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DP EDUCATION

Coding School

score:0

How It Works

Start Here

Run

See the A pp

Built on Code Studio ▲
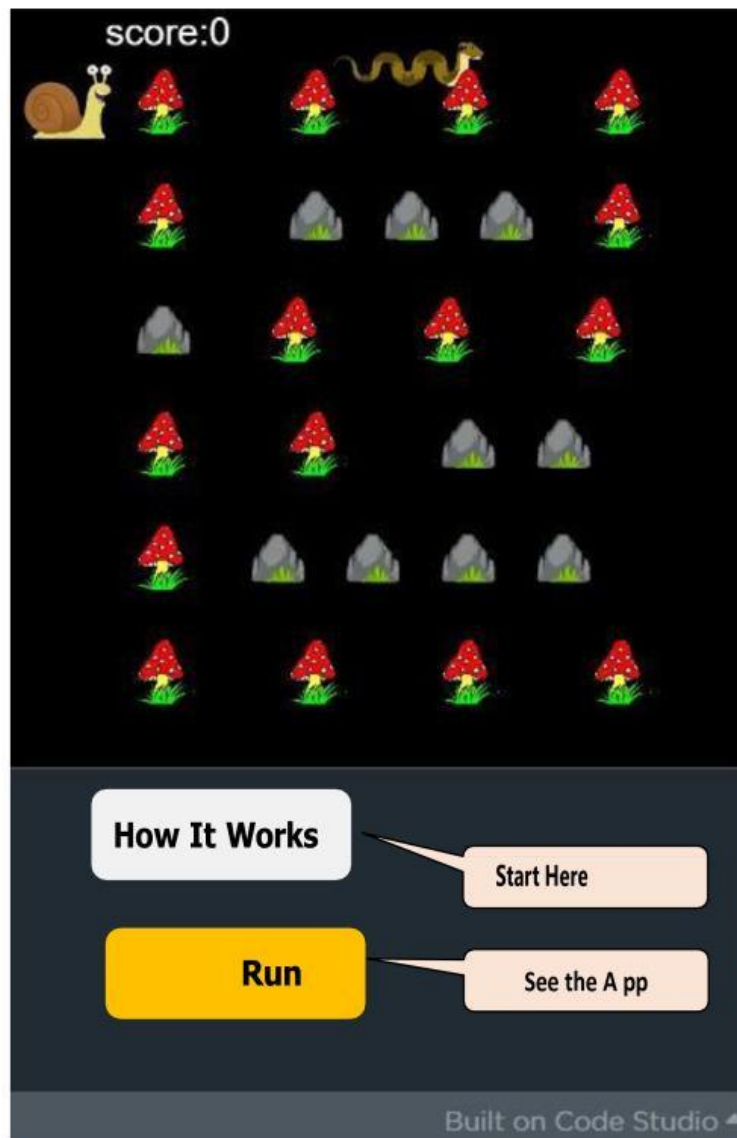
❖ The images related to designing this app are given to you in the library.

❖ Create a sprite to add the image of a snail, Let's use code blocks as follows.

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

Create the sprite as "snail" and 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.
Brush the scale of the sprite to 0.2.

❖ Add a snake sprite like below.

```
var snak = createSprite(300, 50) →;
snak.setAnimation(▼"python_1");
snak.scale = 0.2;
```

❖ Let's add the remaining images required for this as a group in the following blocks.

❖ Prepare the variables as in the following blocks.

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

❖ Create a function like "createmushroom" as below.

```
function createmushrooms (nummushrooms, X_coor, y_coor) {
    for ( var i = 0; i < nummushrooms ; i++) {
        var mushrooms = createSprite( X_coor + 80 * i , y_coor, 5, 5 );
        mushrooms.setAnimation(▼"mushrooms.png_1");
        mushrooms.scale = 0.08;
        pillsmushrooms.add(mushrooms);
        Totmushrooms++;
    }
}
```

❖ The location and sprite of the sprites related to the "createmushroom" function
   Adjust the size 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_coor, y_coor) {
    for ( var i = 0; i < numrock; i++ ) {
        var rock = createSprite( X_coor + 50 * i , y_coor, 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 left arrow key is clicked, the snail will go west, when right arrow key is clicked, the snail will go west.
Up arrow key for east direction
When clicked on the snail
To the north, click on the down arrow key
Snail to the right when done
Must travel. Snak also below
You have to move according to the blocks

```
if ( keyDown(▼ "left") ) {
    snail.setSpeedAndDirection(3, 180);
    if ( snail.x < snak.x ) {
        snak.setSpeedAndDirection(5, 180);
    }
    if ( snail.x > snak.x ) {
        snak.setSpeedAndDirection(5, 360);
    }
}
if ( keyDown(▼ "right") ) {
    snail.setSpeedAndDirection(3, 360);
    if ( snail.x < snak.x ) {
        snak.setSpeedAndDirection(5, 180);
    }
    if ( snail.x > snak.x ) {
        snak.setSpeedAndDirection(5, 360);
    }
}
if ( keyDown(▼ "up") ) {
    snail.setSpeedAndDirection(3, 270);
    if ( snail.y < snak.y ) {
        snak.setSpeedAndDirection(5, 270);
    }
    if ( snail.y > snak.y ) {
        snak.setSpeedAndDirection(5, 90);
    }
}
if ( keyDown(▼ "down") ) {
    snail.setSpeedAndDirection(3, 90);
    if ( snail.y < snak.y ) {
        snak.setSpeedAndDirection(5, 90);
    }
    if ( snail.y > snak.y ) {
        snak.setSpeedAndDirection(5, 270);
    }
}
```

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

```
pillsmushrooms.get(i).destroy();
playSound(▼"sound://category_bell/short_bell_alert.mp3", ▼false);
score = score + 10;
eatmushrooms++;
```

❖ Arrange the blocks as follows for the way the snake moves.

```
snak.velocityY = -3;
if ( snak.y == 30 ) {
    snak.velocityY = 0;
    snak.velocityX = -3;
}
```

❖ At the beginning, when the amount of mushroom and food are equal, the mushroom disappears and a sprite says "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 rock-like sprite, the snail's velocity becomes 0 and a sound is made. Apply the following blocks to release.

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

❖ When the snake touches the snail, the snake and the snail disappear

Go and a sprite should be displayed as Game over

```
if ( snak.isTouching(snail) ) {
    snak.destroy();
    snail.destroy();
    var game_over = createSprite(200, 200) →;
    game_over.setAnimation(▼ "loss.png_1");
}
```

❖ When the snail touches the rocks the following events occur as follows
Apply blocks.

```
if ( snak.isTouching(pillsrock) ) {
    snak.bounceOff(pillsrock);
}
```

❖ 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();
}
```