

For my final game submission, I decided to try my hand at all three extensions.

1. I added a variety of sounds to make the game multi-dimensional. There are different sounds when the character jumps, falls, runs into an enemy as well as background music.
2. I used the factory pattern to build platforms throughout the level to make it more interesting. Either by making it more difficult to reach coins or to avoid enemies.
3. I used the constructor pattern to make enemies that the game character must avoid. Using this and the other extensions, the game is more interesting overall.

Among the most difficult parts, I found that introducing randomness to my tree elements quite challenging, especially the logic surrounding which functions to introduce the randomness into. I also found the camera scrolling bit quite challenging. In addition, I found that working with methods is quite challenging and I need to continue practicing with this functionality. However, the most challenging was trying to debug logic related bugs when I introduced them by accident. I think it is worth spending some time trying to get the logic correct right off the bat rather than use debugging as a means of correcting this.

The most useful part of this game project for me, apart from the fact that I got a very nice overview of Javascript and the p5Js library, was the practice manipulating and working with a variety of data structures. Arrays and Objects (and combinations of the formers) were very useful and if manipulated correctly, proved to be very helpful in organising the code.