

# Space Exploration

Nguyen Lac Vinh  
S3980576

# Project Brief

**This assignment is about creating an experimental code-based artwork through an abstract javascript. I decide to design a website which is relative with the universe, planets and spaceships.**

**This project was created by visual studio code. Javascript is the main languages which I used in the project. Beside, I combine some elements such as interactivity, animation in order to make the website more interested and diverse.**

# Concept statement

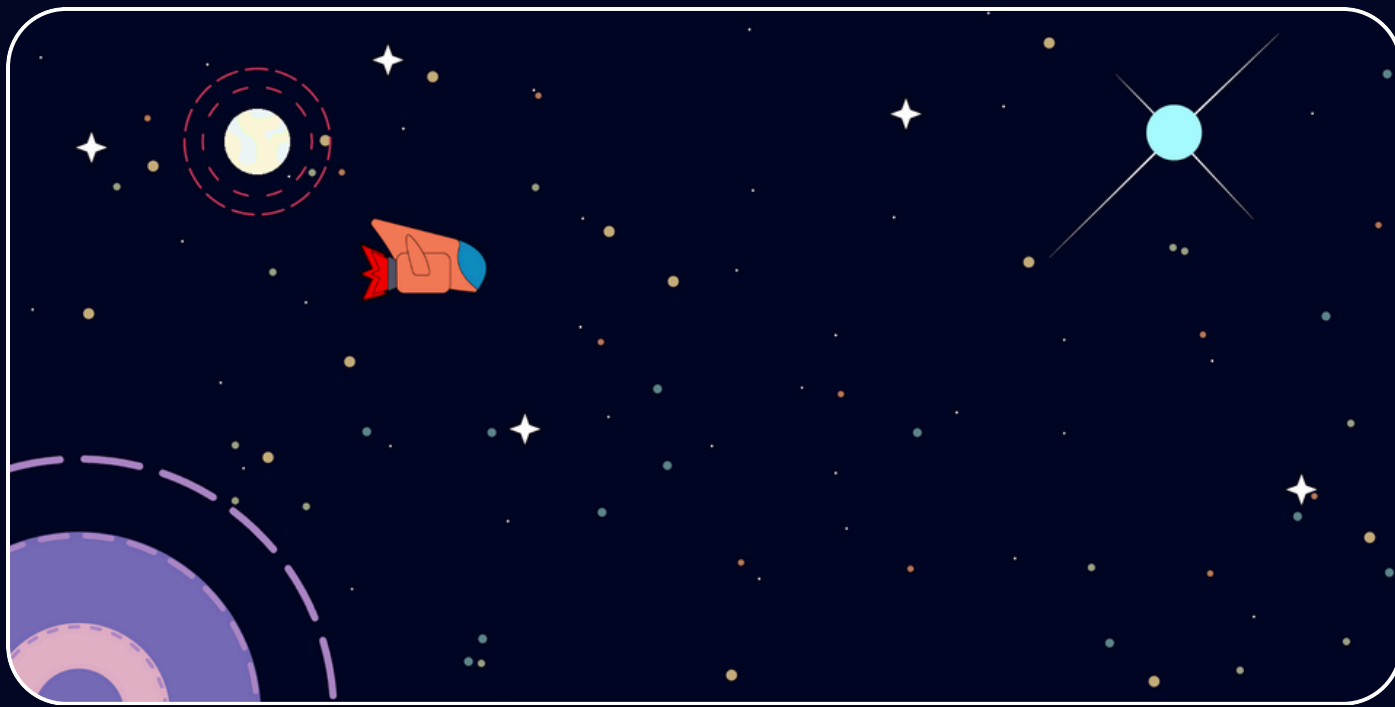


Fig 1

**I designed this website by taking inspiration from the Universe. In this style, the colors of the website mainly are dark but I add some brighter color in my art in order to make it more colorful.**

# Related Work



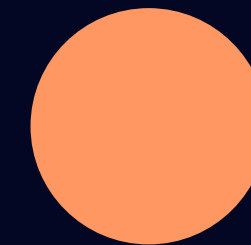
This is a website which following the story of Dogelon Mars as he explores the greatest mysteries of the universe and seeks to return to the planet he once called home.

Fig 2: Griflan (2024), Dogelon Mars, <https://dogelonmars.com/>

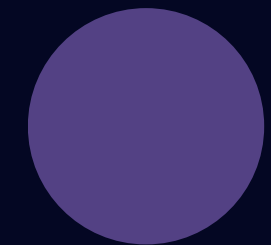
# Moodboard



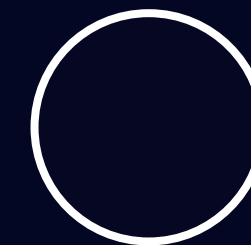
## Color pallet



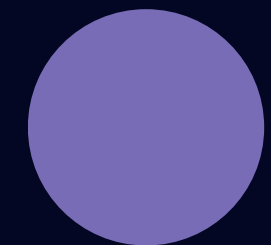
#FE9762



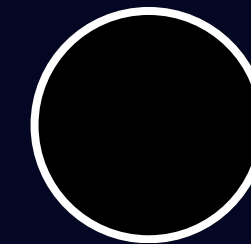
#534184



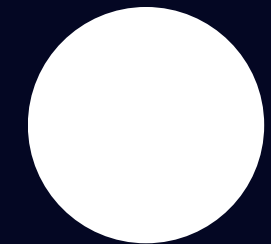
#040723



#786CB6



#878B93



#FFFFFF

Fig 3: 熊熊 师兄 (2020), ANIMAL MECHA.

# Font

## Protest Guerrilla

**Whereas disregard and contempt for human rights have  
resulted**



# Ideation & Sketches

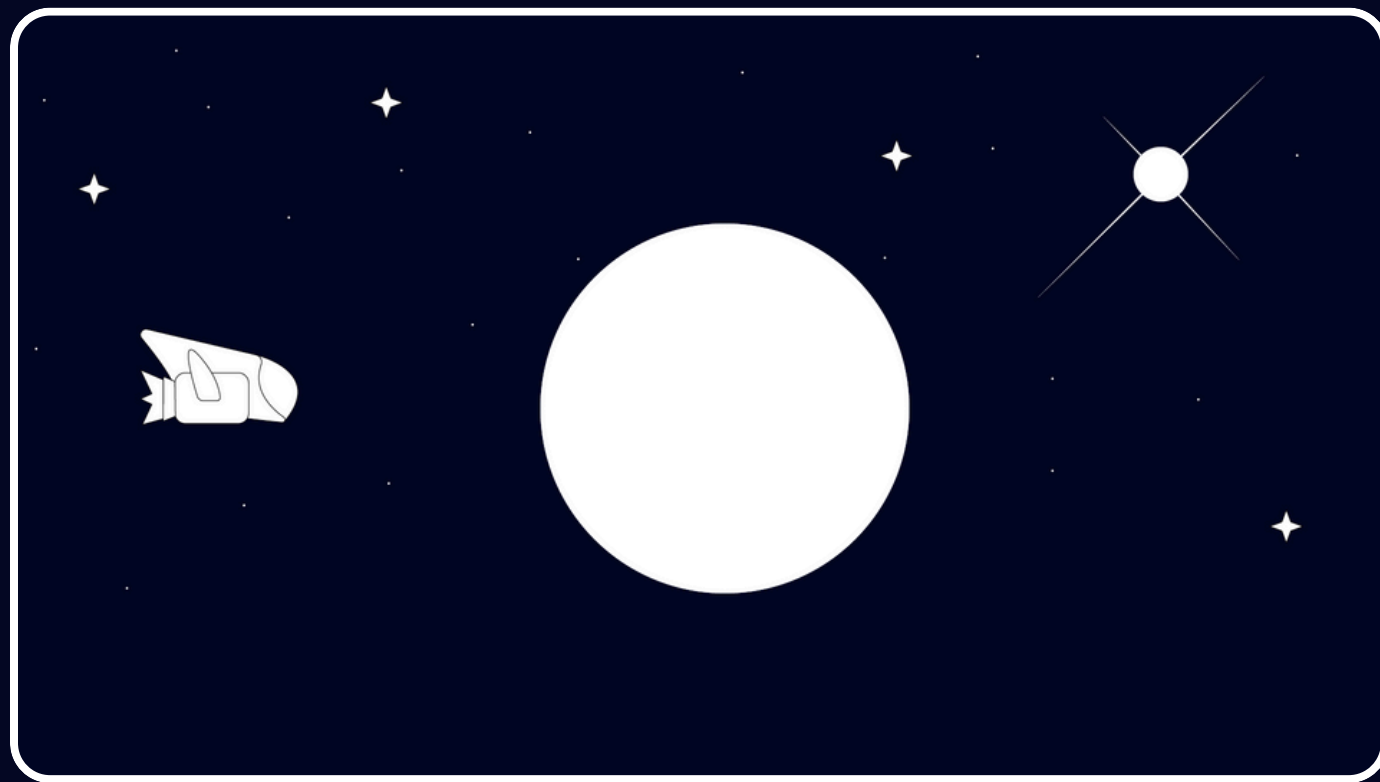


Fig 4

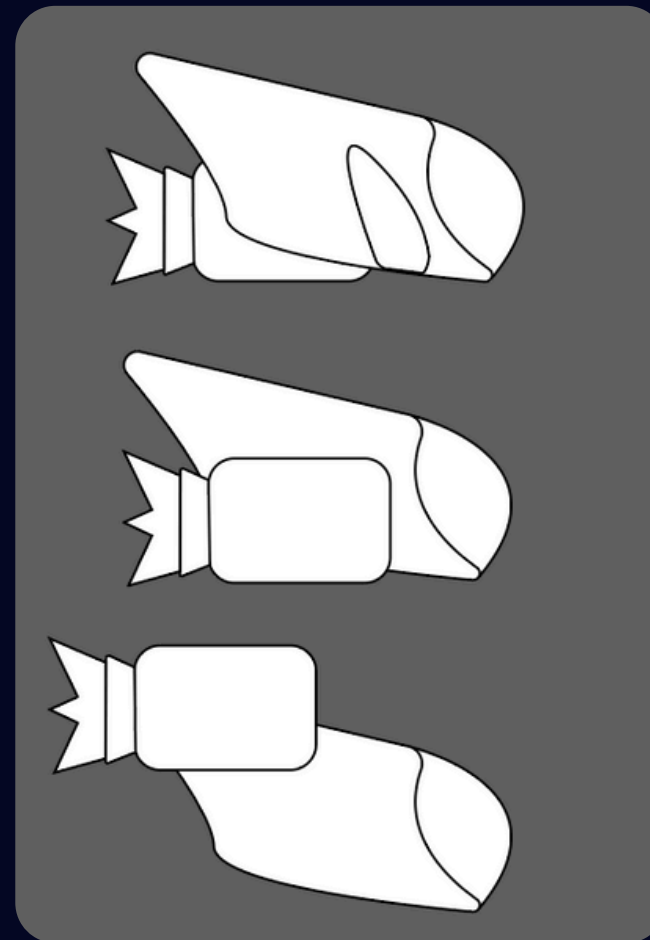


Fig 5

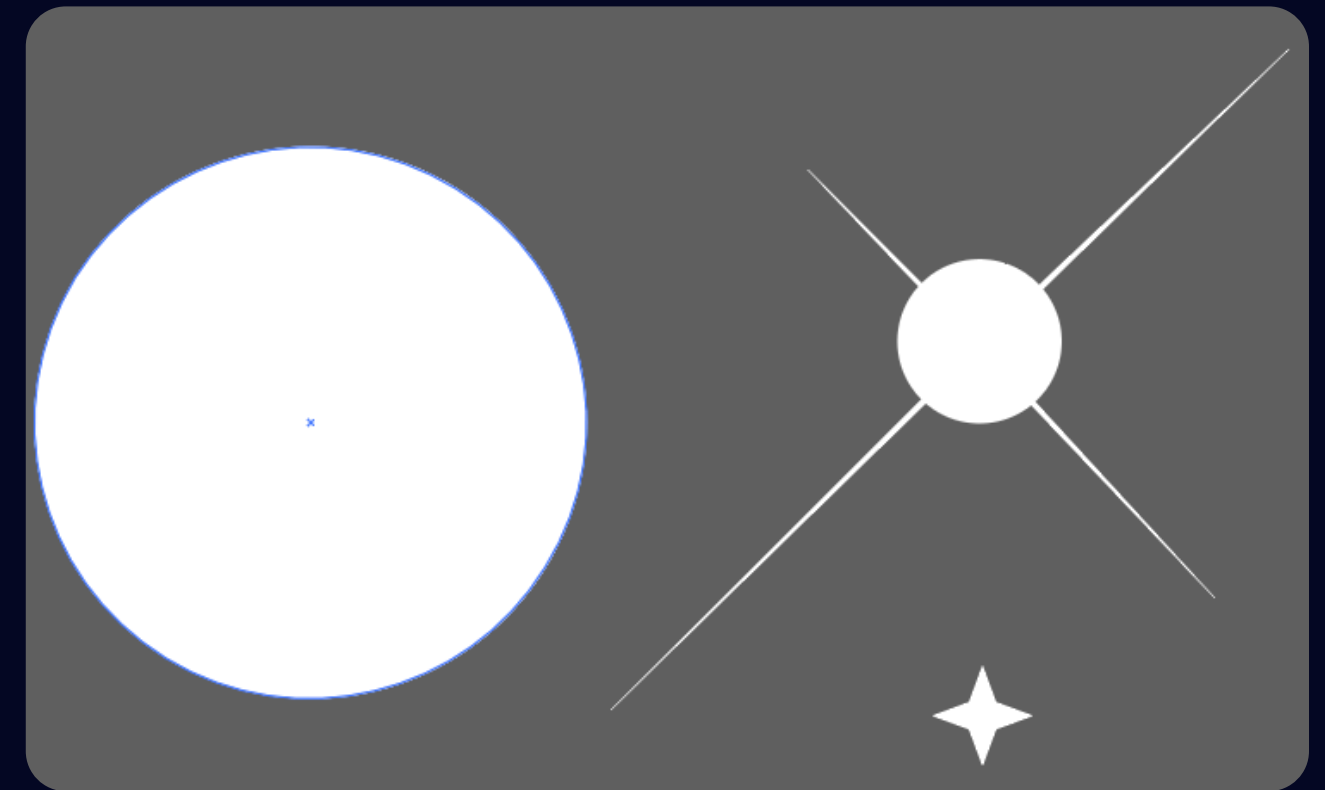


Fig 6

# Prototype



Fig 7

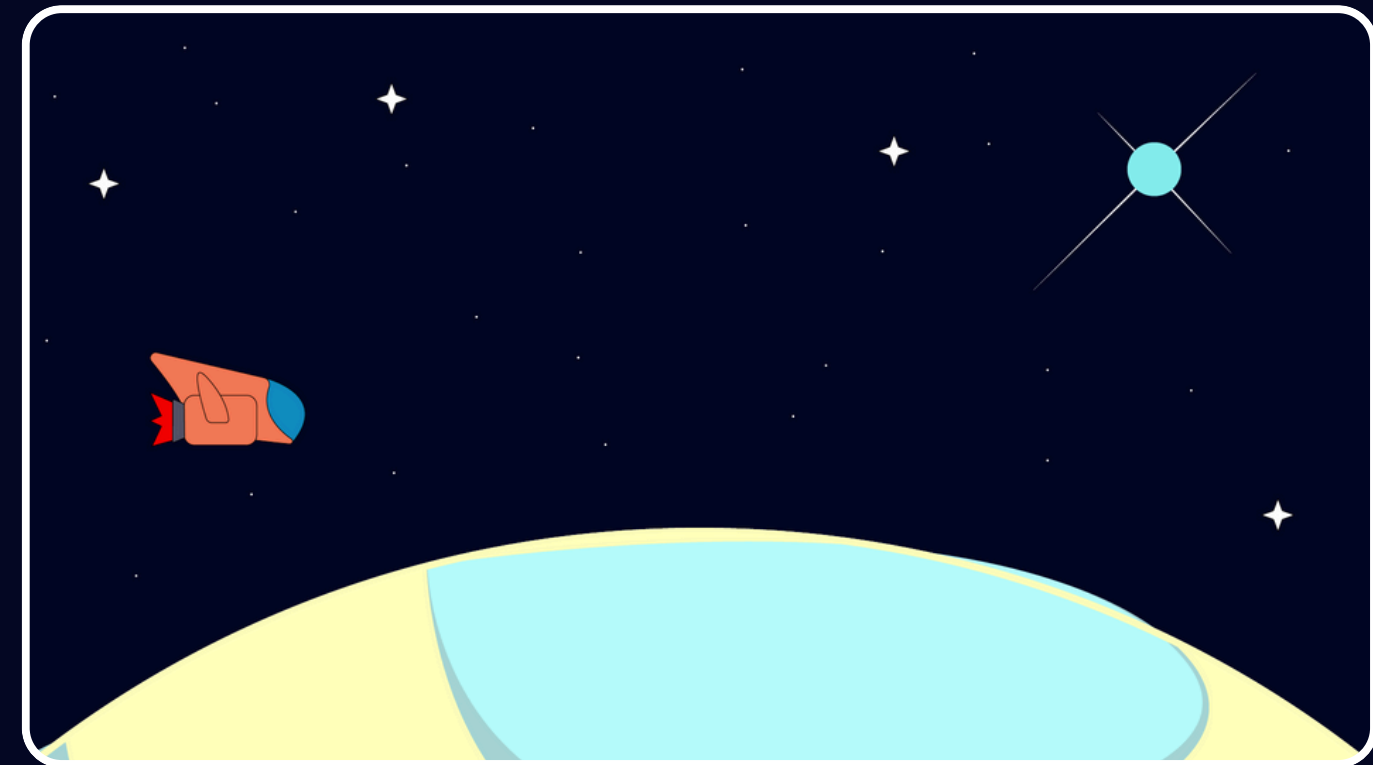


Fig 8



# The final design



Fig 9



Fig 10

# Iteration

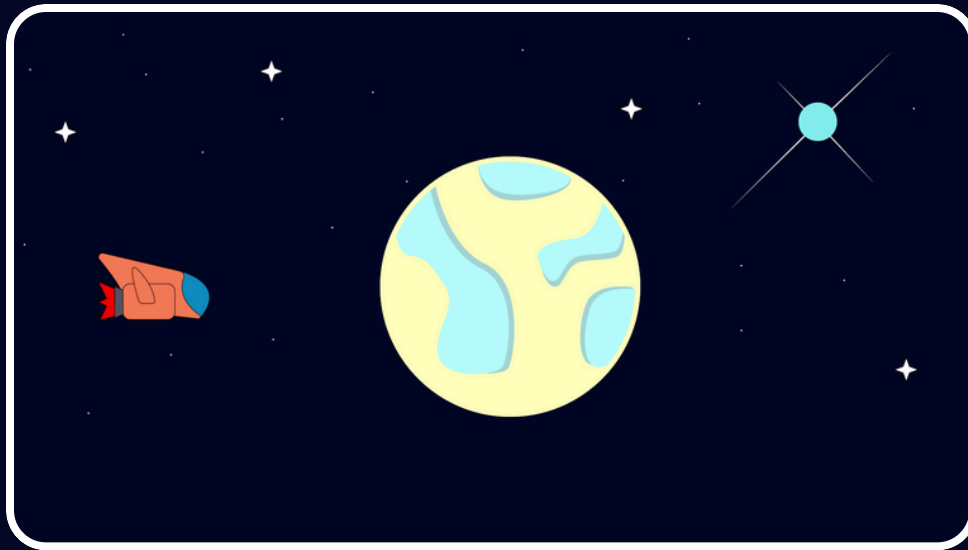


Fig 11



Fig 12

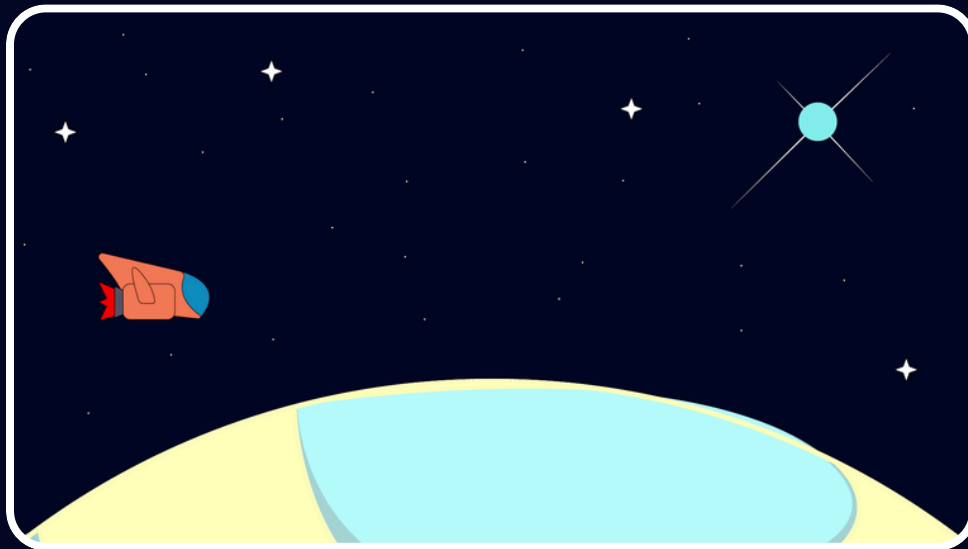


Fig 13



Fig 14

**I tried many options of the design, animations and interactivities in order to get the most suitable design.**

# Iteration

I also tested the code many time in different devices to find the bugs or the errors.

```

1  let img;
2  let img_2;
3  let list;
4
5  var currentSpaceship = 1;
6  var spaceship, spaceship_1, spaceship_2;
7  let x = 500;
8  let y = 350;
9
10 let radius = 100;
11 let rotateEnabled = true;
12
13 let numDashes2 = 15;
14 let dashLength2 = 30;
15 let rotationAngle2 = 0;
16
17 let numDashes3 = 10;
18 let dashLength3 = 27;
19 let rotationAngle3 = 0;
20
21 let numDashes4 = 25;
22 let dashLength4 = 15;
23 let rotationAngle4 = 0;
24
25 let numDashes5 = 25;
26 let dashLength5 = 10;
27 let rotationAngle5 = 0;
28
29 let numDashes6 = 20;
30 let dashLength6 = 22;
31 let rotationAngle6 = 0;
32
33 let particleTexture;
34 let particleSystem;
35
36 let speedX = 0.1;
37 let speedY = 0.1;
38
39 let power = 5;
40 let smoke = 30;
41 let smokeLength = 3;
42 let smokeX = 490;
43 let smokeY = 385;
44
45 const dots = [];
46 let isMoving = true;

```

Fig 15

```

78 function draw() {
79   background(50);
80   image (img, 0, 0, width ,height ,0 ,0 ,img.width, img.height, COVER);
81   image (img_2, 300, 200, 90, 90);
82
83
84   // Dots
85   for(const dot of dots) {
86     if(isMoving) {
87       dot.move();
88     }
89     dot.draw();
90   }
91   //Planet
92
93   push();
94   translate(345,245);
95   if(rotateEnabled){
96     rotationAngle2 += radians(0.7);
97   }
98   let dashAngle2 =(TWO_PI / numDashes2);
99   stroke(200, 57, 91);
100  strokeWeight(3);
101  noFill();
102  for (let i=0 ; i < numDashes2; i++){
103    let startAngle = i * dashAngle2 + rotationAngle2;
104    let endAngle = startAngle + dashLength2 / radius;
105    arc(0,0, radius * 2 , radius * 2, startAngle,endAngle);
106  }
107  pop();
108
109  push();
110  translate(345,245);
111  if(rotateEnabled){
112    rotationAngle3 -= radians(0.5);
113  }
114  let dashAngle3 =(TWO_PI / numDashes3);
115  stroke(200, 57, 91);
116  strokeWeight(3);
117  noFill();
118  for (let i=0 ; i < numDashes3; i++){
119    let startAngle = i * dashAngle3 + rotationAngle3;
120    let endAngle = startAngle + dashLength3 / radius;
121    arc(0,0, radius * 1.5 , radius * 1.5, startAngle,endAngle);
122  }
123  }

```

Fig 16

# Thanks for reading

## References

Fig 2: Griflan (2024), Dogelon Mars, <https://dogelonmars.com>.

Fig 3: 熊熊 师兄 (2020), ANIMAL MECHA,  
<https://www.behance.net/gallery/109562487/ANIMAL-MECHA>.