

# Minesweeper Project 2

## User Story 1 — Sound Effects

### As a user

I want to have sound effects to correlate to actions,  
So that I have a better environment when I am playing the game.

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Get effect for button click	Abdelrahman Zeidan	.1	.2 09/29/2025
Get effect for flag place / remove	Abdelrahman Zeidan	.1	.1 09/29/2025
Get effect for cell reveal	Abdelrahman Zeidan	.1	.1 09/29/2025
Get effect for mine reveal	Abdelrahman Zeidan	.1	.1 09/29/2025
Implement effect playing on click	Abdelrahman Zeidan	1	1 09/29/2025

## User Story — Background Music

### As a user

As a player, I want a background music depending on the game state and also mute the background music

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Get music for win screen	Mya Hoersdig	.1	9/28/25

			11:07pm-12:24am
<b>Get music for playing / start screen</b>	Mya Hoersdig	.1	9/28/25 11:07pm-12:24am
<b>Get music for lose screen</b>	Mya Hoersdig	.1	9/28/25 11:07pm-12:24am
<b>Implement music playing depending on game state</b>	Mya Hoersdig	1	9/28/25 11:07pm-12:24am 1hour and 17mins
<b>Mute Button</b>	Mya Hoersdig	.3	10/5/25 6:19am-6:45am 36mins

## User Story — Human Win and lose screens

### As a user

I want to have a win and lose screens for humans,  
So I can more easily see the outcome of the game.

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Win screen for human making last move	Abdelrahman Zeidan	.2	.2 10/2/2025
Lose screen for human making mistake	Abdelrahman Zeidan	.2	.2 10/2/2025
generic win/loose screen	Connor Williamson	2	2 09/30/2025

## Developer Story

### As a developer

I want to understand team 8's code  
So that I can add upgrades to the game.

**Task Breakdown:**

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Research team 8's code / documentation	Abdelrahman Zeidan	.5	.6 09/28/2025
Research team 8's code / documentation	Ryan Grimsley	.5	.5 09/24/2025
Research team 8's code / documentation	Henry Hoopes	.5	5 p.m. - 5:30 p.m. 09/25/2025
Research team 8s code / documentation	Connor Williamson	.5	.5 09/29/2025

**User Story — AI option****As a user**

I want an option to play against AI,  
So that I can have a “multiplayer” experience

**Task Breakdown:**

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Add template for ai engine	Ryan Grimsley	1	1.5 09/25/2025
Make AI move limited to ~1 second	Ryan Grimsley	.1	.1 10/01/2025
Add functionality for switching between AI modes	Henry Hoopes	1	10:48 a.m. - 11:48ap.m., 9/29/2025

**User Story — Easy AI option**

**As a user**

I want an option to play against an easy AI,  
So that I can have a “multiplayer” experience

**Task Breakdown:**

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Add button for easy ai to start screen	Henry Hoopes	.1	12 p.m. - 12:06 p.m, 09/29/2025
Add functionality to ai engine to make easy ai's decision	Ryan Grimsley	.5	.6 9/25/2025

**User Story — Medium AI option****As a user**

I want an option to play against an easy AI,  
So that I can have a “multiplayer” experience

**Task Breakdown:**

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Add button for medium ai to start screen	Henry Hoopes	.1	11:54 a.m. - 12 p.m, 09/29/2025
Add functionality to ai engine to make medium ai's decision	Ben Stonestreet	1.5	9/30/2025, 7:00pm - 8:30 PM

**User Story — Hard AI option****As a user**

I want an option to play against an easy AI,  
So that I can have a “multiplayer” experience

**Task Breakdown:**

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
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Add button for hard ai to start screen	Henry Hoopes	.1	11:48 a.m. - 11:54 a.m, 09/29/2025
Add functionality to ai engine to make hard ai's decision	Ben Stonestreet	.5	9/30/2025 6:45-7:00PM

## User Story — AI Win and Lose

### As a user

As a player, I want a new win screen for beating the AI (solving the game before AI)

As a player, I want a new loss screen for losing to the AI (AI solves the game before player)

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Create win AI win and loose screen image	Mya Hoersdig	.4	10/5/25 6:18am-8:19am
Implement the functionality into the code	Mya Hoersdig	1	10/5/25 6:18am-8:19am 2hours 1min
AI win loose screen	Connor Williamson	1	1 10/01/2025

## Developer Story — Code Separation

### As a developer

I want a clear code module distinction,

So that I can more easily make changes and extend the code.

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
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Split up team 8's code into separate modules (in different files / classes	Ryan Grimsley	.1	.3 09/24/2025
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## Developer Story — Documentation

### As a developer,

I want accurate documentation in the code and over the system architecture,  
So that the project is more easily understandable to new and current developers.

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Make new system documentation for new architecture (split files, ai engine, and sounds)	Ryan Grimsley	.5	1 10/01/2025
Move old and new documentation into folders	Ryan Grimsley	.1	.1 10/01/2025
Make new prologue comment documentation	Ryan Grimsley	.25	.4 10/02/2025

## Developer Story — Testing

### As a developer

I want a to rigorously test the final code,

So that I can be sure it is correct.

### Task Breakdown:

Tasks	Completed By	Estimated Person Hours	Actual Person Hours / Dates
Perform final testing	Henry Hoopes	.5	10:00 a.m. - 10:36 a.m., 09/24/2025
Perform final testing	Mya Hoersdig	.5	9:17am-9:43am 10/5/25