

Assignment: Interactive Fraction Game Development

Objective:

To develop an interactive game for learning fractions, using Unity/Cocos as the primary development tool.

Requirements:

Core Gameplay:

- **Fraction Representation:** The game should visually represent fractions using a circular model.
- **User Interaction:** Players should be able to add or remove pieces from the circle to create a specific fraction.
- **Target Fraction:** Each level should have a target fraction that the player must achieve.
- **Feedback Mechanism:** Provide immediate feedback to the player, indicating whether their answer is correct or incorrect.

User Interaction:

- **Buttons:** Create two buttons: "Add Piece" and "Remove Piece".
- **Button Click Events:**
 - **Add Piece:**
 - Find the first unshaded piece.
 - Apply the shading material to the piece.
 - **Remove Piece:**
 - Find the last shaded piece.
 - Remove the shading material from the piece.

Technical Implementation:

- **User Interface:** Design an intuitive and visually appealing user interface.
- **Sound and Music:** Incorporate sound effects to enhance the gaming experience.
- **Performance Optimization:** Optimize the game for smooth performance on various devices.

Deliverables:

- A fully functional Unity project for the fraction game.
- Well-commented and organized code.
- A detailed design document outlining the game's mechanics, visuals, and user experience.

Create this fraction

$$\frac{2}{6}$$



− PIECE

+ PIECE

Create this fraction

$$\frac{2}{6}$$



− PIECE

+ PIECE