Epic 1: AI Solver

User Story 1.1 — Versus AI Solver Mode

As a player
I want to be able to choose between playing Minesweeper by myself or against the AI Solver.
So that I can choose the flavor of my game experience

Acceptance Criteria:

- Before the start of the game, the player must be given the option to choose between “Freeplay” Mode and “Versus AI” Mode.
- The player’s selection should be the game mode that is played.

User Story 1.2 — Difficulty Selection

As a player
I want to have the option to select between Easy, Medium, and Hard difficulties.
So that I can control the difficulty of the game.

Acceptance Criteria:

- Before the game starts, the player should be prompted to select a difficulty if they wish.
- The difficulty level the player chooses should be applied to the game.

User Story 1.3 — Easy, Medium, Hard Difficulty Curve

As a player
I want to observe a difference between the three difficulties: Easy, Medium, Hard
So that the game can match my skill level.

Acceptance Criteria:

- The AI on easy mode should be the most trivial (meaning it should be unintelligent) to play against.
- The AI on medium difficulty must be more intelligent than the AI on easy difficulty, but less intelligent than the AI on hard difficulty
- The AI on hard mode should be the most difficult to overcome

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User Story 1.4 — Taking Turns

As a player
I want to take turns with the AI in uncovering cells.
So that I can compete against the AI.

Acceptance Criteria:

- Once the player uncovers a cell, the AI's turn begins, and then the AI uncovers a cell.
- Player and AI take turns one after the other (Player → AI → Player → AI …)

User Story 1.5 — Game Win

As a player
I want to win when the AI uncovers a mine or when I uncover the last cell that is not a mine.
So that I can complete the game with a victory over the AI.

Acceptance Criteria:

- Display a victory screen to the player
- The player should win IF: the AI uncovers a mine.
- If the board is empty, then the game shall be declared a draw

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User Story 1.6 — Game Loss

As a player
I want to lose when I click a mine or when the AI uncovers the last cell
So that I can understand why I lost and try again

Acceptance Criteria:

- Display a game-over screen to the player. The player should be prompted on if they want to start again.
- The player should lose IF: the player clicks on a mine.
- The AI and the player can no longer click on any cell.

Epic 2: Custom Feature – Timer

User Story 2.1 — Timer Display

As a player
I want be able to see the total elapsed time since I started the game.
So that I can measure how quickly I am completing the game.

Acceptance Criteria:

- The total time (displayed in seconds) is displayed at the top of the screen. And counts up
- A game-over/loss displays the total time for that round of Minesweeper.
- The timer should not start until the player clicks on their first cell.

Epic 3: Project Delivery & Compliance

User Story 3.1 — Code Freeze

As a developer
I want to freeze the codebase by the deadline
So that the submitted version is locked for grading.

Acceptance Criteria:

- Final Pull Request is reviewed by team members and merged to main
- Code on master branch matches the final commit timestamp.
- No changes after code freeze are included in grading.

User Story 3.2 — Weekly Demos

As a team member
I want to demonstrate our project progress
So that we can get feedback and stay on track.

Acceptance Criteria:

- Use the master branch for all demos.

- Show latest working features during GTA/team meetings.

User Story 3.3 — Documentation & Peer Reviews

As a team member
I want to submit documentation and evaluations
So that we fulfill all course requirements.

Acceptance Criteria:

- All code and documents are stored in the GitHub master branch.
- Each member submits their peer evaluation form via Canvas.

Epic 4: Bugfixes

User Story 4.1 — Flag Behavior

As a player
I want flag and unflag cells
So that I can avoid clicking on bombs.

Acceptance Criteria:

- Must be able to flag and unflag cells
- Cannot reveal a cell that is flagged
- Cannot flag cells that have been revealed

User Story 4.2 — Win/Loss/Draw Behavior

As a player
I want the end result displayed
So that I know if I won, lost, or had a draw.

Acceptance Criteria:

- Display the player won if the board is cleared with no AI Solver

- Display the player lost if a bomb is clicked by the player
- Display the player won if the AI Solver clicked on a bomb
- Display a draw if the board is cleared when playing with the AI Solver

Source: Generated by ChatGPT; reviewed, edited, and added to by Group 4