

Project 2 Person-Hours: Estimates and Actuals

Estimated Person-Hours

This section describes the estimated person-hours for each task, the description of each task, and how those tasks are assigned to team members.

Task Descriptions:

1. Refactoring: Refactor the code so that it meets Project 1 requirements
2. UML Diagram: Design the custom addition feature and develop the corresponding UML diagram
3. Implementing AI: Implement the 3 different AI difficulties
4. Implementing Custom Addition: Implement the custom addition feature in the code
5. Testing and Debugging: Test the entire game, including human & AI opponents, as well as the custom addition
6. Documentation: Provide hour estimates and draft and revise system documentation
7. GTA Team Meeting: Provide a standup meeting with the supervision of the GTA.

Task Estimate Gantt Chart

Below is a Gantt chart that shows the estimates of each task in addition to the team members responsible for different stages of the project.

Hours Task	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16.25
1. Refactoring : 4 hours	Shad	Nikhil	Nikhil	Nikhil												
2. UML Diagram: 3 hours			Shad	Rahul	Nikhil											
3. Implementing AI: 3 hours						Nikhil	Nikhil	Rahul								
4. Implementing Custom Addition: 4 hours						Shad	Shad	Greg	Greg							
5. Testing and Debugging: 6 hours									Rahul	Rahul	Rahul	Greg	Abir	Abir		
6. Documentation: 5 hours	Abir											Shad	Greg	Abir	Abir	
7. GTA Meeting: 1.25 hours																Abir Rahul Shad Nikhil Greg

Final Estimate for Person-Hours

According to the Gantt chart above, the project will take a total of 25 person-hours. This is derived by adding hours taken for tasks 1 through 6 (Task #1 + Task #2 + Task #3 + Task #4 + Task #5 + Task #6 = 4 + 3 + 3 + 4 + 6 + 5 + 1.25 = 26.25 hours). Since we have 26.25 hours to divide among 5 team members, **each team member is assigned 5.25 estimated person-hours**. The breakdown of tasks and person-hours is already seen in the Gantt chart above.

Actual Hours: Overall Project

Date + Hours Task	9/26	9/27	9/28	9/29
1. Refactoring	Nikhil: 1 Greg: 1	Nikhil: 1 Greg: 1		
2. UML Diagram			Shad: 1	
3. Implementing AI			Shad: 2	
4. Implementing Custom Addition			Nikhil: 0.5	Rahul: 1
5. Testing and Debugging			Rahul: 0.5	Nikhil: 3 Shad: 1 Rahul: 3 Abir: 1
6. Documentation	Abir: 0.25	Shad: 1	Abir: 1	Abir: 2 Greg: 2
GTA Meeting		Abir: 0.25 Shad: 0.25 Rahul: 0.25 Nikhil: 0.25 Greg: 0.25		

Actual Hours: Per Person

Name	Hours worked
Shad	5.25
Abir	4.5
Nikhil	5.75
Greg	4.25
Rahul	4.75
Total Hours	30.25

The total hours worked was 30.25, meaning we were 4 hours over our estimate.