

Sprint 3 Plan Document

COMP20050

HEXOUST PROJECT

By GROUP 13:

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1. Sprint objective

The objective of this sprint is to create a functioning version of the start of the game called “Hexoust” that respects all the functional and non-functional software requirements for specification 3 (SR2, SR2.1, SR2.2). Players (RED/BLE) should place their stones in a valid cell by clicking the cell. If a player made a CP, the board removes the opponent’s pieces affected by the move. After the player makes a capturing move, display that it’s their turn again (until a non-capturing move is made).

2. Technical information

- **Programming languages:** Java, JavaFX
- **Version control:** GitHub
- **Designing tools:** draw.io
- **Additional tools and programs:** IntelliJ and VS Code (Java IDEs), Google Drive and Word/Google Docs (for shared access and editing space to the project’s documentation) and Trello (task and time management)

3. Sprint milestones

- Submission Software Architectural Design and Project Plan - **10 February 2025 SUBMITTED**
- Submission Sprint 1 - **23 February 2025 SUBMITTED**
- Submission Sprint 2 - **10 March 2025 SUBMITTED**
- Submission Sprint 3 - **06 April 2025**

4. Responsibilities

- Chairperson: Laura González Calleja
- Scribe: Federica Fucetola
- Timekeeper: Cian Latchford

5. Communication Plan

- **Communication tools:** WhatsApp and emails for quick exchanges of messages, as well as Google Meet and in-person meetings.
- **Status reports:** Frequent updates on the project's progress, both online (shared Trello board for general milestones and individual boards for each member and their specific tasks) and in-person. Conducted stand-up meetings regularly, discussing project goals and achievements.

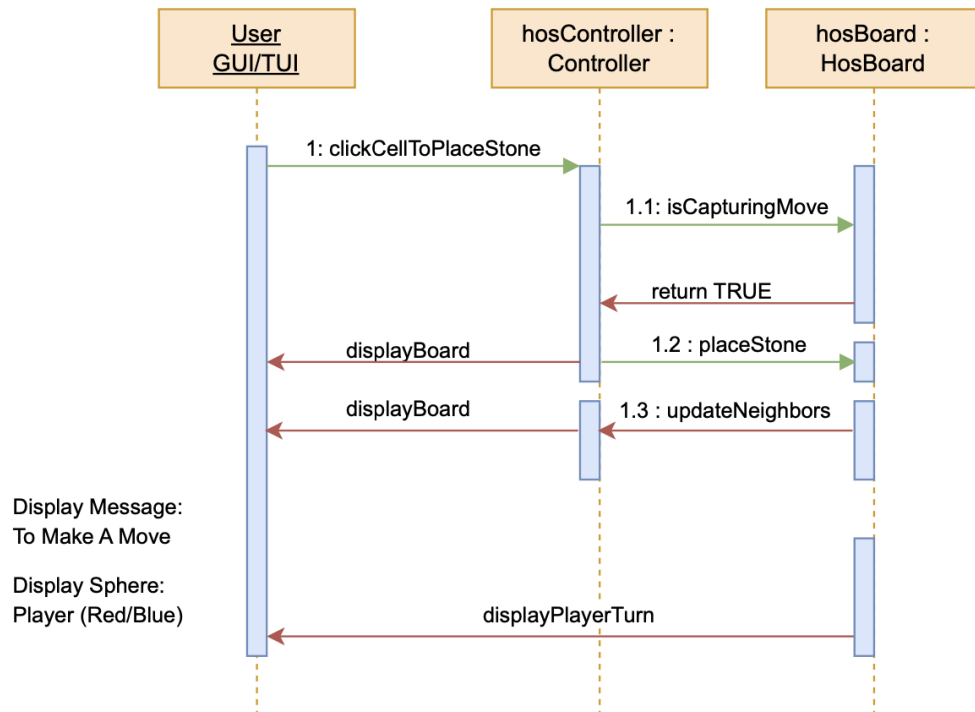
6. Development plan

1. Sprint 3:

- a. Players (RED/BBLUE) should place their stones in a valid cell by clicking the cell **(SR3). (ALREADY DONE LAST SPRINT FOR NCP)**
- b. If a player made CP, then all the opponent's groups that are captured shall be removed from the board **(SR3.1). Laura González Calleja**
- c. A stone of the capturing player's color followed by a text shall be displayed to indicate the capturing player's turn. **(SR3.2). (ALREADY DONE LAST SPRINT FOR NCP)**
- d. Overall Testing. **Cian Latchford and Federica Fucetola**

Following the previous Activity/Sequence Diagram for specification 3:

For specification 3 (SR3, SR3.1, SR3.2)



SR3: Capturing Move (CP) & Group Removal

How It Works:

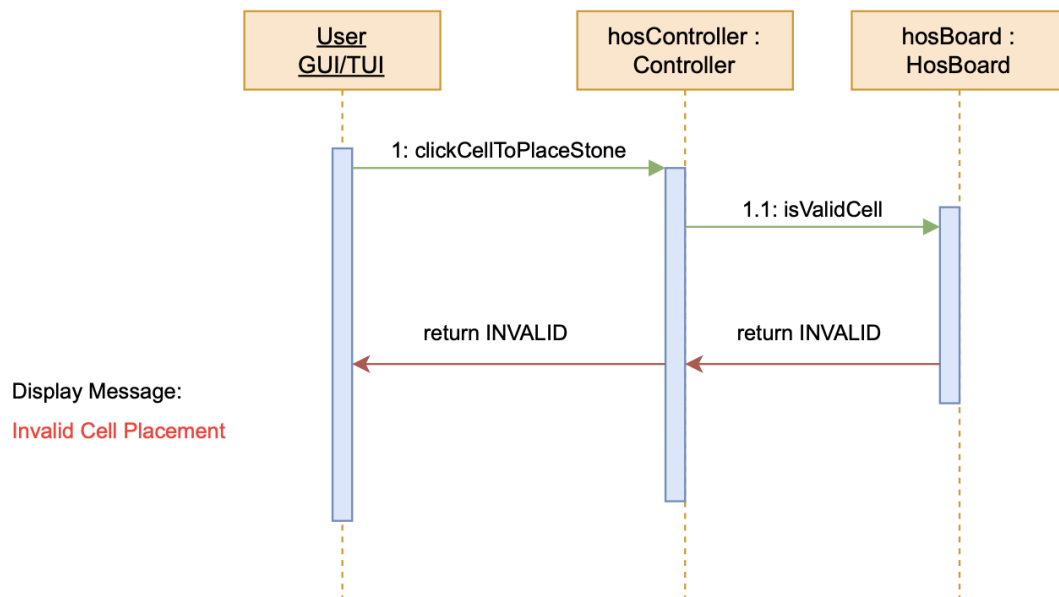
- A capturing move(CP) removes **all opponent's captured groups** from board.
- The turn remains with the **capturing player** after a successful capture.

Diagram Implementation:

1. clickCellToPlaceStone triggers the move.
2. isCapturingMove returns **TRUE**, indicating a capture.
3. placeStone updates the board.
4. updateNeighbors ensures surrounding groups are correctly updated.
5. displayPlayerTurn keeps the capturing player's turn.

Following the previous Activity/Sequence Diagram for specification 4:

For specification 4 (SR4, SR4.1, SR4E1, SR4E2)



SR4: Invalid Moves & Error Handling

How It Works:

- If a player tries to place a stone in an **invalid cell**, an error message appears: **"Invalid Cell Placement."**

Diagram Implementation:

1. **clickCellToPlaceStone** checks move validity.
2. **isValidCell** verifies the chosen cell.
3. If invalid, it returns **INVALID** and displays an **error message**.

The aesthetic guidelines we chose for the project:



Changes from past Sprint

- All the features that were specified in the Architectural Sprint were implemented as planned.
- Now all the different interfaces, the Rules and the Players displays, are linked to the board and the actual game. While getting the names of the players and placing stones according to the rules are combined too.
- The error message displayed when placing a stone in an invalid cell was changed in regards to the last Sprint, from just a red sentence on the corner of the screen to a pop-up error in the center, due to the feedback given on it.
- The Rules and Players displays are now always shown in the centre of the screen for a more cohesive and easy interface and game experience.

7. Conclusion: success of the sprint

To guarantee the success of this sprint, the following guidelines should be followed:

- The sprint and project should be always completed within established dates
- In case of issues of any kind, communicate promptly with the team leader and team members to fix the situation as soon as possible to avoid setbacks and bigger problems in the future
- Meet all the functional and non-functional requirements specified in the “*Software Architectural Design Document*” and in the more general outlines of the project given by the stakeholder
- Get a positive user (stakeholder) feedback