Person-Hours Estimate

The Planning Poker Method

Setup:

Story	Points
Requirements Gathering & Analysis	2
Group forming, GitHub repo, discord, meetings	5
Learning Pygame	2
Planning and scheduling	1

Game Setup

Story	Points
Board Configuration, grid design	5
Mine configuration / randomization	2
Covered/revealed cell logic and display	5
Start screen / mine-count selection	3
Limit flags/display remaining available	2
Creating visual assets	3
Set first selection to safe cell	1
Flood reveal on zero cells	3

Gameplay

Story	Points
Input/logic for cell selection/flagging	5
Set win/loss conditions	2
Selection option for total mine count	1
Disable uncovering flagged cells/flagging revealed cell	2
Reveal mine locations on loss / indicated loss/win statuses	2

Documentation and finalization

Story	Points
Code comments	3
Record keeping	2
Person-hours Estimation	2
Actual Person-hours records	3
System Architecture Overview	5
Testing	2
Peer reviews	1

About Our Person-Hours Estimation:

Methodology:

For this project, our team decided to use the Planning Poker method to get a better idea of the amount of time we could expect it to take completing individual tasks, and the overall assignment. We also knew viewing the project broken up into smaller tasks would help us distribute the workload, plan, and choose tasks that fit our strengths. Using the Fibonacci sequence is a convenient way to unbiasedly account for the larger uncertainties involved with larger tasks, while overall this approach suits the small team and more dynamic nature of the project. For our points to time conversion, it seemed reasonable that each point would represent about one person-hour.

Individual Stories:

Evan Rogerson – 11 Hours

Board Config (5), Mine randomization (2), Limit flags (2), Reveal mines on loss (2)

Nevan Snider – 10 Hours

Visual assets (3), Covered/reveal display (5), win/loss conditions (2)

Spencer Rodenberg – 11 Hours

Start screen/menu (3) mine-count (1), System Architecture Overview (5), GitHub documentation (2)

Kyle Whitmer – 10 Hours

Flood-fill on zero cells (3), First-click safe (1), neighboring mine-counts (2), testing (2), estimation (2)

Karsten Wolter – 10 Hours

Input/selection/flagging (5), disable uncovered flagging/flag revealed (2), recording/documenting (3)

Shared – 12 Hours

Requirements/meetings (6), planning (3), documenting (3)

Total Person-Hours Estimation – 64 Hours