

# Maintenance Project

## User Story 1 — Debug and Feature Checking

**As a user**

I want to ensure that the behavior of the program is as expected.

**Task Breakdown:**

Tasks	Completed By
Test the program for bugs or missing features	Marco, Anya

## User Story 2 — Easy AI implementation

**As a user**

I want a separate mode to play against an Easy AI.

**Task Breakdown:**

Tasks	Completed By
Easy AI algorithm	Anya

## User Story 3 — Medium AI Implementation

**As a user:**

I want a separate mode to play against a Medium AI.

**Task Breakdown:**

Tasks	Completed By
Medium AI algorithm	Hunter

## User Story 4 — Hard AI implementation

### As a user:

I want a separate mode to play against a Hard AI.

### Task Breakdown:

Tasks	Completed By
Hard AI Algorithm	Addie

## User Story 5 — VFX and SFX

### As a user

I want to have sound effects and music played in the background while playing.

### Task Breakdown:

Tasks	Completed By
Bomb Animation	Marco
Game over SFX	Janna
ASMR based sound effects	Elizabeth

## User Story 6 — Brainstorm

### As a developer

I want to come up with application ideas for project 3.

### Task Breakdown:

Tasks	Completed By
Generate ideas for project 3 apps	Everyone

## User Story 7 — Difficulty Select

### As a user

I want to select a mode between Easy, Medium, and Hard in AI mode.

### Task Breakdown:

Tasks	Completed By
Dropdown menu in HTML	Janna

## User Story 8 — Game Mode Select

### As a user

I want to be able to select between AI mode and singleplayer mode.

### Task Breakdown:

Tasks	Completed By
Dropdown menu in HTML	Elizabeth

## User Story 9 — AI Solver or VS Mode Select

### As a user

I want to choose between an interactive and an automatic AI.

### Task Breakdown:

Tasks	Completed By
Create dropdown and HTML elements	Janna

## User Story 10 — Header Comments Distinction

### As a developer

I want to be able to tell which comments and documentation are new

### Task Breakdown:

Tasks	Completed By
Edit comments that are not clearly marked	Anya
Adding new header comments wherever they are needed	Anya

## User Story 11 — Easy AI

### As a user

I want a separate mode to play against an Easy AI.

### Task Breakdown:

Tasks	Completed By
Easy AI algorithm continuation	Anya

## User Story 12 — First Click Bugfix

### As a user

I want the first click to reveal the first cell without having to click twice.

### Task Breakdown:

Tasks	Completed By
Correct error that causes the first click to not be handled properly	Elizabeth

## User Story 13 — AI Interactions

### As a user

I wish to be able to have the AI interact with the DOM based upon the algorithms determining what move it plays.

### Task Breakdown:

Tasks	Completed By
Create AI makes move function	Addie

## User Story 14 — First Click Bugfix

### As a user

I want the first click to always reveal a safe cell.

### Task Breakdown:

Tasks	Completed By
Fix bug that causes first click to not be safe	Elizabeth

## User Story 15 — AI Flagging

### As a user

I want the AI to place a flag on the grid when it determines a tile to be a mine.

### Task Breakdown:

Tasks	Completed By
Add flagging functionality and logic to medium AI	Hunter

## User Story 16 — Code Reorganization

### As a developer

I want to separate the JavaScript and CSS into a separate file once all of the scripting is complete.

**Task Breakdown:**

Tasks	Completed By
Create JS and CSS files, then migrate code into them	Marco

**User Story 17 — System Architecture Documentation****As a user**

I want to have project documentation with a high-level description of the system architecture.

**Task Breakdown:**

Tasks	Completed By
Create document and system architecture descriptions	Janna

**User Story 18 — Additional Features Diagram****As a user**

I want to have a software architecture diagram that describes the flow and functionality of the new features.

**Task Breakdown:**

Tasks	Completed By
Create flow diagram of new features	Marco

**User Story 19 — Documentation Cleanup****As a user**

I want the documentation to be well-formatted and edited.

#### Task Breakdown:

Tasks	Completed By
Go over each document and ensure the format is consistent throughout each one	Anya

### User Story 20 — Extended Playtime Testing

#### As a user

I want the program to be well tested with consistent usage.

#### Task Breakdown:

Tasks	Completed By
Test the program over multiple iterations	Janna

### User Story 21 — Minefield Input

#### As a user

I want to have each user story reformatted into the clients desired template.

#### Task Breakdown:

Tasks	Completed By
Create new user stories document	Marco

### User Story 22 — Turns System

#### As a user

I want to create a take turns system for whenever I play against the AI.

#### Task Breakdown:

Tasks	Completed By
Create function that handles the turns between the AI and the player (player always goes first)	Marco

## User Story 23 — Safe Zone Generation

### As a user

I want a safe zone generated around my first click.

### Task Breakdown:

Tasks	Completed By
Swap any mines around the first-clicked cell with another cell outside the safe zone that does not contain a mine	Elizabeth