

# Minesweeper Project

## User Story 1 — Minefiled input

### As a user

I wish to see an input field

So that I can Specify how many mines there are in my game

### Task Breakdown:

Tasks	Completed By
Edit html page to have input box	Janna
Handle input to adjust the mine count	Janna
Handle error if mine count is not between 10-20 mine	Janna

## User Story 2 — Flag count

### As a user

I wish to see Remaining mine/flag count

So that I can see how many flags I Have placed

### Task Breakdown:

Tasks	Completed By
Add a counter of many flags are available	Janna
Adjust counter whenever a flag is freed	Janna/Hunter

## User Story 3 — Game over

### As a user

I wish to see a game over screen after clicking unsafe cell.  
So that I know when I've lost a game

### Task Breakdown:

Tasks	Completed By
Add game over screen overlay	Anya
Add a reset button to start game again	Anya

## User Story 4 — Minefield generation

### As a user

I wish to generate the minefield after my first click  
So that I can guarantee my first click is always safe

So that I know when I've lost a game

### Task Breakdown:

Tasks	Completed By
Minefield generation represented as a binary matrix	Marco
Receiving first click coordinates and passing it along to the matrix	Marco
Adding Safe perimeter around first click box	Marco

<b>Visual representation of Minefield in the HTML and CSS</b>	<b>Addie</b>
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## **User Story 5 — Reavel cells**

### **As a user**

I wish to reveal if a cell is safe after I click it and expand to reveal the cell with nearest mines.

So that I can have an insight where a mine might be

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Create script to reveal all adjacent cells without mines when clicking</b>	<b>Elizabeth</b>
<b>Add counter to each revealed tile showing how many mines are near it</b>	<b>Elizabeth</b>

## **User Story 6 — Flaggin cells**

### **As a user**

I wish to set flags on cells that I believe to be mines,

So i can keep track of them

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Create matrix to keep track of flagged cells</b>	<b>Hunter</b>
<b>Create script for flagging and unflagging cells</b>	<b>Hunter</b>

## User Story 7 — Minefield input

### As a user

I wish to to see a 10x10 game grid

So, I can play minesweeper on it

### Task Breakdown:

Tasks	Completed By
Make html and CSS for mine grid	Addie
Make script for dynamic grow of grid	Addie

## User Story 8 — directory reorganization

### As a developer

I wish to separate source from distribution files

So, we can better differentiate the development environment form the distribution environment

### Task Breakdown:

Tasks	Completed By
Reformat directory structure	Addie

## User Story 9 — mine reveal

### As a User

I wish to see all mines exposed on the grid when I click on a mine.

So that i can see where all the mines where

### Task Breakdown:

Tasks	Completed By
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Mine reveal script	Anya

## User Story 10 — Grid labels

### As a User

I wish to see columns labeled A-J and rows numbered 1-10

So, I can read the grid locations more naturally

### Task Breakdown:

Tasks	Completed By
Create grid header html and CSS elements	Marco
Create algorithm for excel style column headers	Marco
Inset columns and row header dynamically	Marco

## User Story 11 — Victory screen

### As a User

I wish to see a victory screen when I uncover all the safe cells

So i know I've beaten the game

### Task Breakdown:

Tasks	Completed By

<b>Victory screen html and ccs element</b>	<b>Elizabeth</b>
<b>Victory screen script</b>	<b>Elizabeth</b>

## **User Story 12 — UI polish**

### **As a User**

I wish to to use an intuitive, complete-looking UI

So, I can understand the game functions better

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Page styling</b>	<b>Addie</b>
<b>Element addition</b>	<b>Janna</b>

## **User Story 13 — Flag click prevention**

### **As a User**

I wish to be prevented from clicking on cells I currently have flagged.

So I can avoid accidentally clicking on a flagged cell and lose

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>

<b>IsFlagged check and handler</b>	<b>hunter</b>
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## **User Story 14 — Victory Restart**

**As a User**

I wish to restart the game after seeing the Victory screen.

**Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Add reset button at Victory screen</b>	<b>Elizabeth</b>

## **User Story 15 — Flags bug**

**As a User**

I wish to only be able to flag uncovered/non-empty cells.

**Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Fix bug that allows to flag revealed cells</b>	<b>Hunter</b>

## **User Story 16 — playing status**

**As a User**

I wish to see a playing status once the game has started

#### Task Breakdown:

Tasks	Completed By
Add html elements for is playing display	Janna
Isplaing handler function	Janna

#### User Story 17 — Testing

As a User

I wish this program to be tested

#### Task Breakdown:

Tasks	Completed By
Test and report for bugs	Addie, Anya, Elizabeth, Hunter, Janna, Marco

#### User Story 18 — Estimate document

As a User

I wish to have system documentation with person-hours estimate

#### Task Breakdown:



Tasks	Completed By
Create document and list all person hour estimates	Marco

## User Story 19 —

### As a User

I wish to have system documentation with actual-person hours.

#### Task Breakdown:

Tasks	Completed By
Report the actual person hours spent on each user story	Addie, Anya, Elizabeth, Hunter, Janna, Marco

## User Story 20 —

### As a User

I wish to have the system architecture overview documentation to have a high-level description

#### Task Breakdown:

Tasks	Completed By
Systema architecture document detailing our project at a high- level that covers, system components, Data flow, and Key data structures	Janna

## **User Story 21 —**

### **As a User**

I wish to have the system architecture overview documentation to have a diagram of system components, data flow, and key data structures

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Creation of Diagram</b>	<b>Anya</b>

## **User Story 22 —**

### **As a User**

I wish the program to have prologue comments on each file

### **Task Breakdown:**

<b>Tasks</b>	<b>Completed By</b>
<b>Prologue comments</b>	<b>Elizabeth</b>

## **User Story 23 —**

### **As a User**

I wish for the code to have comments for major code blocks and/or individual lines

**Task Breakdown:**

Tasks	Completed By
Comments on major code blocks	Elizabeth

**User Story 24 —**

**As a User**

I wish to only be able to flag cells that have not been uncovered

**Task Breakdown:**

Tasks	Completed By
Flag cells Bug Fixing	Hunter

**User Story 25 —**

**As a User**

I wish to only be able to start a new game when the game has finished.

**Task Breakdown:**

Tasks	Completed By

<b>Prevent users from clicking the start button while game is ongoing</b>	<b>Janna</b>
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