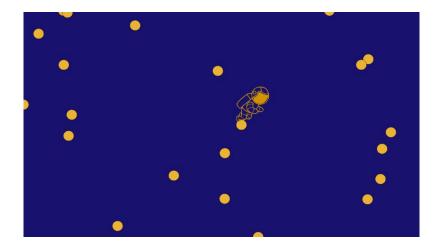
Cart 253

Project 2 (Proposal)

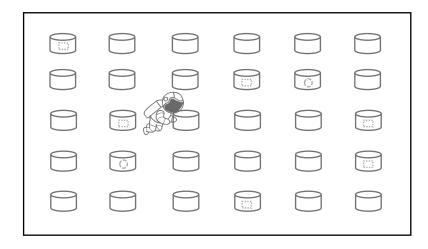
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My Project is a simulation of my favorite sphere, space. It's about an astronaut who is lost in the world to find his/her own spaceship. The mission is to collect the space trashes, repair the broken satellite, survive the strange world of space and return to spaceship before the Oxygen capsule runs out. This was an overall view on the project in the following paragraphs I'm going to break down the process.

Fist I want to let the user customize the looks of the astronaut and prepare the with a proper introduction to the game. After the user is familiar with the outlook, the game starts. The hovering astronaut is ready to return home safely. I'm going to divide the game into different parts. The transition between these sections is with the help of a timer. Everytime the height of the timer reaches a specific amount, the astronaut moves to the next mission. First, the space trash section. The astronaut is going to enter a place full of trashes that are moving in different directions and leaving the screen. The astronaut has to collect as much as possible since they are necessary for the following sections. the codes for this part are going to be drawing circles (for a more minimal concept) as trashes and to determine their different direction with assigning a random number within the range of their speed for their x and y velocity. This way the move randomly on the screen. Then we check the distance between the user and trashes to keep track of the trashes the astronaut has collected. Everytime the user collects one in corner we going to see the number of the collected one increases. This part is done and complete and the next step is to include the object-oriented program in script.js.

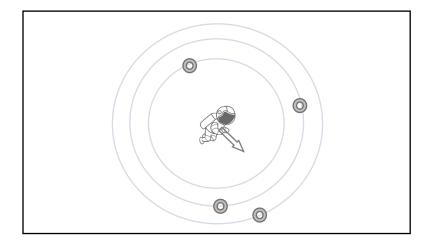


In the second mission the astronaut faces a couple of broken space crafts. They need to be fixed properly. In some of the space crafts, they are oxyzon capsules that can help the astronaut buy some more time and in some there is a rocket to defend him/her in the next chapters. the number of the capsules and rockets found are going to be displayed on the screen too. Here I'm going to load few images as broken spaceships that under some of them, there are rectangles (as Oxygen capsules) and ellipses (as rockets).



The next section is where the trashes are becoming handy. Here the astronaut faces a blackhole which is swallowing the asteroids nearby. The astronaut has to hurry and throw the trashes to the black hole to have the power to move backwards (the simple 3<sup>rd</sup> Einstein physics role that every force creates another force with the same amount but in the opposite direction which is a very important aspect of moving in space). The more the user has collected the trashes the more chances the astronaut has to run from the black hole. Here I'm going to decrease the x and y parameter of the astronaut so it moves to the corner of the screen and in the same time make it smaller for more realistic appearance of blackhole. If the user clicks on the screen fast enough the astronaut survives from being swallowed, the number of clicking allowed is associated with the number of trashes so the user has limited chance of survival.

The final section is the attack of aliens. The astronaut uses the rockets he/she has founded in the spacecraft to defend him/her self. Here I'm going to show some aliens that revolves around the astronaut. The user can choose where to aim by rotating the rocket and then by shooting it. For this part I have done the object-oriented program and I have to include it in script.js.



If the user succeeds in these 4 missions, the astronaut gets to the space craft safely and moves for the next destination.