**Competitive Minesweeper Product Backlog**

**Problem Statement:** Traditional minesweeper lacks any way to determine better players, or to set up non-random game-play boards. We propose a competitive multiplayer version of minesweeper, in which two players will connect over a network, set up each other’s board, and then compete to determine who can get the better score.

**Background Information:** Minesweeper is a simple yet challenging mind game where players are challenged to clear a board without hitting any mines. However, many people are interested in interactive games where they can share the experience with friends. We are attempting to make a version that keeps the simplicity of the traditional minesweeper yet allows players to compete against one another.

**Environment:** We will be using standard desktop Java to develop our application, and no external libraries or databases will be required.

**Functional Requirements:**

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| --- | --- | --- |
| **Backlog ID** | **Functional Requirements** | **Hours** |
| **1** | As a user, I would like to be able to play traditional minesweeper on a generated board | 20 |
| **2** | As a user, I would like to be able to create a minesweeper board | 5 |
| **3** | As a user, I would like to be able to play on a created board | 1 |
| **4** | As as user, I would like to be able to save high scores for a specific board | 1 |
| **5** | As a user, I would like to be able to save a created board for later use | 1 |
| **6** | As a user, I would like to be able to play on multiple board sizes | 2 |
| **7** | As a user, I would like to trade boards with another player | 3 |
| **8** | As a user, I would like to view the other player playing my board while I play theirs | 7 |
| **9** | As a user, I would like to be able to chat with my opponent | 5 |
| **10** | As a user, I would like to be able to see a list of people looking for opponents | 10 |
| **11** | As a user, I would like to be able to select an opponent to challenge | 2 |
|  | **Total** | **57** |

**Non-Functional Requirements:** The opponent challenging system should be reliable and quickly connect players together. The high scores should accurately update and not be modifiable.

**Case: Play Traditional Minesweeper System Responses**

1. Press new game 2. A fresh board appears

3. Attempt to clear the board

**Case: Create board**

1. Press Menu> Create board 2. A size dialog appears

3. Enter board size 4. A blank board appears of selected size

5. Place mines on board

6. Press save board 7. Save dialog appears

8. Input board filename 9. Board is saved

**Case: Play a created board**

1. Press Menu> Load board 2. A load dialog appears

3. Select a board 4. The loaded board appears, with all

spaces blank

5. Attempt to clear the board

**Case: Save High Scores**

1. Complete board 2. High Score List appears

3. If new score is high enough, asks for  
 name

4. Input name if necessary 5. Save high score

**Case: Trade Boards**

1. Press Menu-> Find a player 2. Available players are displayed

3. Select a player

4. Select trade board 5. Board selection dialog appears

6. Select board to trade 7. Board trade is initiated

**Case: Play with opponent**

1. Press Menu-> Find a player 2. Available players are displayed

3. Select a player

4. Select challenge opponent 5. Board selection dialog appears

6. Select board to challenge with 7. Challenge is initiated

8. Chat box appears

9. View of other player’s progress appears

10. Attempt to clear board