

In this project, we did not specifically choose one of the design paradigms to use. Instead, we have a mix of three different design paradigms to work with our prototype, which are object-oriented design, function-oriented design, and event driven design. We used PixiJS as our engine in this project, and there would be a portion of the code that are graphic related, such as the character itself, the map, the wall, and the enemy characters. These are all object-oriented design as they are all defined as objects. There is also a portion of our code calculating different things as the game runs, which includes the velocity of the character, where the character can move, how character reacts when it touches the enemy, and how would it stop when it touches the ground and wall. Each of the mentioned calculations are separated clearly as different functions, which is function-oriented design. The remaining part of our program is mostly about controlling the character with our keyboard. This is where we used event driven design, which basically we used some event listener function to move the character around with w a d. The reason that we choose to use these paradigms is that this works well with the engine that we choose. PixiJS is a good engine to code a platformer game, which is what we are doing in this project. The mentioned parts of the code formed the basis of the project, and the design paradigm helped us develop the code before we work into it, and better structure the code for any future addition.