

PROJECT 1 TIME ESTIMATION FOR MINESWEEPER GAME

Task	Description	Assignee	Label	Priority	Estimated Time	Actual Time
Week 1: Wednesady August 27th - Tuesday Sep 2nd						
Craete a basic Game board	a 2D array that is accessed as boardContent[i][j] where i is the row and j is the column.	Katie	enhancement	Priority 0	3 hrs	1 hr 10 mins
Board Manager Class	Implement a BoardManager class that handles: • Board creation (function) • Retrieving a cell's mine status (function) • Tracking covered cells (list of coordinates) • Tracking uncovered cells (list of coordinates) • Tracking flagged cells (list of coordinates)	Katie	Game Logic	Priority 1	2 hrs	2 hrs
UI Mockup	Prototype in Figma for game UI	Vi	UI	Priority 2	3 hrs	2hrs 15mins
Generate Mine position	Randomly place the mines at the start of the game and this should be based on the size of the board	Vi	Game Logic	Priority 1	2 hrs	1 hr 30 ins
Mine calculation	Calculating the number of mines in adjacent cells	Christina	Game Logic	Priority 1	1 hr	1 hr
Expand Open cells	expand the open cells	Christina	Game Logic	Priority 0	4 hrs	2 hrs
Click of the cell	Converting the click of the cell to its row and column	Vi	Game Logic	Priority 0	2 hrs	1 hr 30 mins
Update the Kanban Board	Make sure everyones duties and takss are all upadted on the prject board	Kundana	Documentation	Priority 1	2 hrs	2 hrs
Documentation Requiremnets	Set up and outline all documentation requirements	Navya	Documentation	Priority 2	1 hr	1 hr
Week 2: Wednesday Sep 3rd - Tuesday Sep 9th						
Architecture diagram	Make an understandable and composed diagram of the system Arc for the game	Kundana	Documentation	Priority 1	2 hrs	1 hr
		Navya	Documentation	Priority 1	2 hrs	1 hr
System Architecture draft	Make a draft of what all needs to be included in the documentation	Kundana	Documentation	Priority 2	2 hrs	2 hrs
Game UI with Tkinter	displaying the game in a visually appealing manner with Tkinter	Navya	UI	Priority 0	3 hrs	4 hrs
Mine calculation	Calculating the number of mines in adjacent cells	Vi	Game Logic	Priority 1	3 hrs	3 hrs
exposing nearby empty cells	Cells need to be exposed	Christina	Game Logic	Priority 1	4 hrs	1 hr
exposing nearby empty cells	Cells need to be exposed	Katie	Game Logic	Priority 1	1 hr	30 mins
Bug Fixing	Fixed bug in expandOpenCells function	Katie	Game Logic	Priority 1	1 hr	30 mins
Week 3: Wednesady Sep 10th - Tuesday 16th						
Testing	Tested mine generation function and tkinter implementation. Found new bug in expandOpenCells	Katie	Game Logic	Priority 2	1 hr	30 mins
expand open cells	Finalize and test the recursive expansion feature to ensure empty neighboring cells reveal correctly. Get it to work correctly	Christina	Game Logic	Priority 0	1 hr	1 hr
mine calculation UI update	Update the Tkinter UI to visually display mine counts, flags, and uncovered cells in real time.	Vi	UI	Priority 2	1 hr	

Write out system architecture based on comments	Revise the system architecture draft based on peer and instructor feedback, ensuring completeness	Kundana	Documentation	Priority 1	4 hrs	
Actual System Architecture	High-level description and diagram of system components, data flow, and key data structures	Kundana	Documentation	Priority 1	2hrs	2 hrs
		Navya	Documentation	Priority 1	2hrs	2 hrs
Make logic diagram	Create a visual flow diagram illustrating the core game logic, from input handling to win/loss detection.	Navya	Documentation	Priority 1	2 hrs	2 hrs
Make technical diagram for the BoardManager class.	Design a diagram showing all possible game board flows, the methods of the class, what inputs it takes, and what outputs and events it produces	Katie	Documentation	Priority 1	3 hrs	2 hrs
Make Different States of the Game diagram	Design a diagram showing all possible game states (ongoing, win, loss) and transitions between them.	Vi	Game Logic	Priority 1	1 hr	
Make a time estimation sheet	Compile a consolidated sheet comparing estimated vs. actual time spent on each task, highlighting variances.	Kundana	Documentation	Priority 1	2 hrs	2 hrs
Testing	Tested mine generation function and tkinter implementation.	Kundana	Game Logic	Priority 0	1hr	1hr
Reviewed The documentation and the new diagrams	Went over all the digrams and the key points in the documentation	Kundana	Game Logic	Priority 1	45 mins	30 mins
Week 4: Tuesday Sep 16th - Friday 19th						
testing	Tested mine generation function and tkinter implementation.	Kundana	Game Logic	Priority 1	1 hr	30 mins
		Navya	Game Logic	Priority 1	1 hr	30 mins
		Christina	Game Logic	Priority 1	1 hr	30 mins
Added state of the game to the title	The header of the game now says what game state you are in (Katie	Game Logic	Priority 2	10 mins	10 mins
Fixed row/column bug	Fixed bug where the row and column labels were on the actua	Katie	Game Logic	Priority 2	10 mins	10 mins
		Vi	Game Logic	Priority 1	1 hr	1hr
Header title						
submission		Navya	Game Logic	Priority 0		DONE