

## rendezvous

*rendezvous* is a single-player platformer starting with the collapse of the moon. The player, a star that stayed close to the moon named Orbit, falls to Earth and tries to find a way to recollect the pieces of the moon, to bring back its celestial friend. The player collects 12 different crystals on three different dimensional planes in order to obtain the power to create a new moon, dodging obstacles and exploring the various environments.

### Similar Projects

This project is primarily inspired by the game *Gris*, made by Nomada Studio and released in 2018; the game follows a girl Gris after she loses her mother and encounters the five stages of grief, denial, anger, bargaining, depression, and acceptance. The game represents these five stages through the use of color as Gris unlocks new and different areas for her to explore, such as underwater or through ruins. As Gris collects and completes different monuments around the world, she is able to eventually accept her mother's death and live on in acceptance.

*rendezvous* includes a similar theme to *Gris*, with Orbit and Gris both being characters that lost a loved one and seeking a feeling of peace. Both of the games involve a monument collection system, where items build up a monument, which, once completed, brings the player to the next part of the game. This project is also inspired by the k-pop group LOONA, whose complex storyline heavily influenced the main story of *rendezvous*; each of the crystals that Orbit collects represents each member of LOONA and the story about the creation of a new moon follows their storyline.

### Structural Plan

The game itself will be run on a main file, with all the functions and classes defined on other files. For the player, crystals, enemies, and collisions, there will be classes defined for each, so I can easily reference their unique properties and assign the classes to multiple objects in the game. To manage gravity and physics, these will likely be defined as functions in a file together, so they can be referenced for different classes; for instance, if an enemy needed to be added at some point, I could call the physics functions to the enemy and to the player by referencing the same physics file.

### Algorithmic Plan

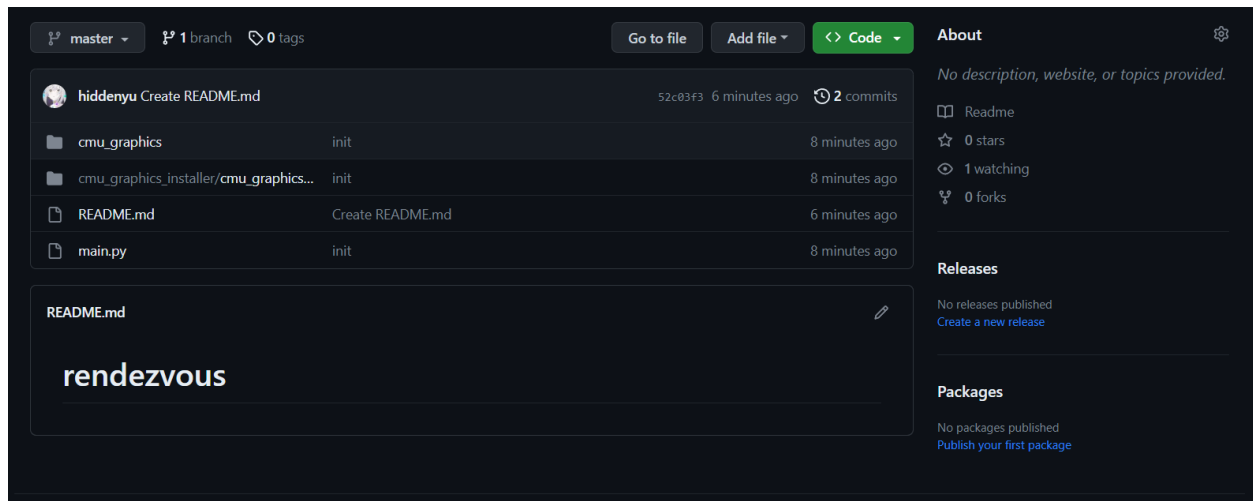
The most algorithmically difficult part of my project is the collision and physics mechanics involved in a platformer game. I plan on tackling this portion of the code by looking at previous exercises, such as Tetris, to get a better understanding of how to track collisions and checking if movement is legal. I also have learned about kinematics in the past, so I intend to use my previous knowledge of physics to gain a general sense of how my game will include gravity, realistic acceleration, jumping, and friction.

## Timeline

By the TP1 deadline, I intend to have a majority of the code for the physics and kinematics, as well as a playable character. By TP2, I want to have my collision mechanics working so that I have a working demo of the game, as well as the design for all my levels finished. By TP3, I want to focus primarily on the visuals and UI for the game, as well as all of the visuals (sprites, backgrounds) so that the final project is fun and engaging to play.

## Version Control

To back up the code for this project, I will be using a GitHub repository, committing changes to my code after any edit. This repository will be directly linked to a folder on my laptop with all my files so that I can commit through VS Code.



Modules: N/A

## TP1 Update

The three worlds of the game will be randomly generated, as another way to have algorithmic complexity. Otherwise, there are no changes.

## TP2 Update

Design-wise, the game has not been modified, although, because of concerns about randomly generated terrain, the project will either include it and remove the storytelling element, or remove it to keep original idea integrity.