

Mario Kart 112

Project Description

- Mario Kart 112 is a game where the player can race against multiple opponents on different race tracks which they can unlock along the way. Race tracks have different power ups that the player can collect along the way, and the player is also able to customize their character and vehicle before the match.

Similar Projects

- There are very similar projects on the Term Project Gallery on the 15112 website, some of which include Mario Kart 12, Mario Kart Rainbow Road, and 3D Mario Kart. My project will be most similar to Mario Kart 12, because there is a character select menu. However, I intend to create multiple tracks, so that the user can race through different maps which they can unlock by winning the previous maps.

Structural Plan

- I plan on creating functions for:
 - The character select menu
 - The vehicle select menu
 - All the keyboard functions
 - Moving the race car
 - Moving the camera
 - Item select
 - Hitting an obstacle
 - Running the game
 - And much more
- I plan on creating classes for:
 - The actual race
 - The items themselves

Algorithmic Plan

- The most difficult part of the project is panning the camera while the track is curving in addition to maintaining the 3D aspect of the game. I am planning on using a mathematical approach for both creating the 3D graphics and turning the race car while the race track curves

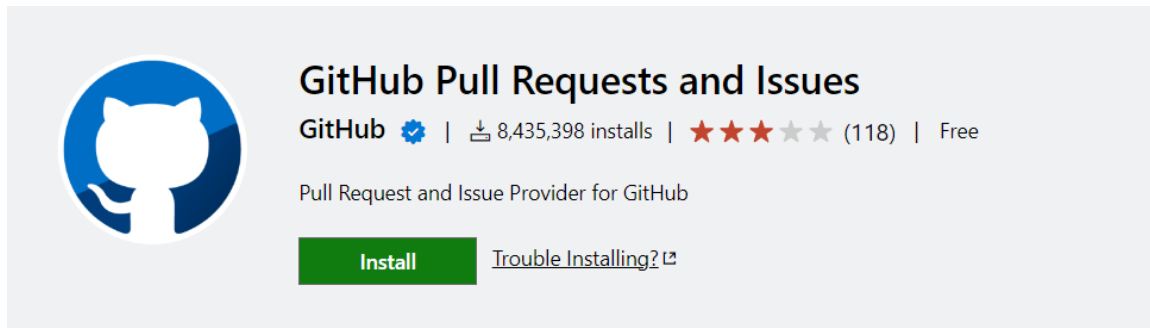
Timeline


- By TP1, I am aiming to finish up the starting menu and make good progress on the 3D portion of the project. By TP2, I am aiming to finish up the character and vehicle select

menus, while also making good progress on the item class and the camera movement. By TP3, I expect to have all parts of the project completed.

Version Control Plan

- I plan on using GitHub for version control because I am able to keep my project on while also being able to push and commit changes to my code whenever I need to. I also plan on installing a VSCode extension that allows me to manage my GitHub pull requests.



 Azure Pipelines succeeded

Review and manage your GitHub pull requests and issues directly in VS Code

This extension allows you to review and manage GitHub pull requests and issues in Visual Studio Code. The support includes:

- Authenticating and connecting VS Code to GitHub and GitHub Enterprise.
- Listing and browsing PRs from within VS Code.
- Reviewing PRs from within VS Code with in-editor commenting.
- Validating PRs from within VS Code with easy checkouts.
- Terminal integration that enables UI and CLIs to co-exist.
- Listing and browsing issues from within VS Code.
- Hover cards for "@" mentioned users and for issues.
- Completion suggestions for users and issues.
- A "Start working on issue" action which can create a branch for you.
- Code actions to create issues from "todo" comments.

Module List

- I will not be using any modules.