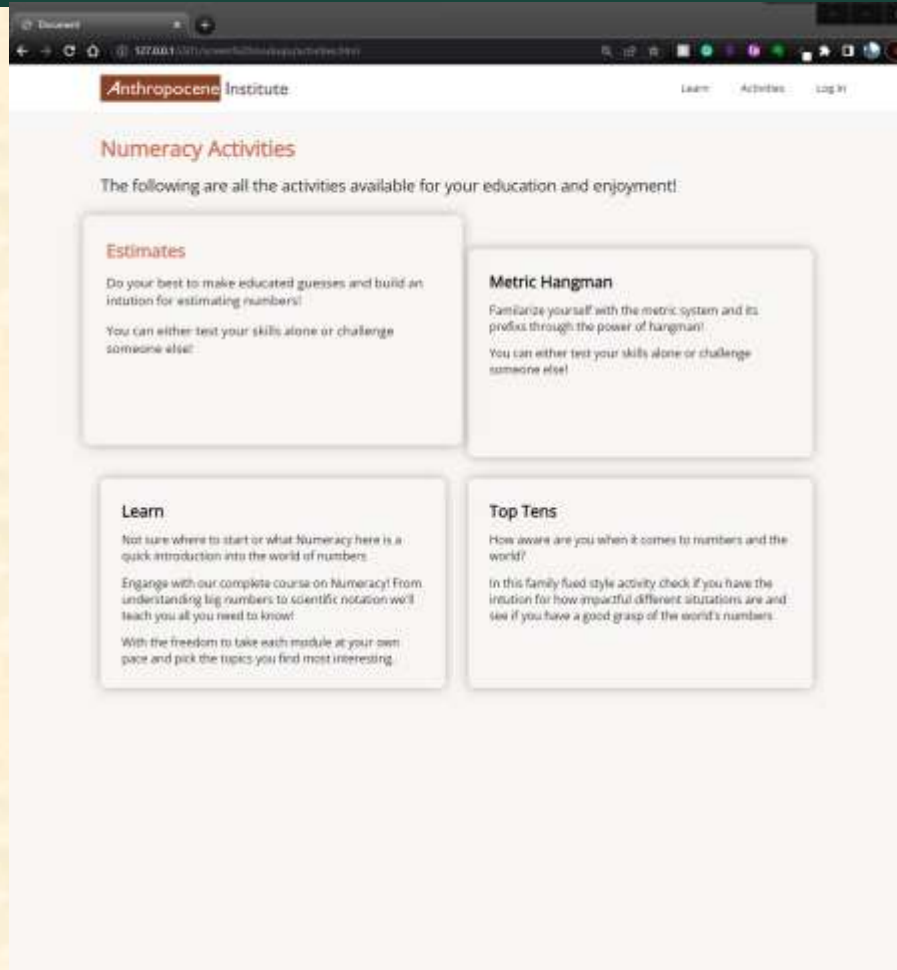


Project Design Specifications

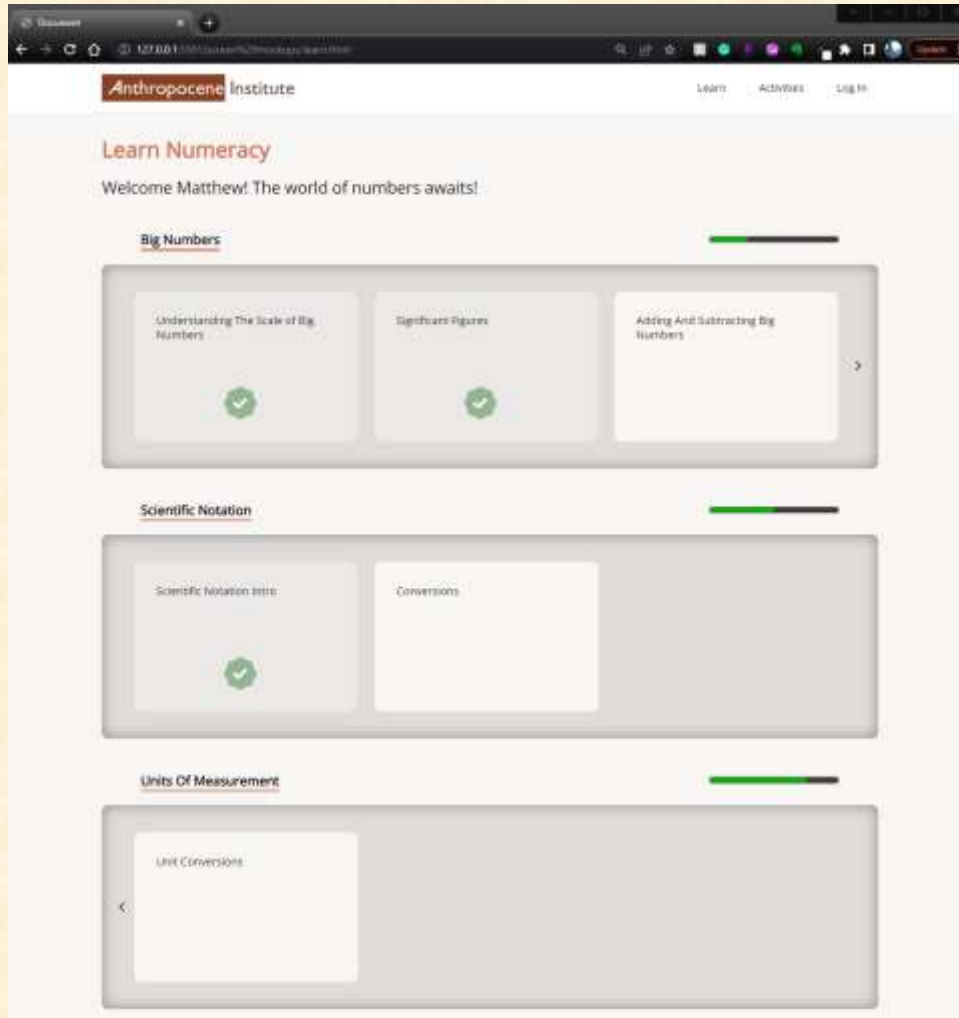
- Guided learning to provide users a basic foundation
- Engaging Games to reinforce learning and provide a fun experience.
- Two main game modes following unique ideas



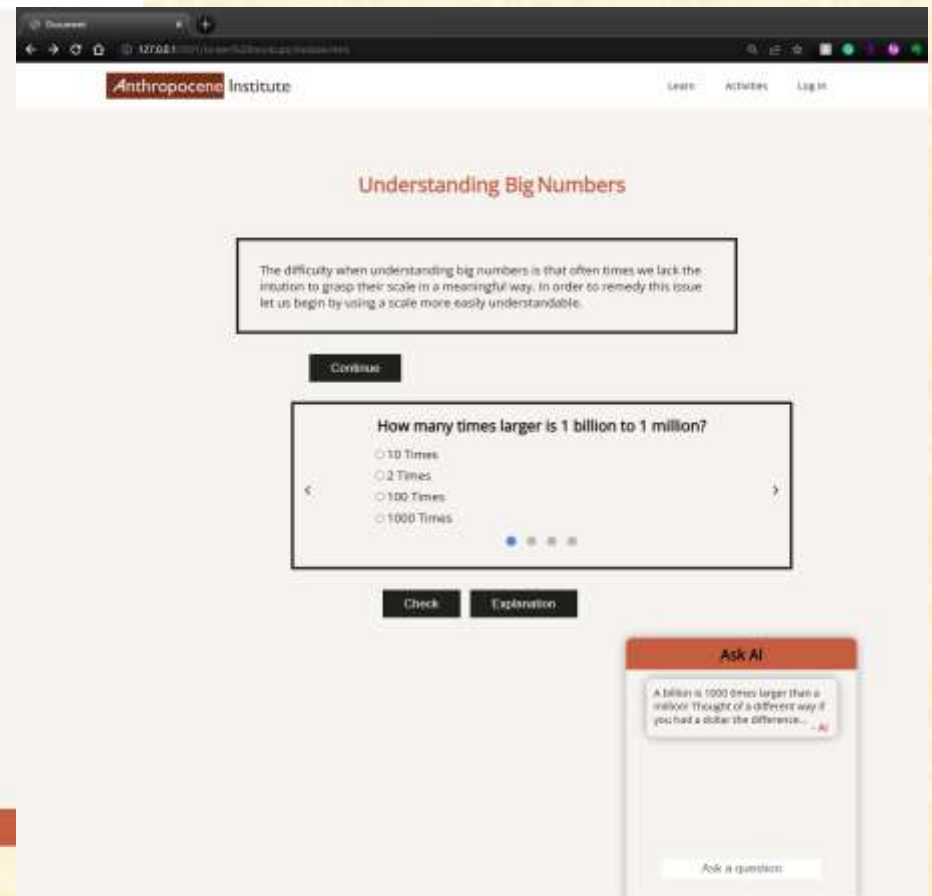
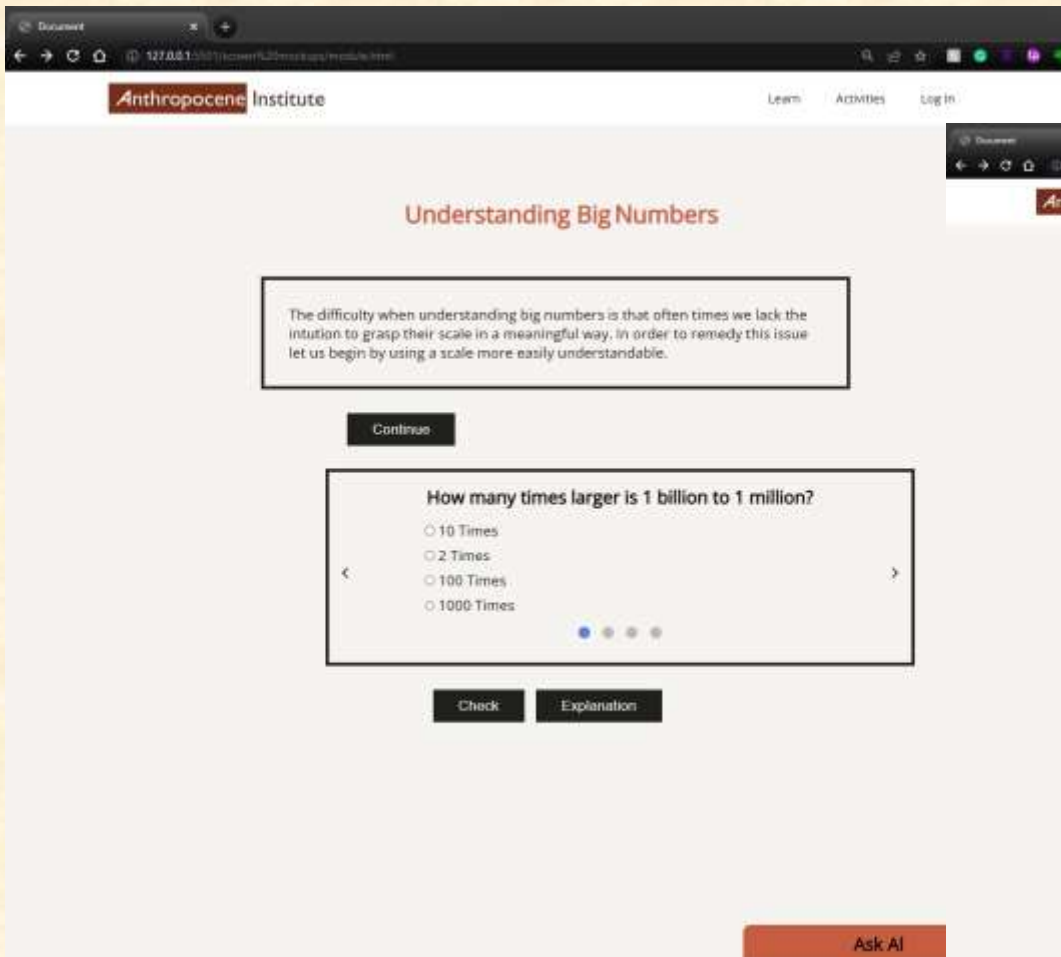
Screen Mockup: Activities



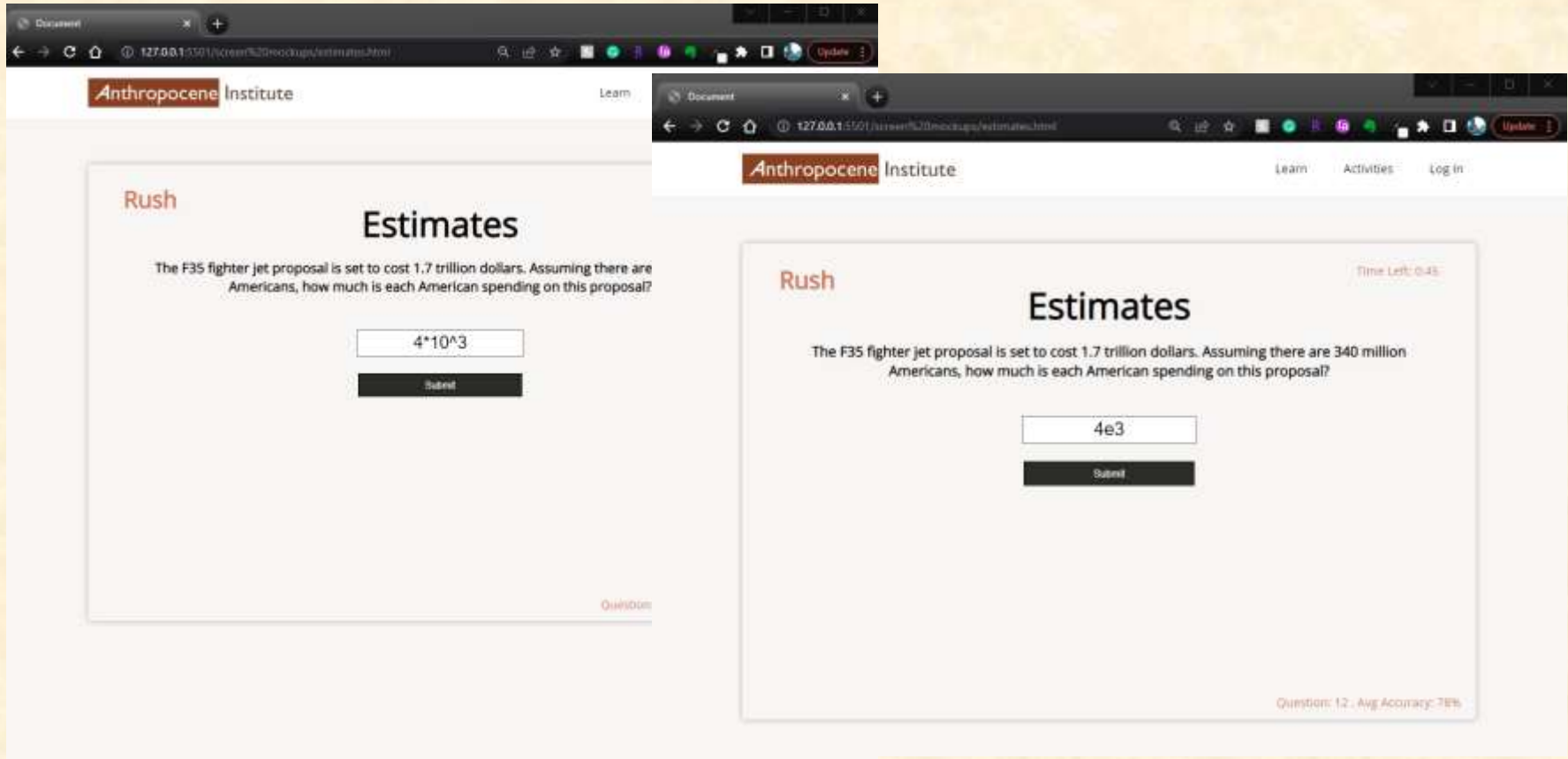
Screen Mockup: Learn



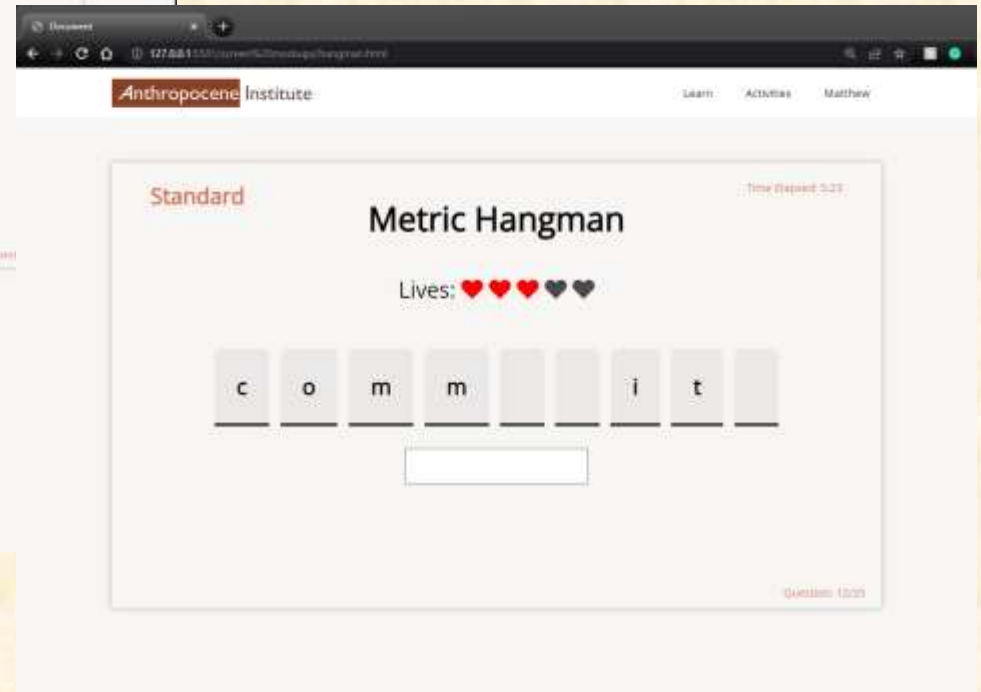
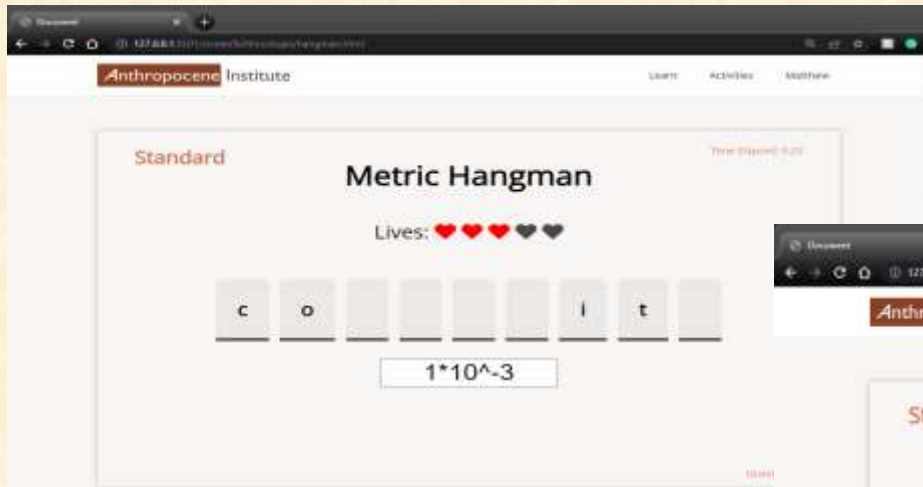
Screen Mockup: Example Module



Screen Mockup: Estimates



Screen Mockup: Metric Hangman

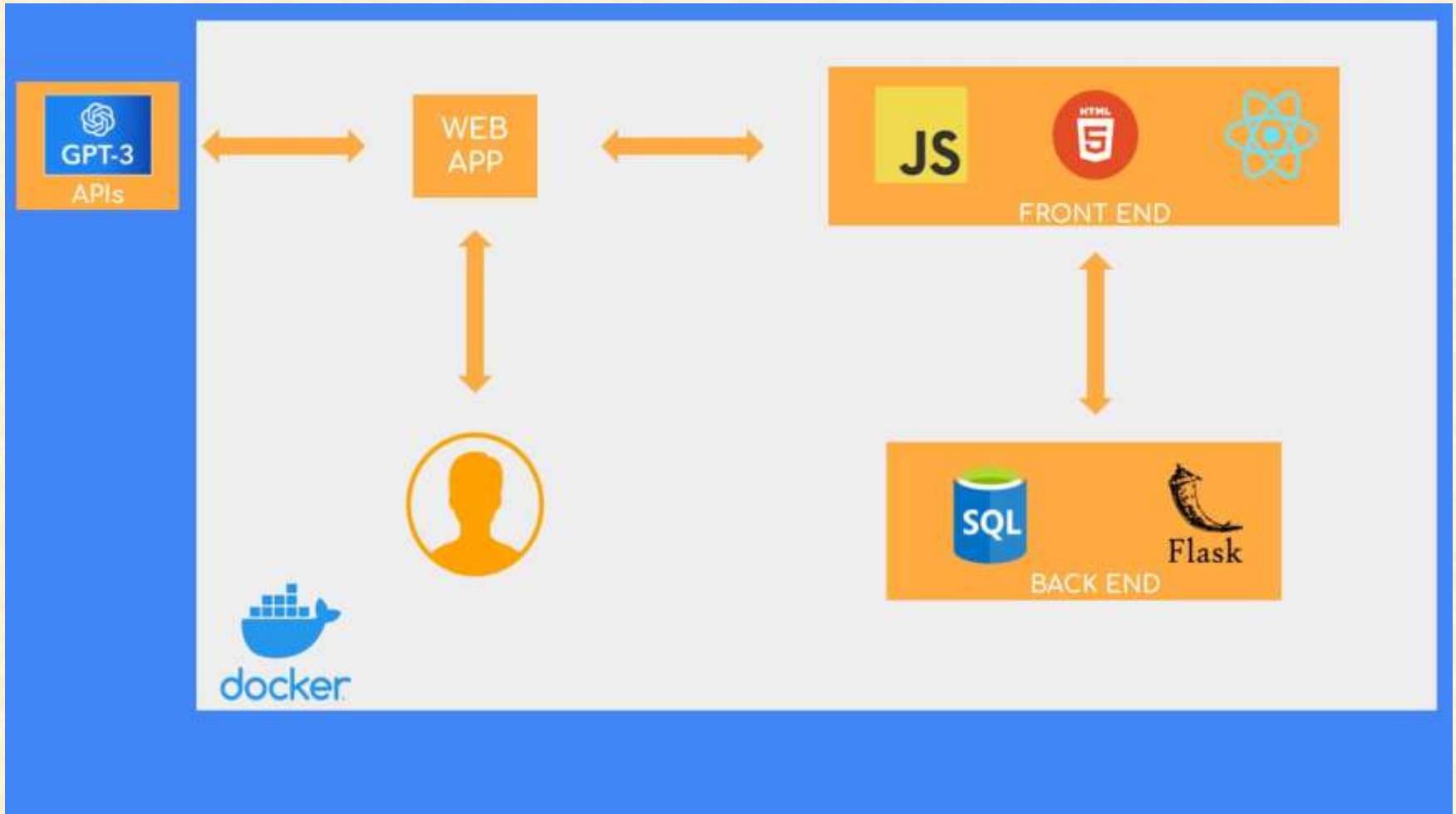


Project Technical Specifications

- Front End: Javascript, HTML, and React
- Back End: SQL and Flask
- APIs: GPT-3



Project System Architecture



Project System Components

- Hardware Platforms
 - iMac, PC, and mobile devices for testing
- Software Platforms / Technologies
 - Front End
 - JavaScript, HTML, React
 - Back End
 - MySQL, Python Flask
 - GPT-3
 - Docker Desktop



Project Risks

- Risk 1
 - Creating sufficient designs and prototypes
 - Provide many design iterations to the client
- Risk 2
 - Properly processing data and ML models
 - Use existing/handmade questions as a baseline for ML
- Risk 3
 - Efficiently increasing the user's numeracy skills
 - Provide user with tutorials, and adapt the questions
- Risk 4
 - Grab attention and entertain the user so they come back
 - Use real-world stats and gamify the learning process



Questions?

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