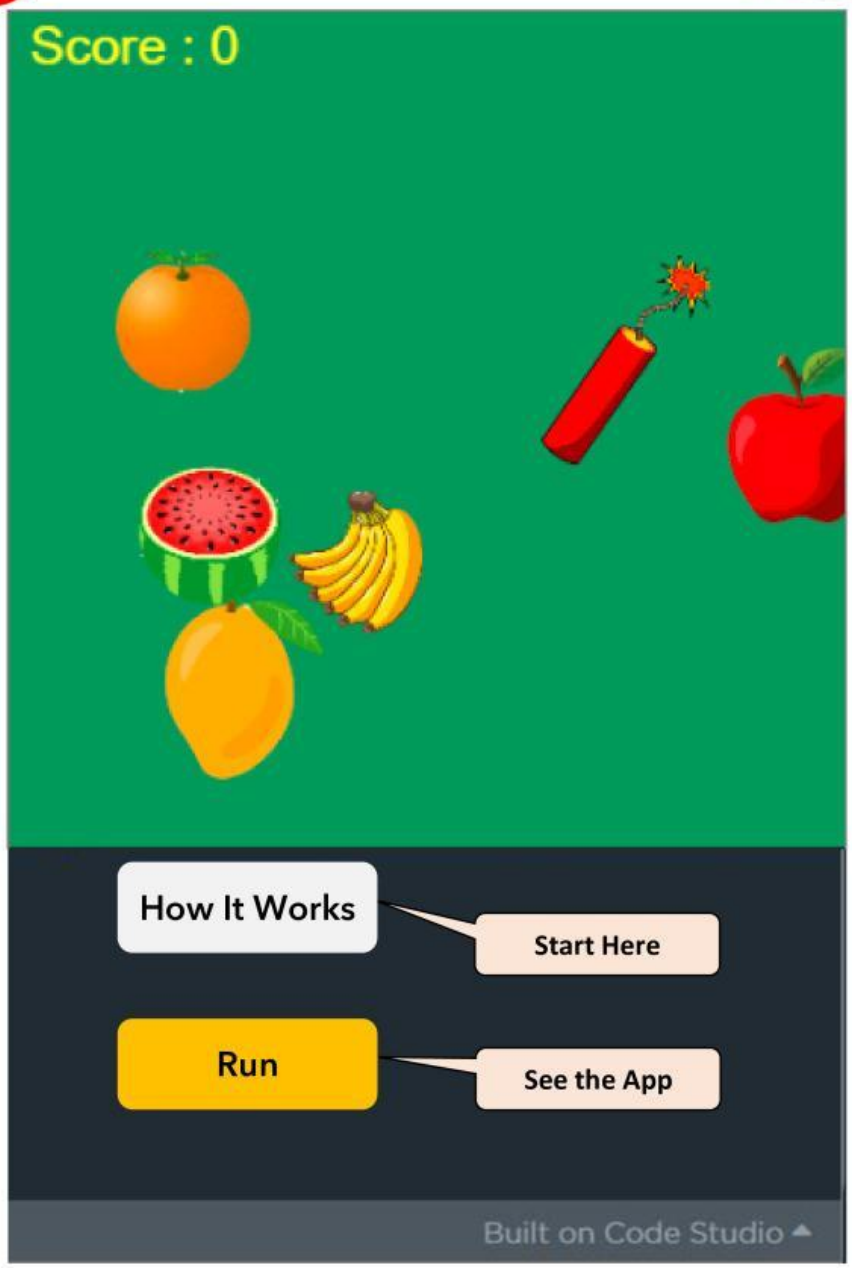
Project 97

DP EDUCATION

Coding School



LIVEWORKSHEETS

- Let's create the Fruit Crush Game.
- In this game, when you click on the fruit, points should be added, and if you click on the bomb, the game will be over.

- Let's first create the required sprites for this.
- Create the banana related sprite and set its animation and scale as below.

```
var banana = createSprite(200, 200);
banana.setAnimation("banana.png_1");
banana.scale = 0.3;
```

- Set the starting position of all sprites to be created as 200,200.
- All the images required for these sprites are included in the animation tab and are contained in the project given to you. Click on how it works and open it.
- In this way, create sprites for other fruits as follows.
- Create the sprite for Apple as follows.

```
var apple = createSprite(200, 200);
apple.setAnimation("Apple.png_1");
apple.scale = 0.3;
```

- Create the sprite like this for the watermelon.

```
var watermelon = createSprite(200, 200);
watermelon.setAnimation("watermelon.png_1");
watermelon.scale = 0.3;
```

LIVEWORKSHEETS

- Create the sprite like this for the oranges.

```
var orange = createSprite(200, 200);
orange.setAnimation("Orange.png_1");
orange.scale = 0.4;
```

- Finally, let's create the sprite of the bomb moving here and there on the screen.

```
var dynamite = createSprite(200, 200);
dynamite.setAnimation("Dynamite.png_1");
dynamite.scale = 0.3;
```

- Create the sprite shown as game over as follows.

```
var gameOver = createSprite(200, 200);
gameOver.setAnimation("game over.png_1");
gameOver.visible = false;
```

- Define variables as follows to calculate the time to change the motion of each fruit and bomb and to store the score.

```
var countForBanana = 0;
var countForApple = 0;
var countForWatermelon = 0;
var countForMango = 0;
var countForOrange = 0;
var countForDynamite = 0;
var score = 0;
```

- After creating in this way, let's first set a background color in the draw function.

```
function draw() {
  background(rgb(57, 153, 86));
```

- Within it, every time the draw function is called, code in this way to increase the value of the above fruit and bomb variables by one.

LIVEWORKSHEETS

```
function draw() {
  background( rgb(57, 153, 86) );
  countForBanana = countForBanana + 1;
  countForApple = countForApple + 1;
  countForWatermelon = countForWatermelon + 1;
  countForMango = countForMango + 1;
  countForOrange = countForOrange + 1;
  countForDynamite = countForDynamite + 1;
```

- Now let's code using the variable created for the above banana to continuously change the position of the banana at a certain time.

```
if( countForBanana == 25 )
{
  banana.x = randomNumber(60, 380);
  banana.y = randomNumber(60, 380);
  countForBanana = 0;
}
```

- Whenever the value of countForBanana Variable is 25, the x and y position of the banana sprite will change randomly.
  When it is 25, create the value of the countForBanana variable to be 0 again
- Just like bananas, code the same way as above to change the position of the apple in a certain time.

```
if( countForApple == 25 )
{
  apple.x = randomNumber(60, 380);
  apple.y = randomNumber(60, 380);
  countForApple = 0;
}
```

- Code to change the position like this for watermelons as well.

```
if( countForWatermelon == 35 )
{
  watermelon.x = randomNumber(60, 380);
  watermelon.y = randomNumber(60, 380);
  countForWatermelon = 0;
}
```

LIVEWORKSHEETS

❖ Code to change the position like this for the mango.

```
if( countForMango == 25 )
{
  mango.x = randomNumber(60, 380);
  mango.y = randomNumber(60, 380);
  countForMango = 0;
}
```

❖ Code to change position like this for oranges as well.

```
if( countForOrange == 25 )
{
  orange.x = randomNumber(60, 380);
  orange.y = randomNumber(60, 380);
  countForOrange = 0;
}
```

❖ In the same way, create the change of position of the bomb.

```
if( countForDynamite == 10 )
{
  dynamite.x = randomNumber(60, 380);
  dynamite.y = randomNumber(60, 380);
  countForDynamite = 0;
}
```

❖ To change the time of each item's position change, it is possible to increase or decrease the corresponding value of the corresponding variable.

❖ When you click on the fruit, the sprites will disappear and the score will be added and create a sound to play.

```
if ( mousePressedOver(banana) )
{
  playSound( "sound://category_achievements/lighthearted_bonus_objective_2.mp3", false);
  banana.destroy();
  score = score + 10;
}
```

❖ Above is the code related to what happens when you click on the banana. Create code for other fruits in the same way.

LIVEWORKSHEETS

- The code related to what happens when you click on the apple is as follows.

```
if (mousePressedOver(apple))
{
  playSound("sound://category_achievements/lighthearted_bonus_objective_2.mp3", false);
  apple.destroy();
  score = score + 10;
}
```

- Code what happens when you click on the watermelon as follows.

```
if (mousePressedOver(watermelon))
{
  playSound("sound://category_achievements/lighthearted_bonus_objective_2.mp3", false);
```

```
if (mousePressedOver(mango))
{
  playSound("sound://category_achievements/lighthearted_bonus_objective_2.mp3", false);
  mango.destroy();
  score = score + 10;
}
```

- Code as follows to create what happens when you click on the mango.
- Code as below to create what happens when you click on oranges.

```
if (mousePressedOver(orange))
{
  playSound("sound://category_achievements/lighthearted_bonus_objective_2.mp3", false);
  orange.destroy();
  score = score + 10;
}
```

- When you click on the bomb, all the sprites disappear and the game over sprite should be visible.

```
if (mousePressedOver(dynamite))
{
  playSound("sound://category_explosion/8bit_explosion.mp3", false);
  banana.destroy();
  apple.destroy();
  watermelon.destroy();
  mango.destroy();
  orange.destroy();
  dynamite.destroy();
  gameOver.visible = true;
}
```

- Then let's create the related codes to show the scores as follows.

LIVEWORKSHEETS

```
fill("yellow");
textSize(25);
text("Score : " + score, 10, 25);
drawSprites();
```

- The scores stored in the score variable are shown as above. finally drawSprite(); Call the function.

LIVEWORKSHEETS