

### extensions

I implemented sounds using p5.sound. I noticed that the bgm does not automatically play before I make any action such as pushing buttons. Therefore, in this game, the game starts just after the user pressed the space button. After pressing, the bgm starts and the character appears from the top of the screen.

Using factory pattern, I created platforms.

In creating enemies, I used constructor function to create enemies. Furthermore, the enemies moving around, spinning.

Furthermore, I implemented a movement in which the main character spins around when jumping to the left or right. I also implemented the sun, cloud movement, and the effect of the constantly changing colors of the tree decorations. I used rotate(), push(), pop(), etc to implement these movements. By actually using them, I was able to learn how to use them.

### The bits I found difficult

I found it difficult to use constructor functions. In this assignment, I used it to create enemies, but I felt that if I used it better, I would be able to express myself more efficiently and richly, but I was not able to use it very well. I would like to master it by consciously trying to use it in my individual projects in the future.

### The skills I learned in completing the game project

I learned JavaScript and p5.js techniques in this game project, including constructors and many useful functions, but I also learned that basic syntax such as “if” and “for” can be used to great effect when used well. It was also very exciting to learn how to design the main character in a way that I had never thought of before, such as creating it around gameChar\_x and gameChar\_y.