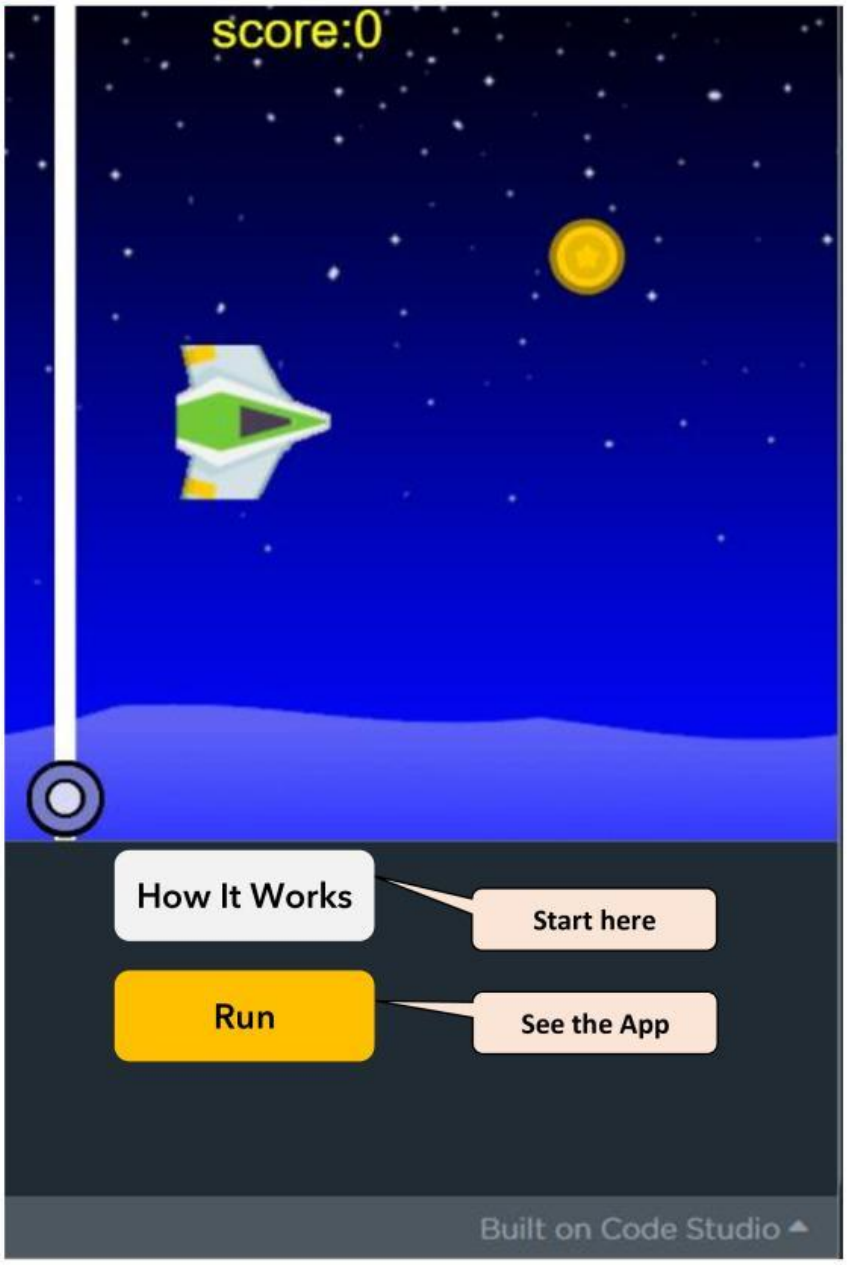
Project 67

DP EDUCATION

Coding School



LIVEWORKSHEETS

- Let's create a Rocket game.

- Let's use the following code blocks to create a sprite to add the image for the Rocket.

```
var ship = createSprite(120, 200);
ship.setAnimation("Ship");
ship.scale = 1;
```

Create the sprite as Ship and give its x and y positions as 120 and 200.

Use the “setAnimation” block to set the animation for the sprite. For that, select the "ship.png" image in the shop.

Give the scale of the sprite as 1.

- Let's use the following code blocks to create a sprite to add images for the angle slider and the ball.

```
var angleslider = createSprite(30, 200);
angleslider.setAnimation("angle_slider");
var ball = createSprite(30, 380);
ball.setAnimation("ball");
ball.scale = 0.18;
```

- Let's use the following code blocks to create a sprite to add the image for the coin.

```
var coin = createSprite(280, 120);
coin.setAnimation("coin");
coin.scale = 0.6;
```

LIVEWORKSHEETS

❖ Let's use the following code blocks to set the angle slider to rotate when the ball is moved up and down along the length.

```
if ( mousePressedOver(ball) ) {
    ball.y = World.mouseY;
    ship.rotation = 380 - ball.y;
}
```

When the mouse pressed over is moved up and down, the y passion of the ball changes accordingly.

To rotate the rocket according to the y-passion of the ball, rotate the rocket 380 minus the y-passion of the ball.

❖ Let's use the following code blocks to make the rocket move.

```
if ( mousePressedOver(ship) ) {
    ship.setSpeedAndDirection(5, ship.rotation);
}
```

❖ Let's use the following code blocks to make a sound when the rocket touches the coin, the rocket stops, and the x and y passion of the coin changes randomly.

```
if ( ship.isTouching(coin) ) {
    playSound( "sound://category_explosion/8bit_explosion.mp3", false);
    ship.setSpeedAndDirection(0, 0);
    coin.x = randomNumber(100, 350);
    coin.y = randomNumber(100, 350);
    score = score + 1;
}
```

When the rocket touches the coin, the score should increase by one.

LIVEWORKSHEETS

❖ Let's use the following code blocks to give points when the rocket touches the coin

```
textSize(25);
fill("yellow");
text("Score: " + score, 100, 20);
```

Select the correct answer.

1. What blocks should be used to pronounce Your score is 10 points when your score is equal to 10 points?

```
if (score == 5) {
  playSpeech("Your score is 10 points ", "female", "English");
}
```

```
if (score > 5) {
  playSpeech("Your score is 10 points ", "female", "English");
}
```

```
if (score > 5) {
  playSound("sound://default.mp3", false);
}
```

2. What block should be applied to display a medal on the screen when you get 100 points?

```
if (score && 100) {
  var medal = createSprite(300, 300);
  medal.setAnimation("flat_medal8_1");
}
```

```
if (score == 100) {
  var medal = createSprite(300, 300);
  medal.setAnimation("flat_medal8_1");
}
```

```
if (score && 100) {
  var medal = createSprite(300, 300);
  medal.destroy();
}
```

LIVEWORKSHEETS

3. What blocks are needed to add an alien plane moving to the right when the score is equal to 500?

```
if (score == 500) {
  var ufo = createSprite(70, 300);
  ufo.setAnimation("ufo_1");
  ufo.velocityY = 10;
  ufo.scale = 0.3;
}
```

```
if (score == 500) {
  var ufo = createSprite(70, 300);
  ufo.setAnimation("ufo_1");
  ufo.velocityY = -10;
  ufo.scale = 0.3;
}
```

```
if (score == 500) {
  var ufo = createSprite(70, 300);
  ufo.setAnimation("ufo_1");
  ufo.velocityX = -10;
  ufo.scale = 0.3;
}
```

4. If the coin collector touches the alien, what block should be applied to make the collector, alien and coins invisible?

```
if (ufo.isTouching(ship)) {
  ship.destroy();
  coin.destroy();
}
```

```
if (ufo.isTouching(ship)) {
  ufo.destroy();
  ship.destroy();
  coin.destroy();
}
```

```
if (ufo.isTouching(ship)) {
  ufo.setAnimation("ufo_1");
  coin.setAnimation("coin");
}
```

5. According to this screen, what block should be applied to display the score?

```
textSize(25);
fill("blue");
```

```
textSize(25);
fill("blue");
text("score" + score, 100, 200);
```

```
textSize(25);
fill("blue");
text("score" + score, 100, 20);
```

LIVEWORKSHEETS