

Falé Do

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Project 2: Anything™ Proposal

Underwater Mini Game

With everything I have learned until now, taking in consideration the experiments, practice activities and exercises coding JavaScript using p5 libraries, two concepts stood out. One is the concept of exercise 4 *Age of Aquarium* where I learned about arrays by coding fishes appearing in an aquarium and the other is an activity concept where I learned about inheritance and polymorphism by coding a traffic simulation. That said, I would like to combine these two concepts and make an underwater traffic simulation mini game involving levels of difficulty. This way it will become a fishy circulation simulation game!

My approach to this project is to create a pleasant and entertaining simulation game. I intend to use images and icon vectors to display the moving objects (i.e. fishes) and the background. That said, I would like to work with image manipulation, especially in arrays and inheritance. One example is the fish image points to the right (🐟) when it moves to the right and if I want it to move to the left then the fish image should flip to the left (🐠) rather than facing the right, so that the simulation can provide a smoother transition in terms of movement. I would also like to work with time (i.e. countdown timer). In addition, once I finish coding my project (displaying and have it be functional), I would like to work with sound such as inserting a background music or sound effects and this can be done if I still have time to add more dynamic features to my project.

For an initial structure, I plan to start the simulation with a starting state (probably called title) then, triggered by a keyPressed or mousePressed, it will lead to the main simulation state. From here, there will have two endings for each mini game stage: a bad ending where you must restart the mini game and a good ending where you can move on to the next mini game stage. I plan to have three mini game stages, meaning there will be a mission to complete for each stage, and when it is completed, you move to the next stage that is a bit more difficult than the previous one. Here is a sketch of my plan (I hope my writing is visible for you):

Structure of underwater circulation mini game

