

Project86



Coding School

score:0

How It Works

Start here

Run

See the App

Built on Code Studio

The image shows a game interface with a 6x5 grid. The top-left cell contains a snail icon. The grid is populated with red mushrooms and grey rocks. Below the grid is a dark grey control panel with a 'How It Works' section containing a 'Start here' button, and a yellow 'Run' button with a 'See the App' button. A 'score:0' label is at the top left of the grid. At the bottom right of the panel, it says 'Built on Code Studio' with a small upward arrow.

- Let's create the rest of the project started by the 85th homework here.
 - ❖ The images related to designing this app are given to you in the library.
 - ❖ When creating a sprite to add the image of a snail, use the following code blocks.

```
var snail = createSprite(30, 30);
snail.setAnimation("snail.png_1");
snail.scale = 0.2;
```

Create the sprite as “snail”. Give its x and y positions as 30 and 30.

Use the “setAnimation” block to set the animation for the sprite. Select the image “snail.png_1” for that.

Set the scale of the sprite to 0.2.

- ❖ For this, let's add the remaining images for a group like the following blocks.
- ❖ Prepare the variables as in the following blocks.

- ❖ Create a function like “createmushroom” as below.

```
var pillsmushrooms = createGroup();
var mushrooms;
var Totmushrooms = 0;
var score = 0;
var eatmushrooms = 0;
```

```
function createmushrooms(nummushrooms, X_coord, y_coord) {
  for (var i = 0; i < nummushrooms; i++) {
    var mushrooms = createSprite(X_coord + 60 * i, y_coord, 60, 60);
    mushrooms.setAnimation("mushrooms.png_1");
    mushrooms.scale = 0.08;
    pillsmushrooms.add(mushrooms);
    Totmushrooms++;
  }
}
```

- ❖ Adjust the location and sprite size of the sprites related to the "createmushroom" function according to the following blocks.

```
createmushrooms(4, 80, 50);
createmushrooms(1, 80, 110);
createmushrooms(1, 320, 110);
createmushrooms(3, 150, 170);
createmushrooms(2, 80, 230);
createmushrooms(1, 80, 290);
createmushrooms(4, 80, 350);
```

- ❖ To create the sprite group with rocks, like the following blocks Set variables.

```
var pillsrock = createGroup();
var rock;
var Totrock = 0;
```

- ❖ Create a function like "createrock" as below.

```
function createrock(numrock, X_coord, y_coord) {
  for (var i = 0; i < numrock; i++) {
    var rock = createSprite(X_coord + 50 * i, y_coord, 5, 5);
    rock.setAnimation("rock.png 1");
    rock.scale = 0.2;
    pillsrock.add(rock);
    Totrock++;
  }
}
```

- ❖ Below is the location and sprite size of the sprites related to the "createrock" function Arrange in blocks

```
createrock(3, 160, 110);
createrock(1, 80, 170);
createrock(2, 240, 230);
createrock(4, 140, 290);
```

- ❖ Then apply the following inside the "function draw" block.

```
function draw() {
  drawSprites();
  background("black");
}
```

- ❖ When you click on the Left arrow key, the snail will go to the west, and the Right arrow key When the key is clicked, the snail is east In the direction, when you click on the Up arrow key, the snail should move to the north, and when you click on the down arrow key, the snail should move to the right.

```

if ( keyDown(▼ "left") ) {
    snail.setSpeedAndDirection(3, 180);
}
if ( keyDown(▼ "right") ) {
    snail.setSpeedAndDirection(3, 360);
}
if ( keyDown(▼ "up") ) {
    snail.setSpeedAndDirection(3, 270);
}
if ( keyDown(▼ "down") ) {
    snail.setSpeedAndDirection(3, 90);
}

```

- ❖ When the mushroom snail is touched, the touched mushroom should disappear and make a sound. And when the snail touches a mushroom you get 10 points. For that, apply blocks as follows.

```

for ( var i = 0; i < Totmushrooms; i++ ) {
    if ( pillsmushrooms.get(i) != undefined && pillsmushrooms.get(i).isTouching(snail) ) {
        pillsmushrooms.get(i).destroy();
        playSound(▼ "sound://category_bell/short_bell_alert.mp3", ▼ false);
        score = score + 10;
        eatmushrooms++;
    }
}

```

- ❖ When the amount of mushrooms at the beginning and the amount of mushrooms eaten are the same, the snail will disappear and a sprite saying "You win" should be displayed

```

if ( eatmushrooms == Totmushrooms ) {
    snail.destroy();
    var youwin = createSprite(200, 200);
    youwin.setAnimation(▼ "win.png_1");
}

```

- ❖ When the snail touches a sprite such as a rock, the snail's velocity will be 0 and a sound will be emitted

```
if ( snail.collide(pillsrock) ) {  
  snail.velocityX = 0;  
  snail.velocityY = 0;  
  playSound(▼ "sound://default.mp3", ▼ false);  
}
```

- ❖ Blocks as below to mark the amount of points obtained in white color apply.

```
fill(▼ "white");  
textSize(20);  
text("score:" + score, 50, 20);
```

- ❖ Connect the drawSprite block as follows

```
drawSprites();  
}
```