

## COMMENTARY

For the project, I developed a game where a wizard must navigate through the obstacles and avoid being seen by the eyes while collecting spellbooks. These spellbooks will later on allow him to cast his spell against the final boss. The game color palette was chosen based on principles of color harmony, inspired by design studies and previous work experience.

**For a better gameplay, I have implemented all 3 extensions** provided in class:

- Sound, for jumping, falling, collecting item and background music, all according to the magic and mysterious theme of the game
- Platforms in all of the game, using the factory pattern learned in class
- Enemies, in a format of an eye using a constructor function and utilizing a dynamic transparency using map together with sin, in order to be more realistic

**One of the most challenging aspects** was constructing the enemies using a constructor function due the complexity of the logic involved with *"this"*. Additionally, implementing acceleration into the character falls using velocity was difficult, since it should increase according to fall itself, allowing a more realistic motion.

**By completing the game project, I learned** a deeper understanding of programming logic, such as loops (for and while), data structures such as arrays and how objects in the game could interact among to each other using *"if"* conditions. I also explored advanced JavaScript techniques such as ES6 syntax, leveraging arrow functions, *"const"* and *"let"* variables according to scope.

Beyond these implementations, I also added a life and collectable system, where the life counter decreases when the player loses a life, reducing the number of displayed hearts, in the same way as collected items, that are shown on the top left corner to track the progress of the phase.