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Status Report

Planning: Literature and Implementation

Our Space Invaders game is based on the original Space Invaders game but with a different twist. The main players are the aliens. Several players can join the game as aliens. Whoever reaches ground level by escaping all the fighter jet's lasers wins the game. Each player gets three lives, and several players can win the game. All winners are displayed at the end of the game. We are using Pycharm and Pygame as our two main tools for this game. The research behind our game is latency. The main question we are trying to answer is: how can we reduce latency and increase the competitiveness of our game? There are several articles on this, and some interesting ones are listed in references. Most of the latency reduction must be taken care of in the coding. Research shows that memory usage greatly affects latency. Making sure that trash is properly disposed of is a good step.

What We Have Done

- Created a GitHub Repository (<https://github.com/ImaniChristianne/Space-Invaders>) for our game where we push code and collaborate.
- Coded the Client program for the game
- Researched on network latency while gaming

What are Our Next Steps:

- Code the Server program
- Code the Network program
- Code the game program
- Do a game demo way before presentation day

References

- Bevilacqua, F. (2013, August 12). Building a peer-to-peer multiplayer networked game. Game Development Envato Tuts+. Retrieved September 12, 2022, from <https://gamedevelopment.tutsplus.com/tutorials/building-a-peer-to-peer-multiplayer-networked-game--gamedev-10074>
- God, T. S. (2021, March 27). *Improving performance in Pygame – speed up your game*. CodeProject. Retrieved October 11, 2022, from <https://www.codeproject.com/Articles/5298051/Improving-Performance-in-Pygame-Speed-Up-Your-Game>
- Pygame - time*. GeeksforGeeks. (2021, October 25). Retrieved October 11, 2022, from <https://www.geeksforgeeks.org/pygame-time/>