Sprint 3 Instructions

COMP20050

HEXOUST PROJECT

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Sprint Objective

In this third sprint, we've focused on building the first steps of the game. The goal is simple: let the players decide where to place their stones by clicking the desired cell, if the cell is valid and it's a non-capturing move, place the stone, and change the turn to the other player by displaying a coloured message. If it's a capturing move, remove all the captured opponents' stones and keep the turn until the player makes a non-capturing move.

This version includes:

- A hexagonal board display.
- A prompt for player names and color selection (Red or Blue).
- A visual indicator showing whose turn it is.
- An option to exit the game at any point.
- A method for choosing the desired cell.
- A visual placement of the stone in said cell.
- A visual indicator showing the next player's turn.
- A visual indicator showing an error message for invalid moves.

How to Launch HexOust

Prerequisites

Before launching the game, make sure you have the following set up:

- Java, JavaFX and SceneBuilder installed on your machine.
- An IDE like IntelliJ.
- A cloned copy of the project from GitHub.

IDK version used for the .jar: Oracle OpenIDK 22.0.2 - aarch64

Steps to Run the Game

- 1. Clone the Repository:
 - Open your terminal or GitHub desktop.
 - Run:

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git clone <repository-link>
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- 2. Open the Project in Your IDE:
 - Launch IntelliJ.
 - Open the cloned HexagonalBoard project.

3. Set Up JavaFX (if needed):

- Ensure JavaFX is properly linked in your project settings.
- In IntelliJ: Go to File > Project Structure > Libraries and add JavaFX.

4. Run the HelloApplication Class:

- Locate the "HelloApplication.java" file.
- Right-click and select Run.

5. The Game Window Opens

- You should now see the Rules displayed. Once you read them and click "Ok", you should see a new window asking for the Players' names (the colors are assigned automatically). After you insert them and click "Ok", you should see the HexOust board displayed with a colored message to see the player's turn switching.

6. Playing the Game

- The first player (RED Player) can start placing the first stone by clicking the desired cell (hexagon). Once the cell is clicked, a RED stone will appear in said spot. If the move was capturing (CP), the captured opponents' stones(BLUE) are removed from the board, and it's still the RED Player's turn and can place a new stone following the same rules, but if the move was non-capturing (NCP), the turn changes to BLUE and the message will change to BLUE.
- The second player (BLUE Player) can start placing their first stone by clicking the desired cell (hexagon). Once the cell is clicked, a BLUE stone will appear in said spot. If the move was capturing (CP), the captured opponents' stones(RED) are removed from the board, and it's still the BLUE Player's turn and can place a new stone following the same rules, but if the move was non-capturing (NCP), the turn changes to RED and the message will change to RED.

Additional Notes:

<u>HexagonalBoard</u> contains the Board source code with all the graphic interfaces and the NCP and CP moves implemented, as it should be in the final product.

How to Play HexOust (Sprint 3 Version)

- 1. Setting Up the Game:
- When the game launches, a window will prompt:
- Player 1: Enter your name.
- Player 2: Enter your name.

Note: The Red player always starts first.

- 2. The Game Board:
- A hexagonal board will appear on the screen.
- The board is currently empty, awaiting player moves.
- A colored text message(RED or BLUE) will indicate whose turn it is.
 - Example: "(PLAYER 1 NAME)'s Turn" in color Red.
- 3. Ending the Game:
- At any point, players can choose to exit the game:
- Simply click the Exit button.
- The game will close, ending the session.

Aesthetic Choices:

- A clean and minimalistic interface with a green background covering the entire screen.
- Hexagons resize perfectly when you adjust the window, always staying proportional.
- Clear turn indicators with bold colored text and a colored circle.
- Invalid cell placement error message with clear information on error.

Sprint 3 Milestones Achieved:

- Let the players decide where to place their stones by clicking the desired cell.
- Place a stone if the cell is valid.
- Change the turn to the other player by displaying a coloured message if it's a non-capturing move (NCP).
- Remove all captured opponents' stones from the board if it's a capturing move (CP).

Conclusion:

This sprint sets the game logic for HexOust. The focus was on creating a functional and clean game, letting the players place their stones if they made an NCP or CP move, ensuring all elements in Specification 3 (SR3, SR3.1, SR3.2) work smoothly. And remove all captured opponents' stones from the board if it's a capturing move (CP).

Future sprints will bring more complex gameplay mechanics. But for now, enjoy exploring the board and seeing the first steps of HexOust in action.