

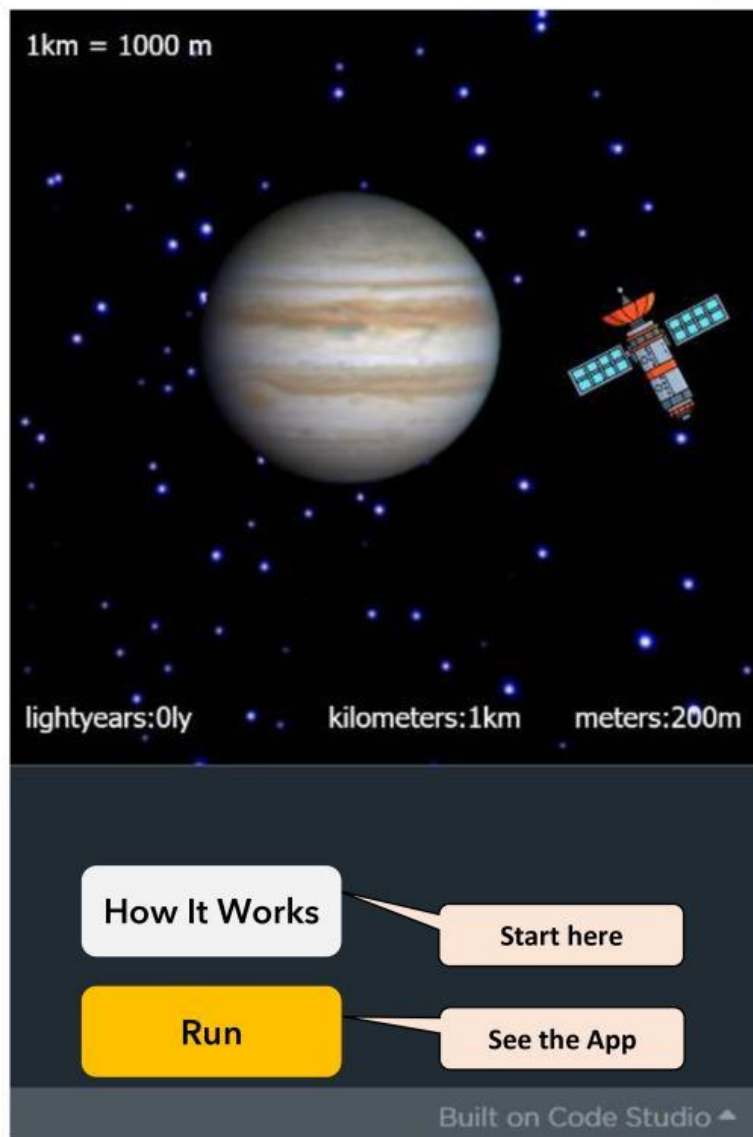
# Project 75

75

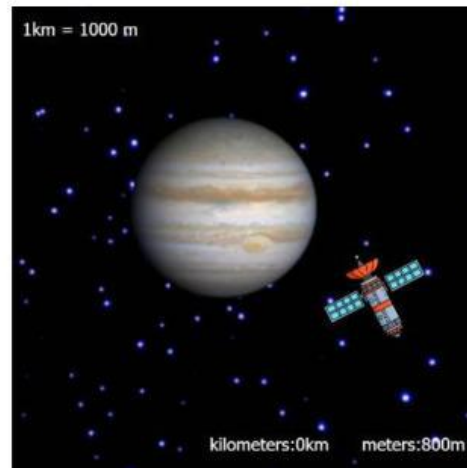


**DP**  
EDUCATION

## Coding School



- ❖ Let's create a satellite orbiting Jupiter
- ❖ The images required to design this app are given to you in the library. Let's see how to design using them as follows.



- ❖ Let's use the code blocks used in creating a sprite to add the image in the space as follows.

```
var space = createSprite(200, 200) ;
space.setAnimation(▼ "space.png") ;
space.scale = 1.5;
```

Create the sprite as space and give its x and y positions as 200 and 200.

Use the “setAnimation” block to set the animation for the sprite. Select the “space.png” image for that.

Give the scale of the sprite as 1.5.

- ❖ Add the image of Jupiter and the satellite in the same way as the image of space is added.

To add the image of Jupiter, create the sprite as jupiter and give its x and y positions as 180 and 180. Use the “setAnimation” block to set the animation for the sprite. Select the image "jupiter.png" for that. Give the scale of the sprite as 1.3

To add the image of the satellite, create the sprite as satellite and give its x and y positions as 200 and 300. Use the "setAnimation" block to set the animation for the sprite. Select the image "satellite.png" for that. Give the scale of the sprite as 0.25.

- ❖ Give a value of 90 for the rotation blocks.

```
satellite.rotation = 90;
```

- ❖ Create variables as meters, kilometers and lightyears.

```
var meters = 0;  
var kilometers = 0;  
var lightyears = 0;
```

- ❖ Set the value to 2 in the World frameRate block.

```
World.frameRate = 2;
```

- ❖ Place the drawSprites block and the nextFrame block in the function draw block as follows.

```
function draw() {  
  drawSprites();  
  jupiter.nextFrame();  
}
```

- ❖ Change the value of the meters variable as follows.

```
meters = meters + 100;
```

- ❖ When the value of "meters" is equal to 1000, the value of "meters" should be 0 and 1 should be added to the value of "kilometers".

```
if (meters == 1000) {  
  meters = 0;  
  kilometers = kilometers + 1;  
}
```

- ❖ When the value of "kilometers" is equal to 9460000000000, the value of "kilometers" should be 0 and 1 should be added to the value of "lightyears".

```
if (kilometers == 9460000000000) {
  kilometers = 0;
  lightyears = lightyears + 1;
}
```

- ❖ Use `satellite.setSpeedAndDirection(10, satellite.getDirection() - 90);` the following block to make the satellite move around Jupiter.

- ❖ The size of the characters is 15 and the color of the characters is white, and the font of the characters should be Tahoma. Also, as "1km = 1000m" and kilometers: display the amount of kilometers in front of meters: display the

```
textSize(15);
fill("white");
textFont("tahoma");
text("1km = 1000 m", 10, 25);
text("kilometers:" + (kilometers + "km"), 170, 380);
text("meters:" + (meters + "m"), 300, 380);
text("lightyears:" + (lightyears + "ly"), 10, 380);
```

amount of meters in front of lightyears: display the amount of lightyears in front of Also, apply blocks as follows.