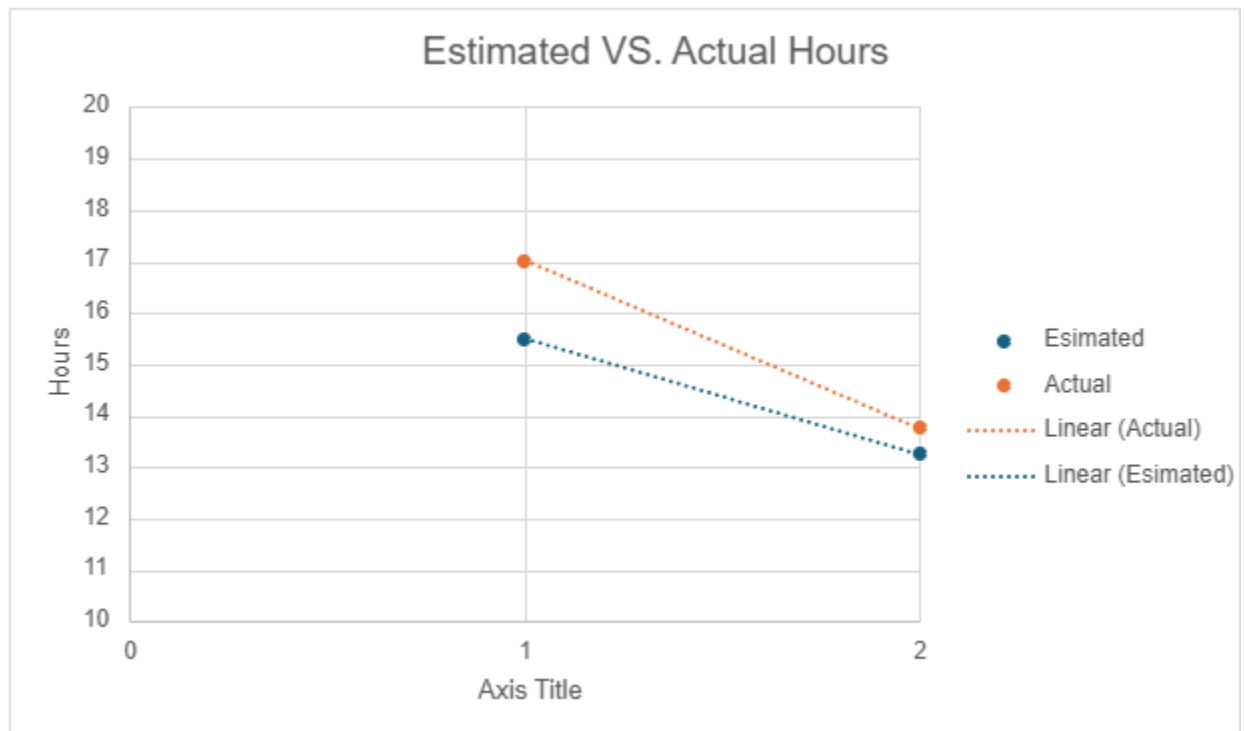


## Team 2 Project 2 Task History

Task Name	Hours (Est.)	Hours (Actual)	Difficulty Level (Est.) (1-10)	Implementation Notes
Bug Testing/Fixes	2.0	2.0	3	Implemented by whole group.
AI Solver (Easy)	0.5	1.0	3	Implemented by Jacob Kice. Took longer than estimated due to difficulty in understanding existing code
AI Solver (Medium)	1.5	1.0	6	Implemented by Jacob Kice
AI Solver (Hard)	1.0	1.0	3	Implemented by Jacob Kice
Dynamic Board Size	1.5	1.0	4	Implemented by Gunther Luechtefeld: The board size and was hardcoded and the size of the cell in the GUI was broken (in some cases, some of the cells wouldn't be shown). Just took a little messing around with it to get it working.
Custom Mine Count	0.5	0.5	1	Implemented by Gunther Luechtefeld: Mine count was also hard coded through a global variable, which made it a little more difficult.
Interactive vs Automatic Mode	1.5	1.5	7	Implemented by Jake Kice: had a couple of logic bugs that prevented the player from playing in AI OFF mode  Addition by Gunther Luechtefeld: Added an option to choose between interactive and automatic in the startup settings menu.
GUI (New Features)	2.0	3.0	8	Implemented By Srihari Meyoor: Grid Size can now be customized by user, (was

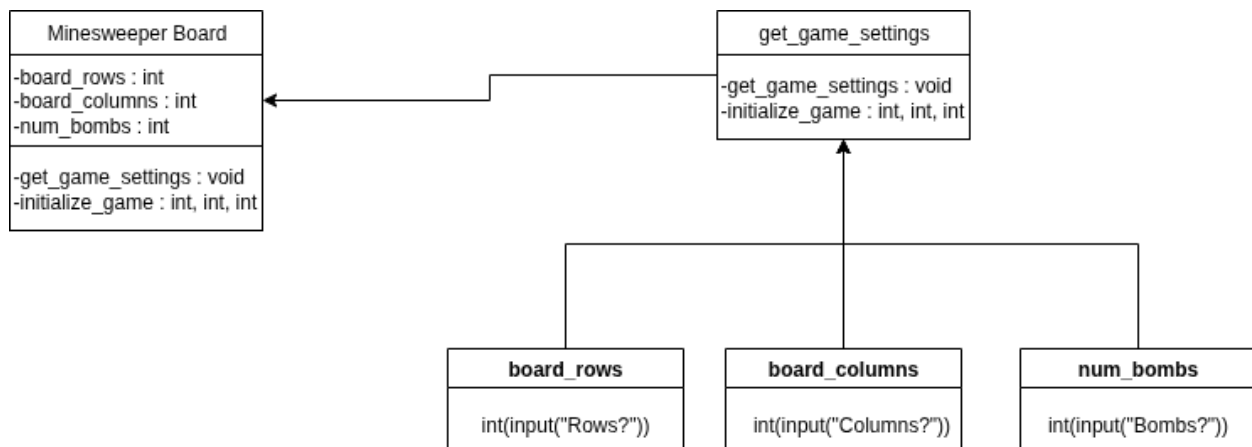
				initially constant). Added game settings for AI on/off, AI mode (interactive vs automatic) and AI level (easy, medium, hard) Had a few issues with pixel alignment, but now calculated dynamically
Project Task History/Document Creation	0.25	0.25	1	Created by Joe Hotze, tasks filled in by appropriate member
Project Hours Estimation Graph	1.0	1.5	3	Created by Joe Hotze. Mild issues due to inexperience with excel
Project 2 UML Diagram	1.5	1.0	3	Created by Joe Hotze
Code Refactoring	2.0	2.0	3	Done by Jamie King: original project had all code in one Python file, so code was split into multiple files, with each containing relevant sets of functions

## Team 2 Project 1-2 Hours Estimation



Our initial values were an estimate of 15.5 hours and an actual time of 17.01 hours for Project 1, and our recent values were an estimate of 13.25 compared to an actual time of 13.75 hours. Our estimates were slightly optimistic in both cases, but our accuracy improved between the two projects.

## Team 2 Project 2 New Feature UML Diagram



This UML Diagram describes how our feature of custom difficulty functions within the project. Our minesweeper board class has a function known as `get_game_settings()`. This function queries the user with a series of questions in order to allow them to input their own desired difficulty, allowing them to choose the number of rows, columns, and total number of bombs.