

FISHING GAME

- As we start the game, a menu in which the message of “New Game” pops up in a tab. In which the player will be asked to also introduce themselves by writing their name.
- Rendering the game itself, there should be a clear difference between the sky, the water where the fish will appear and the boat in which the fisherman is going to be standing on top. On the top of the frame there will be a score bar, timer, reset button and an indicator for the amount of baits that are left.
 - The fisherman on top of the boat will appear centered on top of the water.
 - The Fish will be in three different possible levels, these levels will vary depending on the depth of the animated sea. There will be 3 fish maximum at the same time.
- In-game:
 - The boat will be able to move to the sides, either to the left or to the right controlled by both the keyboard's arrows. As the fisherman is to be standing on one side of the boat, when you change directions, on the first tap of the arrow the fisherman will face the other side and then with the next tap the boat will start moving.
 - When clicking with the left button of the mouse the rod will appear and move downwards until the fish is caught or it reaches the bottom of the ocean or the boat moves. It will not be instant so in this way we need to calculate when to throw our bait and where to so that it's not too early or late for the fish to be caught. Finally, when the fisherman loses all 5 baits, the game will end.
 - There are sounds in the in-game when the fish is caught.
- Game end:
 - As the fisherman runs out of baits or the time runs out, “GAME OVER” tab pops up where you see your score (how many fish you actually caught) and moreover, you are directed to the starting screen, where your name and score is displayed next to the others.

- Coding that we must implement:
 - Code for catching the fish. When the end of the rod meets the fish, it should be caught and respawn at the beginning, moreover, the rod should disappear and the fish counter increased.
 - Code that will animate the fish (as it goes from left to right and appears again as it reaches the end) and the rod as they are moving.
 - Code that will change the position of the boat when the “a” and “d” buttons are pressed.
 - Code for the background. We used a sine function to produce the ocean wave and 2D graphics to draw the clouds.

- Two topics of our choice:
 - 1) Game design. We have made it so that our game looks like a proper one. We have implemented sound, created a background and have replaced labels by images of fishes, a boat and rods. Furthermore, we implemented a restart button, a label that tells you the time that is left, so that the player can have a limited time and thus, feel the need to catch more fishes. Furthermore, we added an indicator of the number of baits that can still be used as if they were lifes for the player to actually be able to lose. The score (fish caught) of all the players is also there and more things to make the player have a better gaming experience in general.
 - 2) Game mechanics. This is mainly concerned with how the fish is caught, how the fish speed is increased (looking at the remainder of the timer divided by some number), how the rod is animated, the boat moves and the rod disappears when contacting a fish with the end of it, reaching the bottom of the frame or when the boat is moved. This is all to do with the actual playing of the game and not only it looking nice.