

ODDBALL

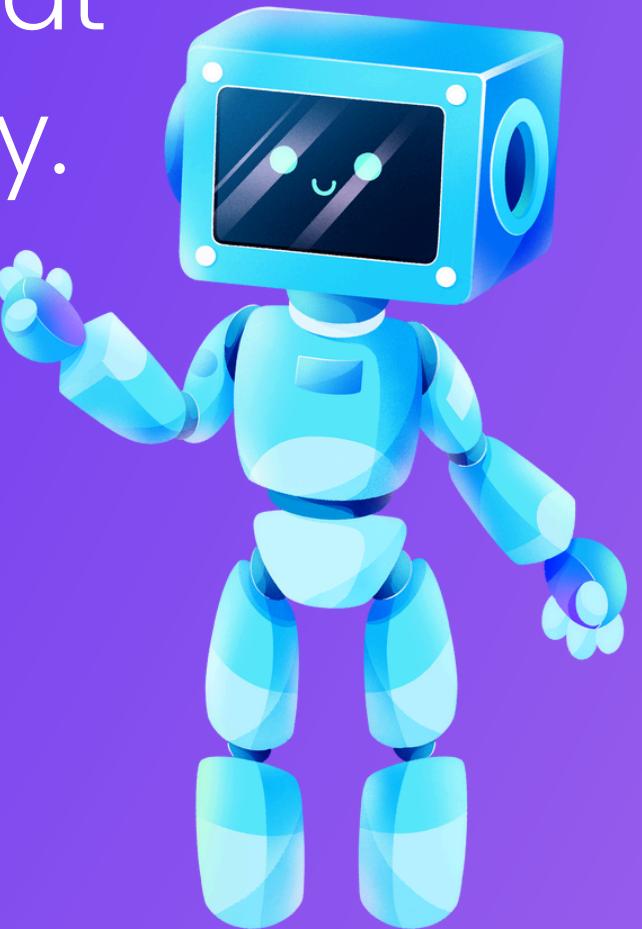
Play and learn!



Client : *Patrick Fitzgerald, NC State Design*
Team: Aditya Iyer, Anish Rao Toorpu, Bahare Riahi, Mahathi Kolishetty, Mery Harika Gaddam

PROBLEM STATEMENT

Professor Patrick Fitzgerald aims to design an engaging visual matching game to choose odd one out of given images. The game should captivate a wide range of players through its mechanics and content that maintains interest and excitement throughout gameplay.



GOALS

EDUCATIONAL AND FUN

The game should be both enjoyable and educational, providing players with insights into various themes, and encouraging learning through interactive gameplay.

GENERATIVE AI

Utilize generative AI technology to create dynamic and evolving game content. This integration aims to enhance the game's appeal and replayability by generating unique game scenarios and challenges.

FUN REVEAL MECHANIC

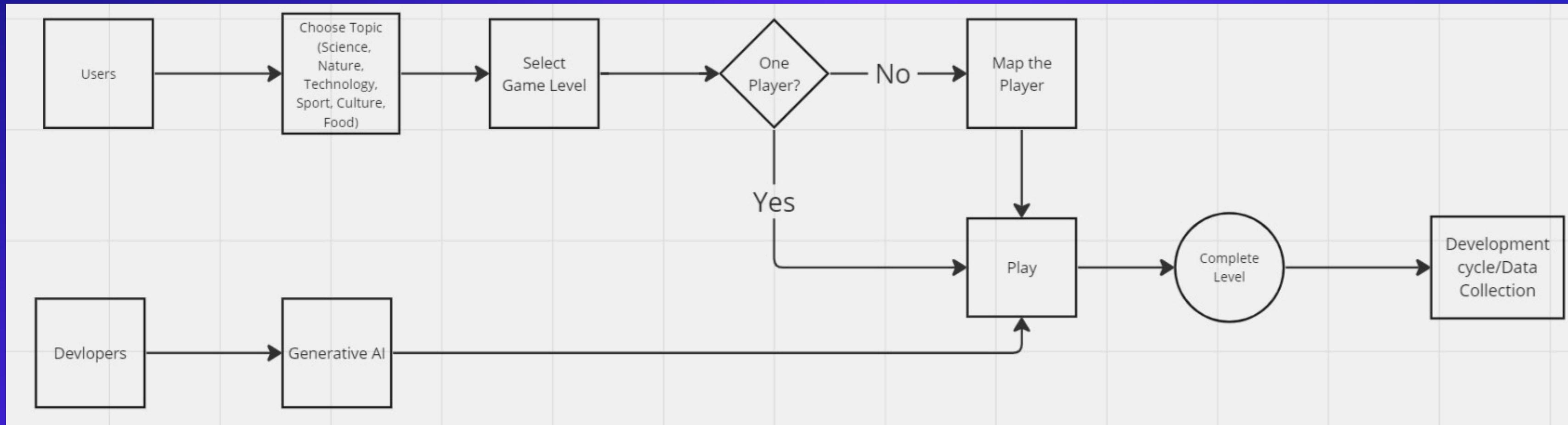
Implement a fun and slow reveal mechanic that progressively discloses visual elements. This mechanic is designed to maintain player engagement, add a layer of suspense, and introduce a strategic challenge to the gameplay, making it more intriguing and competitive.

Research

Challenges:

- How can we integrate AI into a game?
- How might we design the slow-reveal mechanic to be intuitive yet suspenseful?
- What measures should we take to ensure the game remains fun and engaging while balancing both?
- How might we design the user interface to be intuitive and accessible for all age groups and abilities?
- How might we ensure long-term engagement?

EXPERIENCE MAP



Generate

Inspirational products:

Differences – Find Them All: Challenge players to spot subtle differences

Match The Memory: Memory and pattern recognition elements

Colorzzle: color and shape differences

The Room: Enhance puzzle complexity

Pokémon Go: Augmented reality elements to make puzzles immersive

Peak: Adaptive difficulty

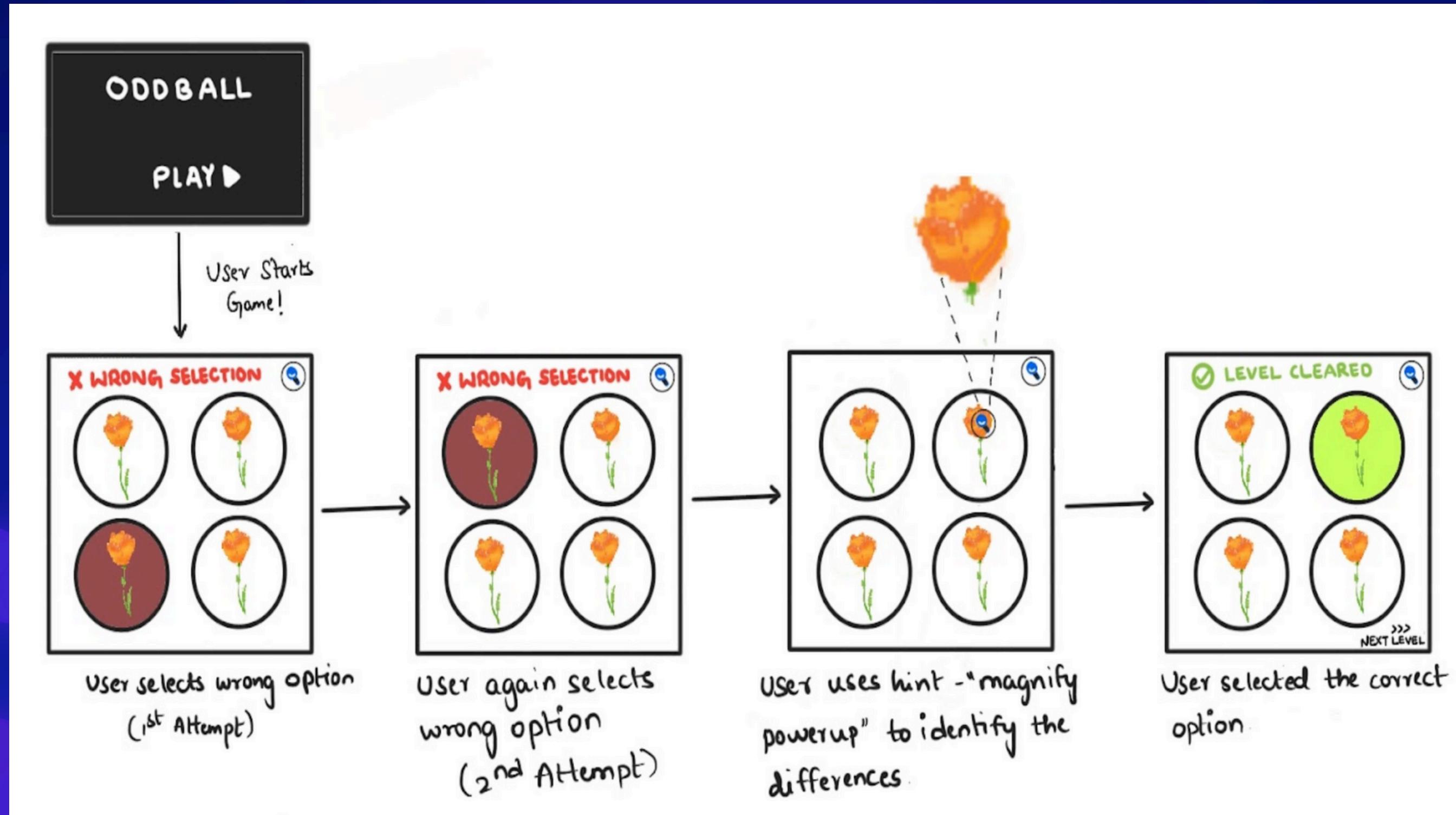
Guess the Pictures: Progressive image revelation

QuizUp: Social features that allow players to challenge friends

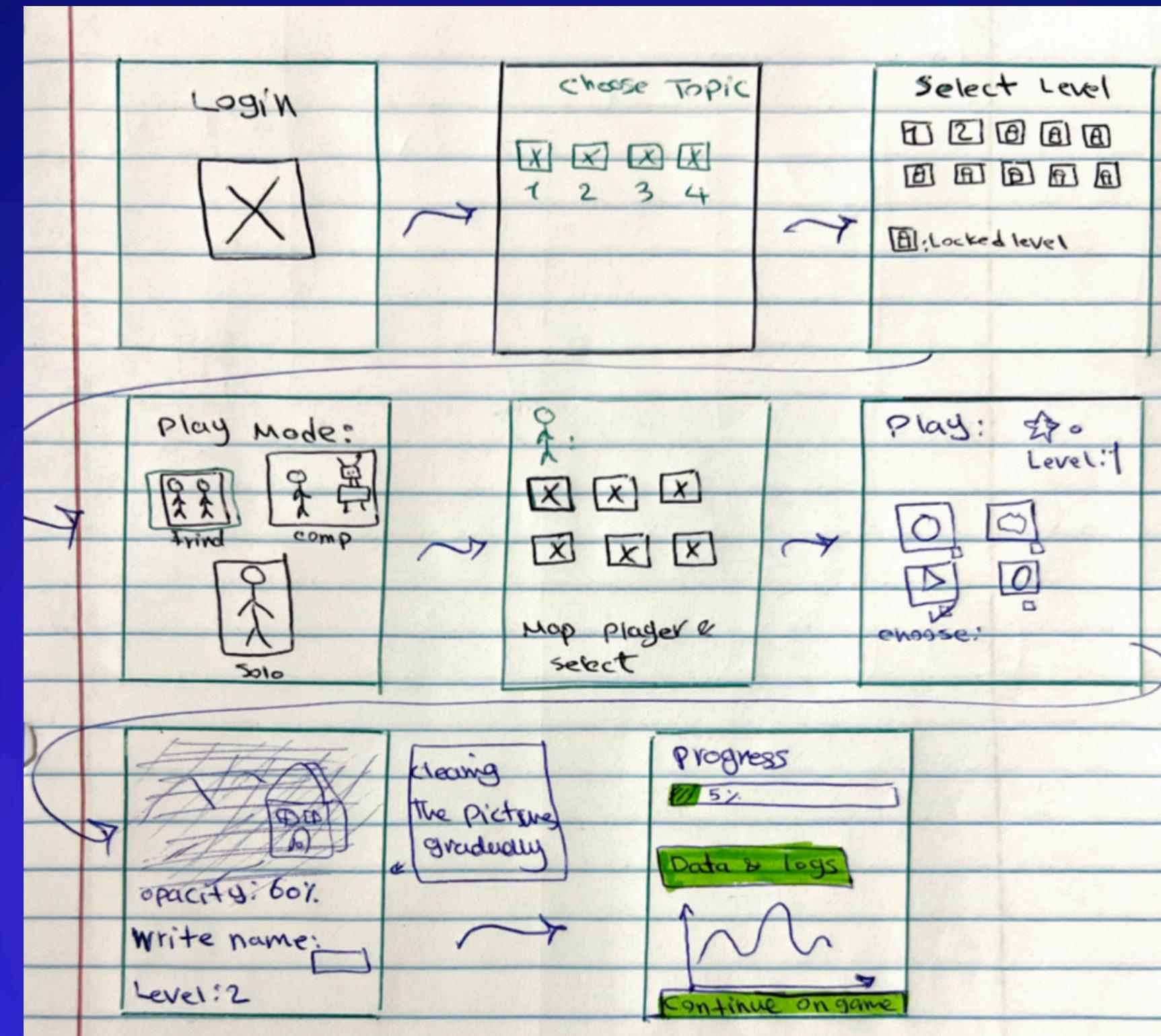
Monument Valley: Striking visual design

Mysteries of the Past: Shadow of the Daemon: hint system

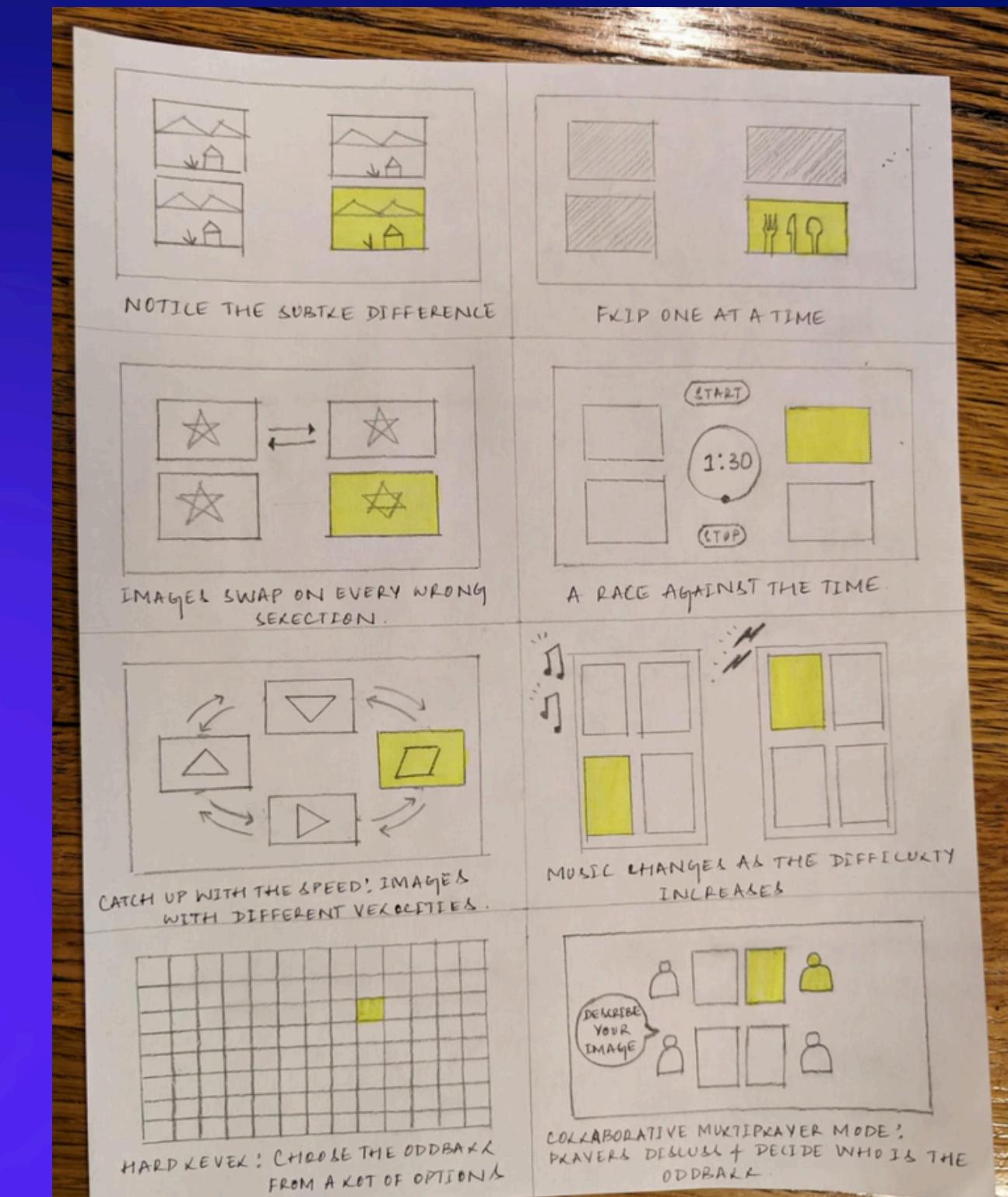
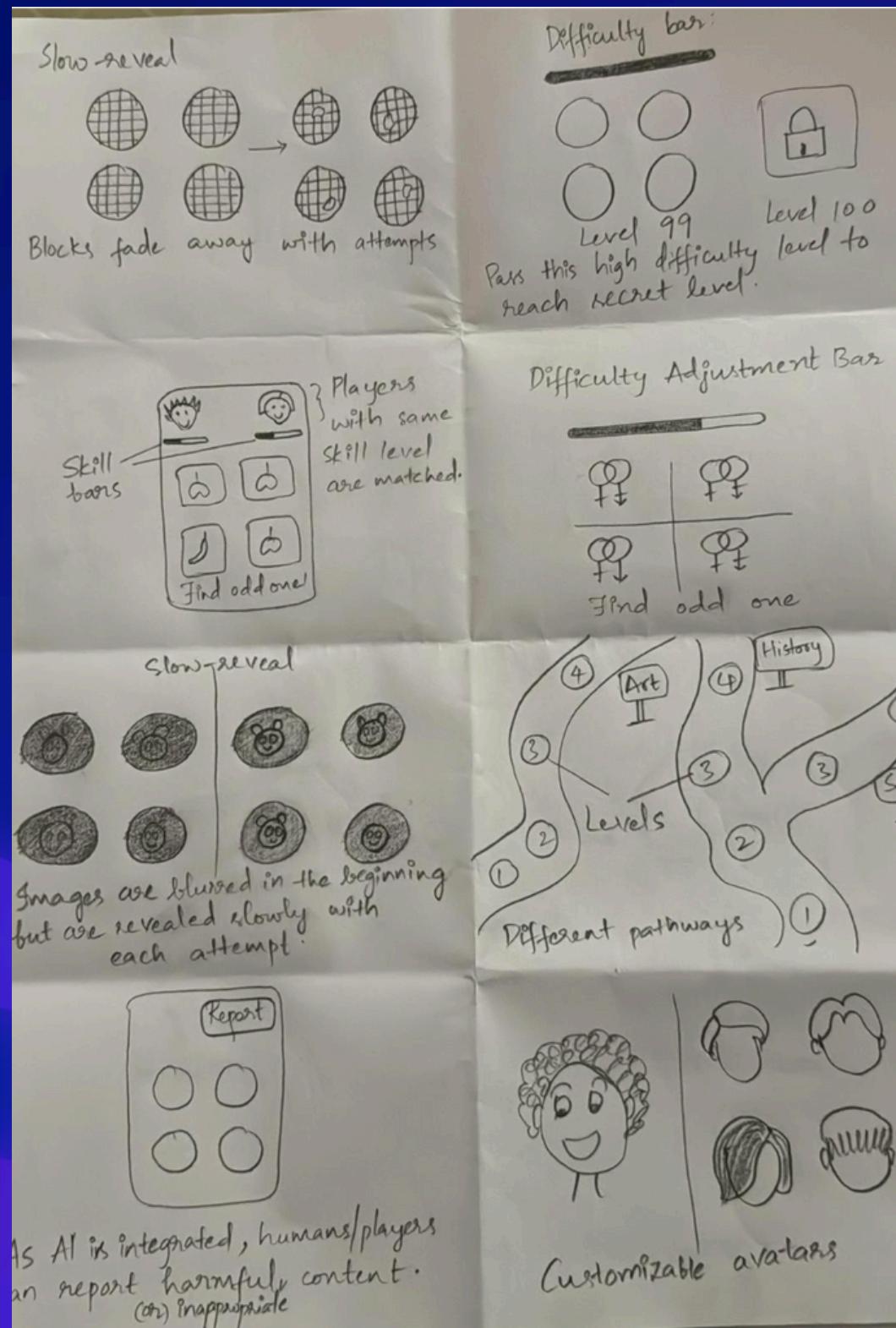
Generate: Story board



Generate: Story board



Generate: Crazy 8s



Choose

Ideas:

Votes:

- **Time attack mode**
- **Rewarding progress system**
- **Collaborative solving**
- **AI created Images**
- Multiplayer mode
- Fun reveal mechanic
- Community challenges
- Educational paths
- Changing sounds
- 3D or Augmented Reality



Decider votes to prototype

AI-Created Puzzle Images:

- Uses AI to generate new, original images for each level.
- Avoids copyright issues and reduces the need for human intervention.

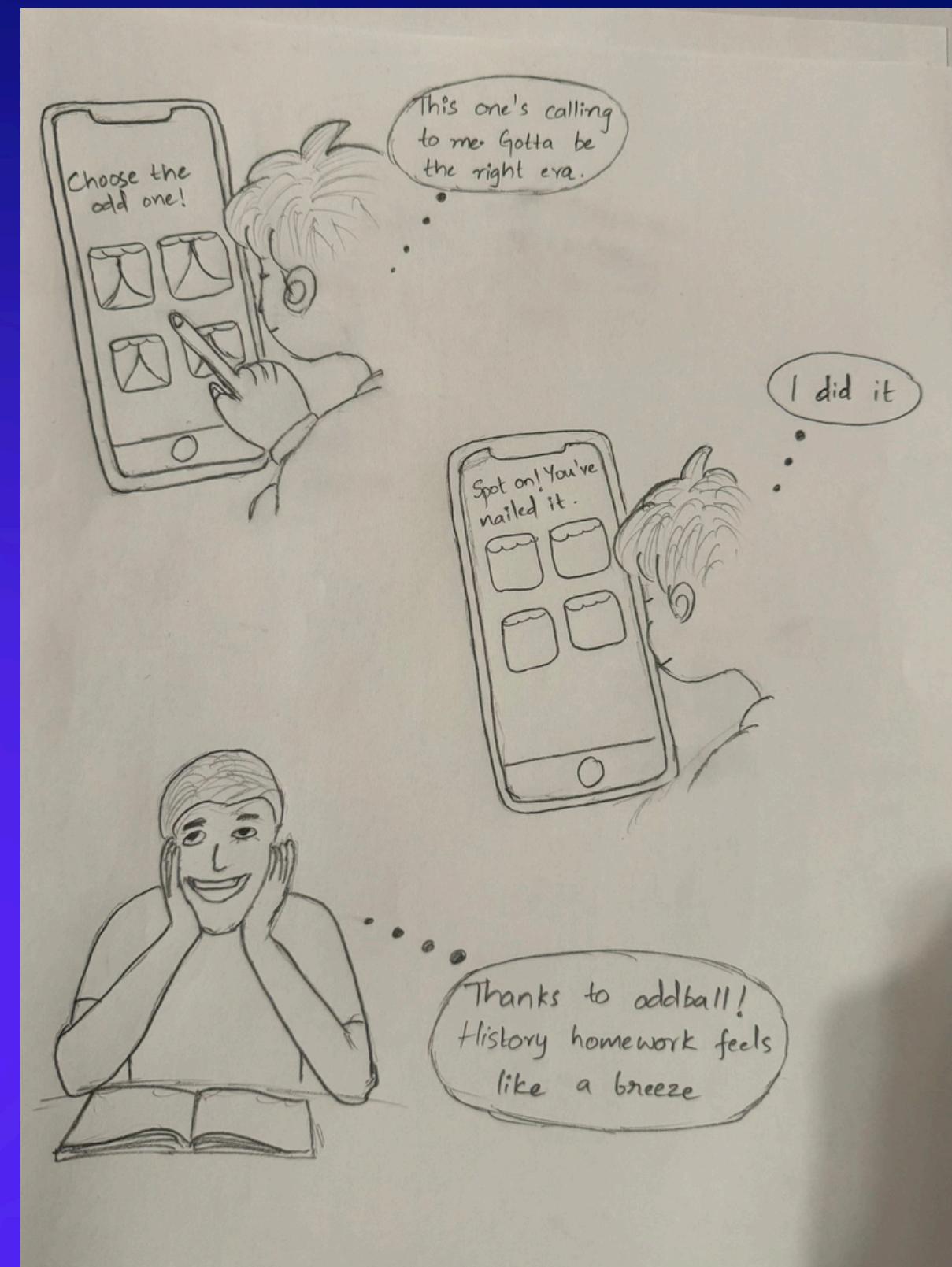
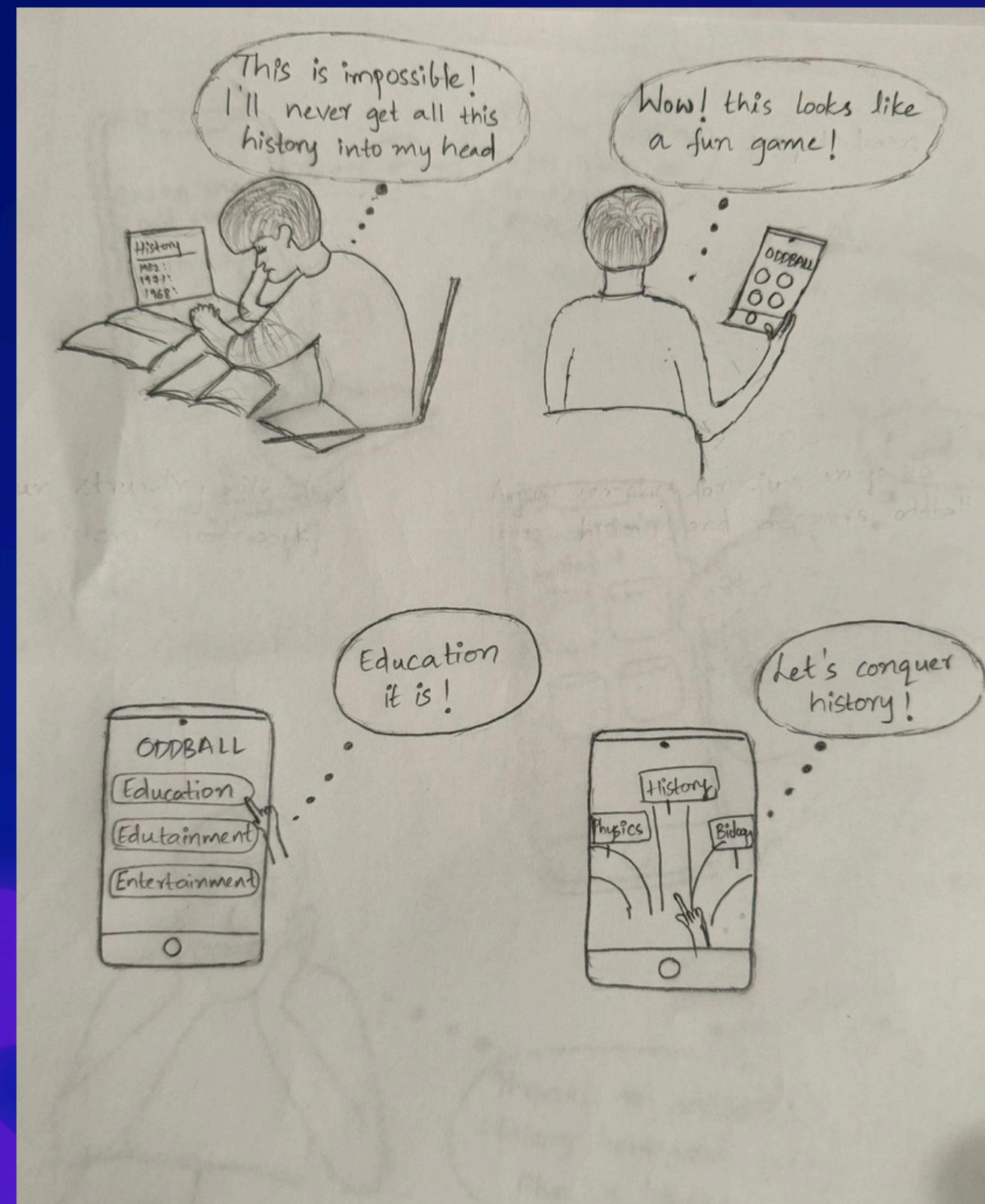
Educational Paths:

- Features educational themes like biology, social studies, mathematics, and history.
- Combines quizzes and facts with gameplay for a fun learning experience.

Fun Reveal Mechanic:

- Gradually reveals images, using blur and partial visibility to enhance challenge and suspense.

Storyboard



Tools Used

Photoshop : logo, curtain



Figma : Designing prototype



Prototype

Landing Page

OddBall

Play and learn!



Choose your area and play

[Play and Enjoy](#)

Log in



Sign in to your Account

Email

Password

[Sign in](#)

Don't have an account?
[Sign Up](#)

Sign up



Create Account

Username or email

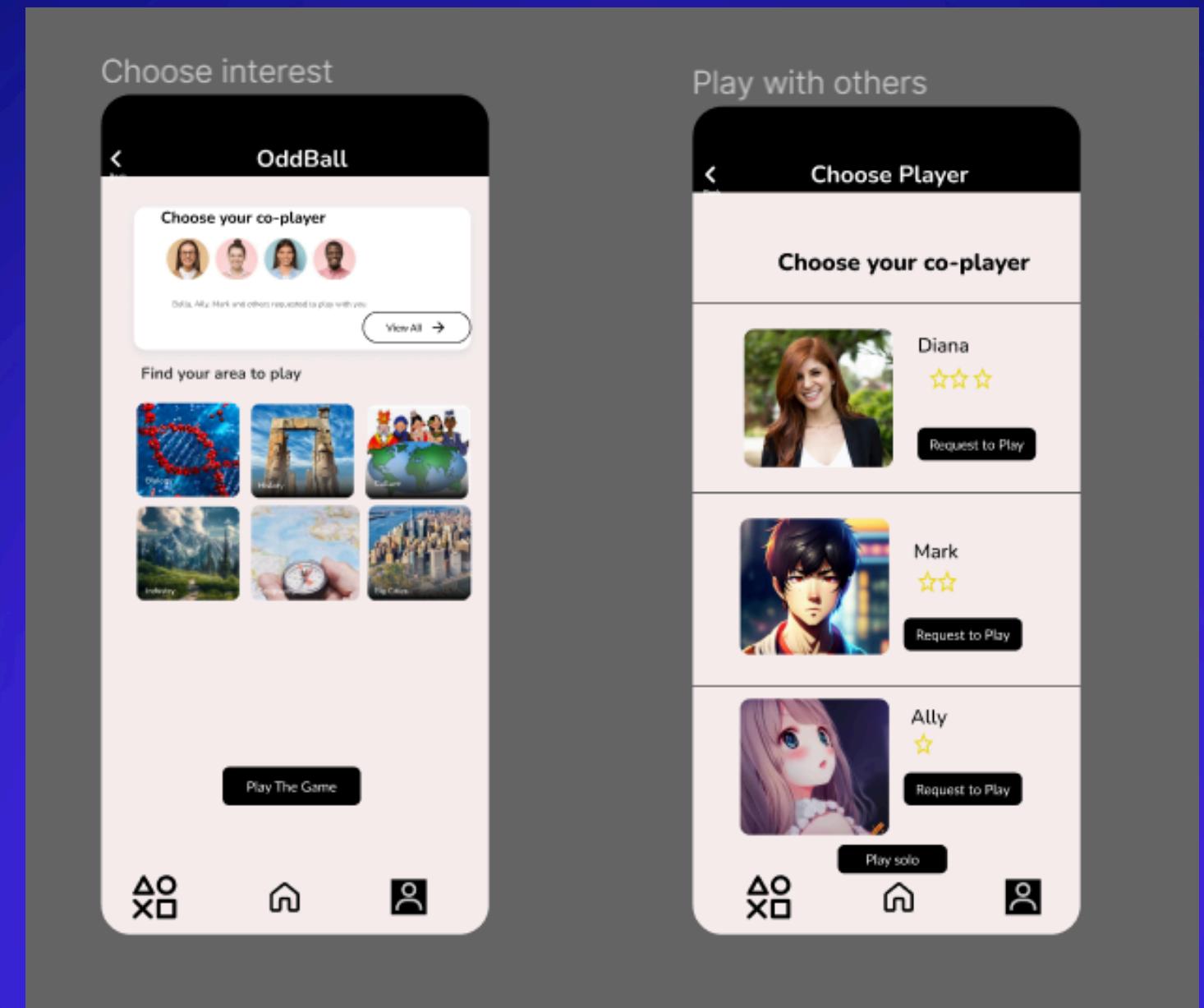
Create Password

Confirm Password

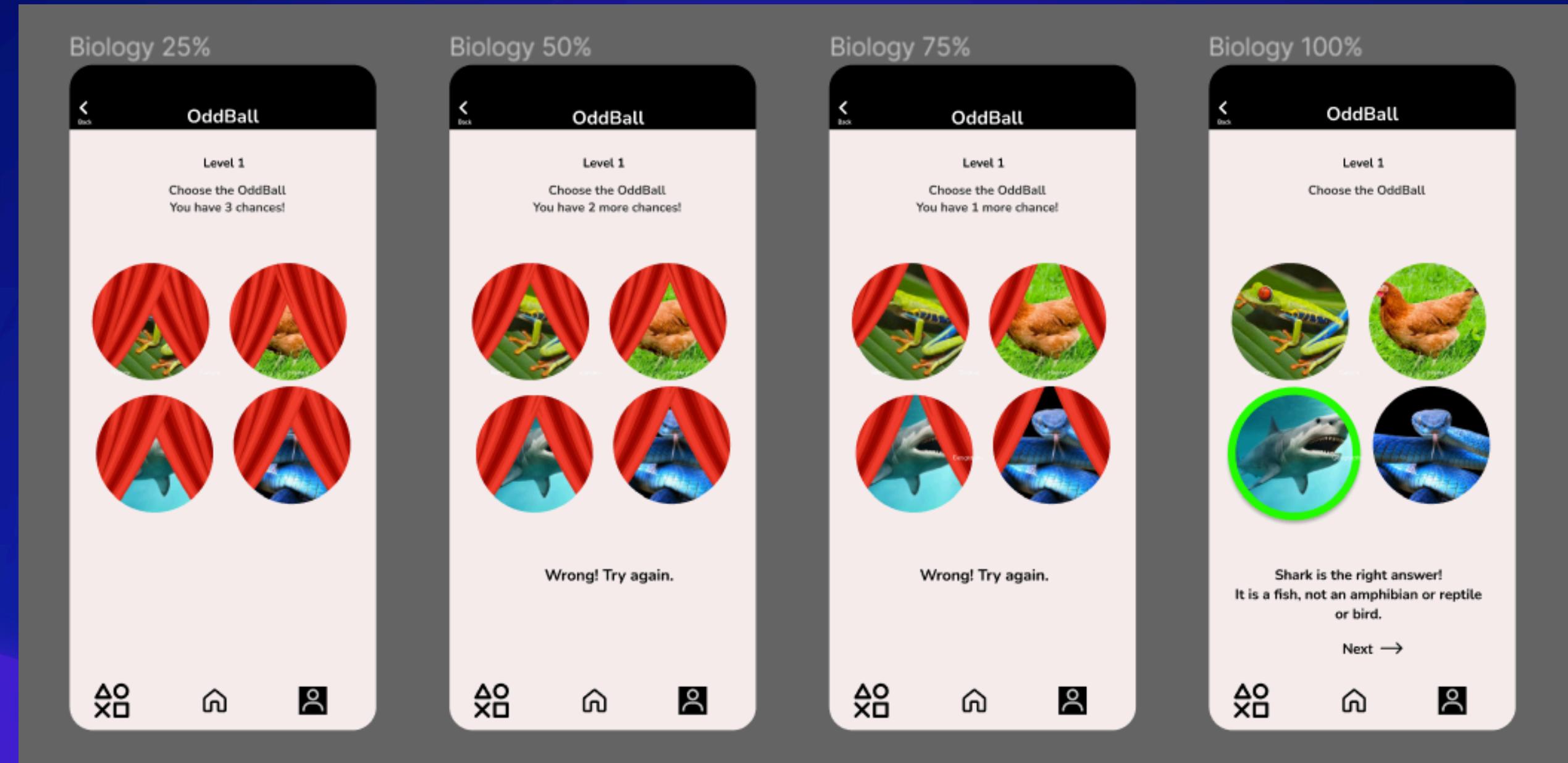
[Register](#)

Already have an account?
[Sign in](#)

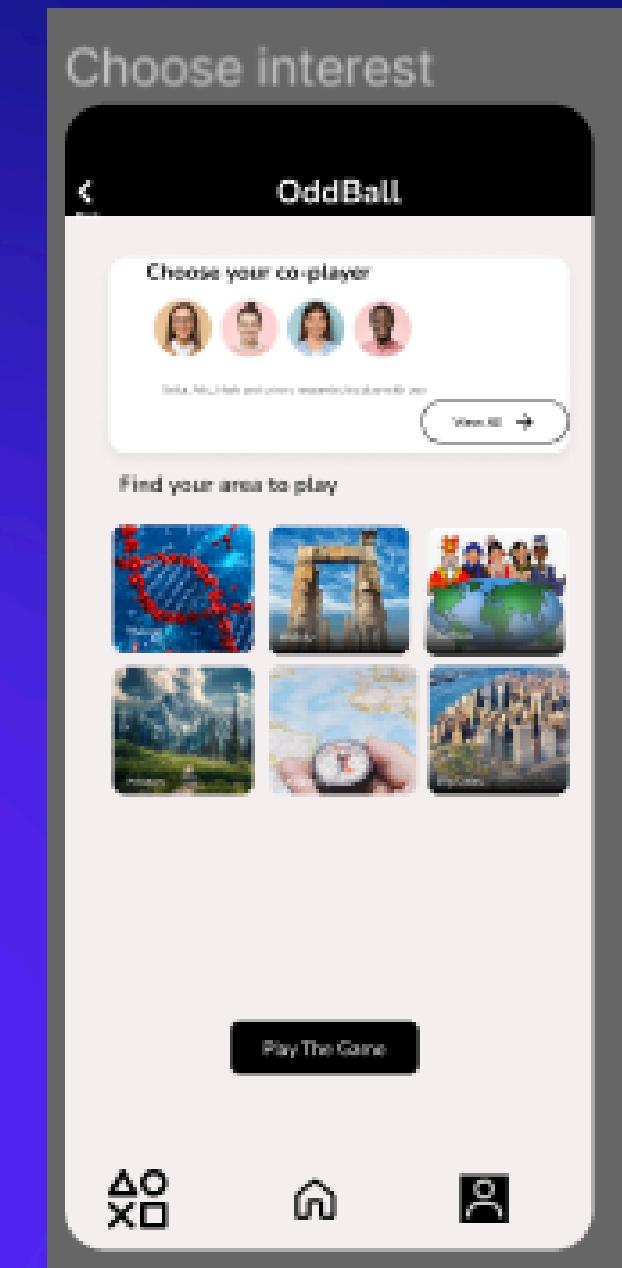
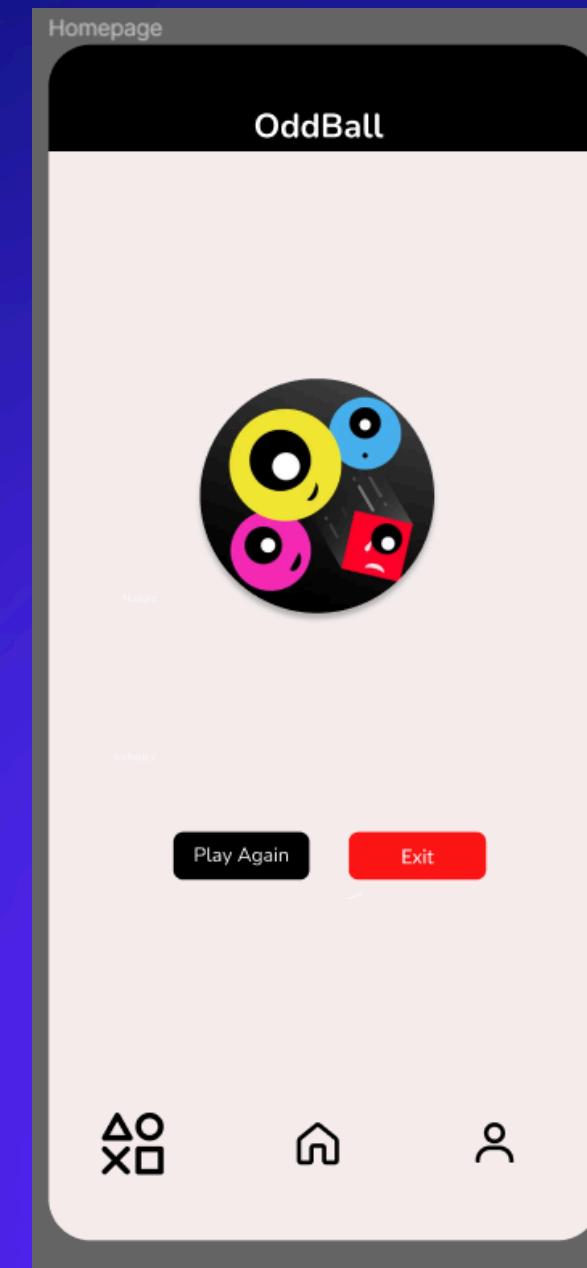
Prototype



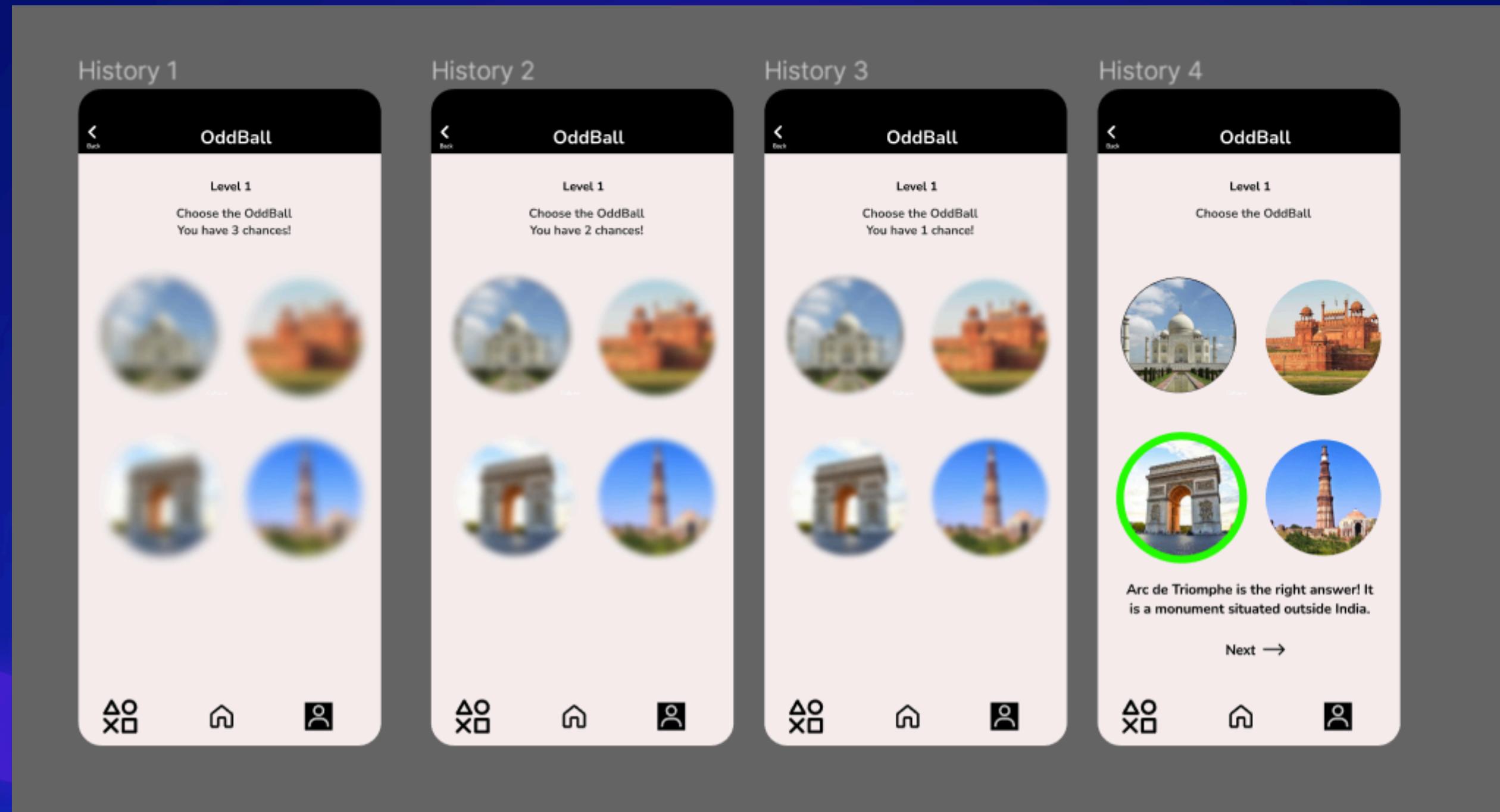
Prototype



Prototype



Prototype



Evaluate

Participants: 6

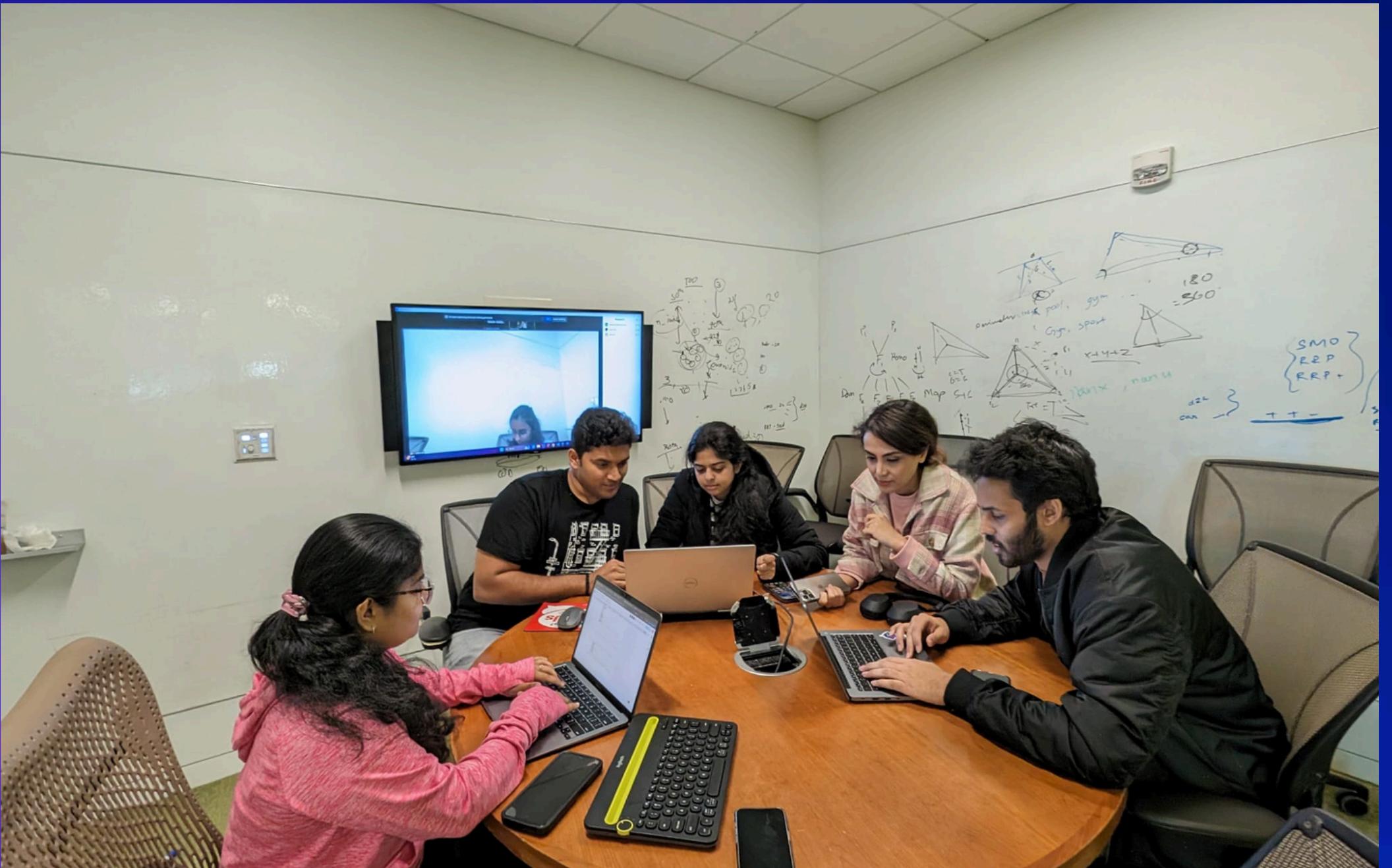
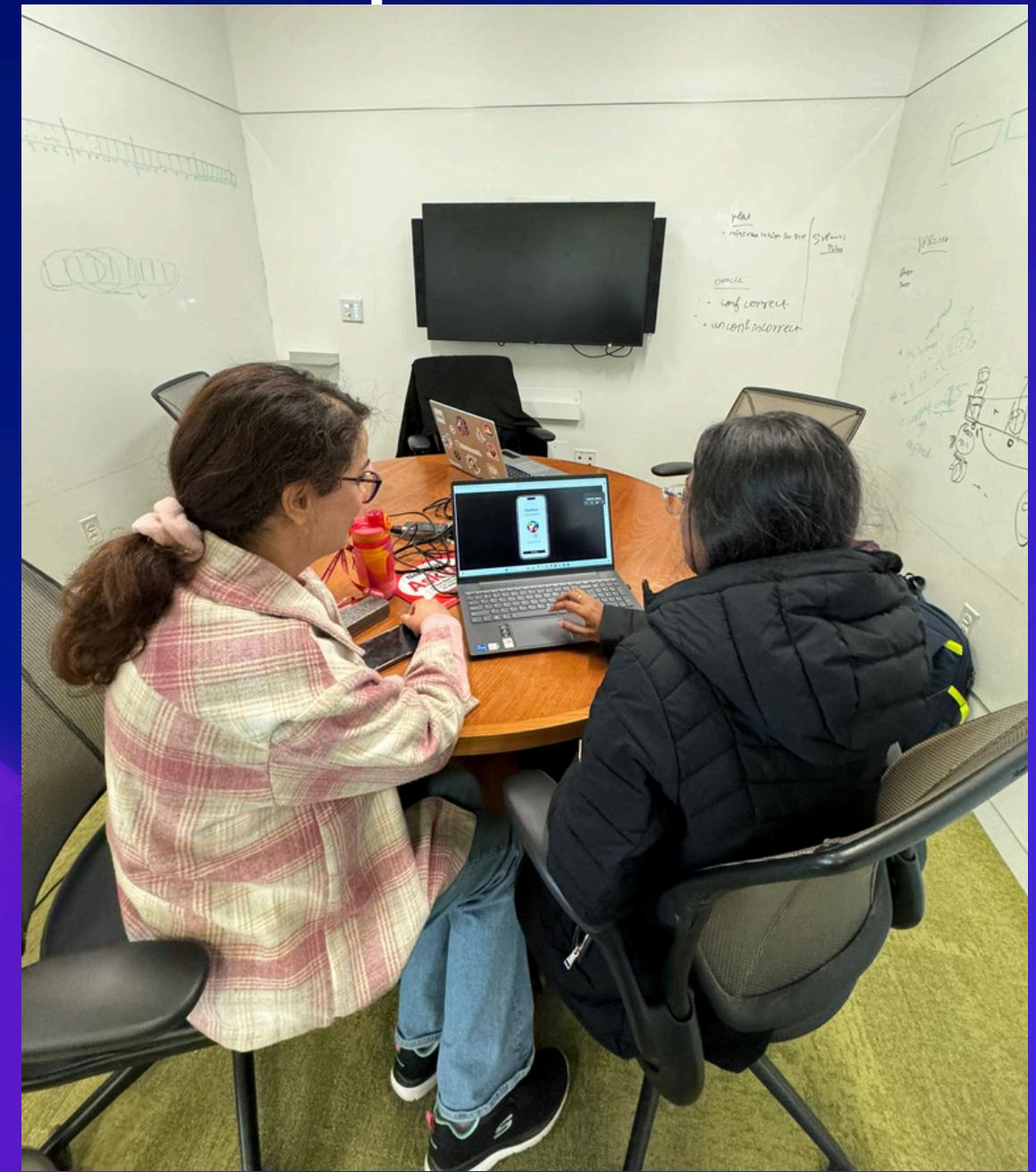
Recruited using screening survey

Characteristics:

- Students
- Diverse age groups
- People who prefer playing games
- Willing to participate

Evaluate

Setup:



Evaluate

Think-aloud interview tasks:

- Register and login
- Select an educational path
- Choose a player or play solo
- Complete level
- Change educational path

Evaluate

Patterns found from interviews:

- The game was rated 5/5 for its engaging and enjoyable experience by users.
- Users appreciated the combination of education and fun offered by the game.
- Many users identified the fun reveal mechanic and AI integration as the most intriguing features.
- Some users did not like the presence of an extra navigation button, finding it unintuitive. Apart from that, the navigation seemed seamless to them.
- The instructions were clear and easy for the users to follow.
- Overall, users rated the game approximately 9.6/10.

Evaluate

Recommended followups:

- Improve the navigation button on the left bottom
- Develop the actual content to be more clearer and informative
- Choose better color schemes
- Build a more attractive page for the first screen after login
- Make the right answer bigger than others when revealing the right answer
- Provide a button to learn more about all the provided options

ACKNOWLEDGEMENTS

- We thank **Professor Ben Watson** and **Professor Patrick Fitzgerald** for allowing us to work on this prototype.
- We are thankful to our instructor, **Arjun Madhusudhan** for his guidance and support throughout all five phases of this project.
- We would like to extend our gratitude to our classmates and friends for providing insightful suggestions during our project standups and for their support throughout.

Thank you for listening!

