

Extensions:

- Platform with factory pattern to make it easier to scale with different properties like levels (height) and width.
- Falling rockets act as Enemies by using the Constructor functions to generate objects and use methods on them. It will fall down at a random position with different sizes and speeds.
- Particles with Constructor functions with their own behaviour and lifetime when the game wins.
- Implemented Sound effects when jumping, falling, game over, winning, collecting gems, and health kits with looping background music.
- Rotate the star background when Game Char moves.

Bits I found difficult:

- At first, I was struggling to use the factory pattern for the platform because I was not familiar enough with the syntax.
- Another bit that I found confusing is when splice (JavaScript method) is used to remove the particle when the lifetime ends and generate a new one. Hence, my approach for particles is to move them back to their initial positions after their lifetime ends.

Skills I learned / practiced:

- I learned how to apply mathematical ways of thinking to the code. For example, using variables for scalability and customizability.
- My debugging skills improved a lot in this Game Project from identifying the problems to solving them. The code philosophy videos really helped me a lot with the tips they gave.
- How to implement object-oriented programming to encapsulate properties and methods together in an object. With this concept, it will be easier to manage and manipulate complex systems.