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| Sprint No | Sprint Goal | Sprint Tasks | Start Date and End Date | ScrumMaster | Daily Stand-up  1 | Daily Stand-up  2 | Daily Stand-up  3 | Sprint Review |
| 1 | Initialize the project.  Game Setup and Initialization  Recreation of the Game OrOgins | Aims and Objectives of the Project  Deciding the roles  Functional and Non-Functional Requirements  Risk Assessment Table  Installation of the Unity  Installation of Required Packages  Creating a 2D Project  Designing the Board and Pieces  Creating the game Pieces using C# code.  Implementation of Game Logic | Start Date:25/Nov/24  End  Date: 16/March/25 | Samik | Date: 18/October/2024.  Meeting Time: 2:00 pm  Discussion of:  In this meeting we talked about researching on different aspects and decided that each member will research about different aspect. | Date: 28/October/2024  Meeting Time: 3:00 pm  Discussion of:  In this meeting we pool the findings.  We discussed about the aims and Objectives of the project.  We decided the roles of each team member. We discussed about the functional and Non-functional requirements | Date: 15/December/24  Meeting Time: 1:00pm  Discussion of:  In this meeting we finalized the Aims and Objectives of the project.  We finalized the Functional and Non-functional requirement for the game.  We discussed about the Game Initialization and Recreation of the game. The tasks among the team were decided. | This is the first and the longest sprint. In this sprint we have finalized the Aims and objectives, Decided the roles, completed Functional and Non-Functional Requirements for Game, Installed the Unity and required packages, created a 2D project, Designed the Board and Pieces and Created the Game pieces using C# code. We are yet to implement the game logic. The final task of this sprint |
| 2 | Completion of Game Development  Completion of RL Agent  Integrate RL model with the game | Integrated game logic into various environment setups, testing multiple implementation strategies.  Designed and created multiple versions of custom gym env using gym.Env  Evaluate which environment is best for our RL model  Built and trained the initial RL model using stable-baselines.  Tested and loaded model checkpoints to analyze performance.  Monitor Training Progress  Testing and Debugging  Played the game manually to verify logic and agent responses. | Start  Date: 17/March/25  End  Date: 3/April/25 | Syed Bokhari | Date: 18/March/2025  Meeting Time: 3:00 pm  Discussion of:  In this meeting we discussed that we would create the RL Model using the gym and the prototype of the game created using pygame. | Date: 25/March/2025  Meeting Time: 10 am  Discussion of:  In this meeting, we Tested initial training runs, observed early model behavior, and planned necessary adjustments. | Date: 3/April/2025  Meeting Time: 12 pm  Discussion of:  In this meeting, finalized the RL model structure and training setup and decided to work on other tasks for project completion. | This sprint involved creation of custom game environment using gym.env, building and testing the RL Agent using Stable-Baseline3 and conducted several tests to monitor its performance. Manual testing also helped verify both game logic and agent behavior. |
| 3 | Project Completion | creation of presentation skeleton  Finalizing the project  Defined Multi-disciplinary issues and innovations  Model Evaluation  Model Validation | Start  Date: 4/April/2025  End  Date: 6/April/2025 | Samik | Date: 5/April/2025  Meeting Time: 12:00 pm  Discussion of:  In this meeting we discussed how are we going to design our slides for presentation. | Date: 6/April/2025  Meeting Time: 2 pm  Discussion of:  In this we discussed the multi-disciplinary issues and innovations of our project. |  | All the tasks were completed. |
| Scrum Closure | Review of Game and Model.  Update of project plan  Review of presentation slides. | Checked the game and model.  Updated the project plan  Assigned slides to each team member. | Start 06/04/2025  End 06/04/2025 |  |  |  |  | Organizing all of our code files, uploading them on GitHub and finalization of presentation slides. |