Project77

DP EDUCATION

Coding School

CLICK
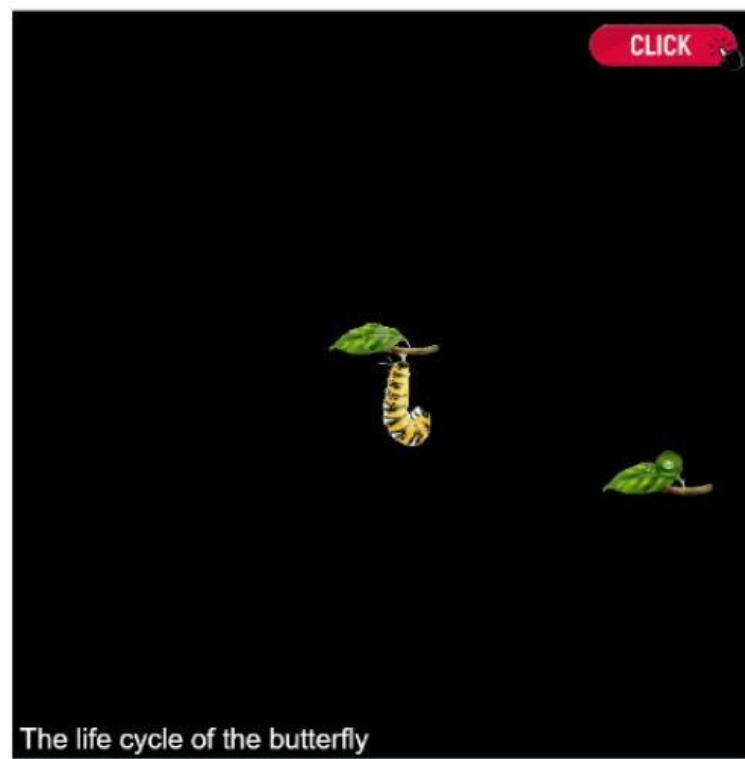
The life cycle of the butterfly

| How It Works	Start here
Run	See the App

Built on Code Studio ▲

❖ Let's design an app to create the life cycle of the butterfly.

❖ Images related to the life cycle of the butterfly are provided to you in the library

❖ When creating a sprite to add the image of a button, use the following code blocks.

```
var button = createSprite(350, 20) ⊣ ;
button.setAnimation(▼ "button.png");
button.scale = 0.4;
```

Create the sprite as a button and give its x and y positions as 350 and 20.

Use the "setAnimation" block to set the animation for the sprite. Select the image "button.png" for that.

Give the scale of the sprite as 0.4.

❖ To add the remaining images needed for this, apply blocks as above.

Create the sprite as "butterfly" and give its x and y positions as 200 and 200. Use the "setAnimation" block to set the animation for the sprite. For that, select the image of the "butterfly" and give the scale of the sprite as 0.5.

Create the sprite as "b1" and give its x and y positions as 350 and 250. Use the "setAnimation" block to set the animation for the sprite. Select the image "b1.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b2" and give its x and y positions as 350 and 180. Use the "setAnimation" block to set the animation for the sprite. Select the image "b2.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b3" and give its x and y positions as 200 and 200. Use "setAnimation" to set the animation for the sprite block. Select the image "b3.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b4" and give its x and y positions as 200 and 40. Use the "setAnimation" block to set the animation for the sprite. Select the image "b4.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b5" and give its x and y positions as 100 and 90. Use the "setAnimation" block to set the animation for the sprite. Select the image "b5.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b6" and give its x and y positions as 70 and 170. Use the "setAnimation" block to set the animation for the sprite. Select the image "b6.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b7" and give its x and y positions as 40 and 260. Use the "setAnimation" block to set the animation for the sprite. Select the image "b7.png" for that. Give the scale of the sprite as 0.5.

Create the sprite as "b8" and give its x and y positions as 140 and 330. Use the "setAnimation" block to set the animation for the sprite. Select the image "b8.png" for that. Give the scale of the sprite as 0.4.

Create the sprite as "b9" and give its x and y positions as 270 and 340. Use the "setAnimation" block to set the animation for the sprite. Select the image "b9.png" for that. Give the scale of the sprite as 0.4.

❖ To make the sprite named b1 visible and to make the sprites named b2, b3, b4, b5, b6, b7, b8 and b9 invisible, apply blocks as follows.

```
b1.visible = 1;
b2.visible = 0;
b3.visible = 0;
b4.visible = 0;
b5.visible = 0;
b6.visible = 0;
b7.visible = 0;
b8.visible = 0;
b9.visible = 0;
```

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

```
function draw() {
    background("black");
    fill("white");
    textSize(15);
    text("The life cycle of the butterfly", 5, 395);
    drawSprites();
```

❖ "When the mouse is moved over the sprite named as "b1", the sprite named "b2" should be visible, and the frame switching of the sprite named "butterfly" should stop and the first frame should appear. One should be display. For that, apply blocks as follows. Connect that block set to the "drawSprites" block itself.

```
if (mouseIsOver(b1)) {
    b2.visible = 1;
    butterfly.setFrame(0);
    butterfly.pause();
    text("The eggs", 5, 20);
}
```

❖ When the mouse is moved over the sprite named as "b2", the sprite named "b3" should be visible and "b1" should not be visible, the frame shifting of the sprite named "butterfly" should stop and the second frame should appear. And a text like "The caterpillar 1" should be displayed. For that, apply blocks as below.

```
if (mouseIsOver(b2)) {
    b3.visible = 1;
    butterfly.setFrame(1);
    butterfly.pause();
    b1.visible = 0;
    text("The caterpillar 1", 5, 20);
}
```

❖ When the mouse is moved over the sprite named as "b3", the sprite named "b4" should become visible and "b2" should disappear, and the frame shifting of the sprite named "butterfly" should stop and the third frame should appear. And a text like "The caterpillar 2" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b3) ) {
    b4.visible = 1;
    butterfly.setFrame(2);
    butterfly.pause();
    b2.visible = 0;
    text("The caterpillar 2", 5, 20);
}
```

❖ When the mouse is moved over the sprite named as "b4", the sprite named "b5" should be visible and "b3" should be invisible, and the frame shifting of the sprite named "butterfly" should stop and the fourth frame should appear. . And a text like "The pupa 1" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b4) ) {
    b5.visible = 1;
    butterfly.setFrame(3);
    butterfly.pause();
    b3.visible = 0;
    text("The pupa 1", 5, 20);
}
```

❖ When the mouse is moved over the sprite named as "b5", the sprite named "b6" should be visible and "b4" should be invisible, and the frame shifting of the sprite named "butterfly" should stop and the fifth frame should appear. . And a text like "The pupa 2" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b5) ) {
    b6.visible = 1;
    butterfly.setFrame(4);
    butterfly.pause();
    b4.visible = 0;
    text("The pupa 2", 5, 20);
}
```

❖ When the mouse is moved over the sprite named as "b6", the sprite named "b7" should be visible and "b5" should not be visible, the frame shifting of the sprite named "butterfly" should stop and the sixth frame should appear. And a text like "The pupa 3" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b6) ) {
    b7.visible = 1;
    butterfly.setFrame(5);
    butterfly.pause();
    b5.visible = 0;
    text("The pupa 3", 5, 20); →
}
```

❖ When the mouse is moved over the sprite named as "b7", the sprite named "b8" should be visible and "b6" should not be visible, the frame shifting of the sprite named "butterfly" should stop and the seventh frame should appear. And a text like "The emerging butterfly" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b7) ) {
    b8.visible = 1;
    butterfly.setFrame(6);
    butterfly.pause();
    b6.visible = 0;
    text("The emerging butterfly", 5, 20); →
}
```

❖ When the mouse is moved over the sprite named as "b8", the sprite named "b9" should be visible and "b7" should not be visible, and the frame shifting of the sprite named "butterfly" should stop and the eighth frame should appear. And a text like "The adult butterfly" should be displayed. For that, apply blocks as follows.

```
if ( mouseIsOver(b8) ) {
    b9.visible = 1;
    butterfly.setFrame(7);
    butterfly.pause();
    b7.visible = 0;
    text("The adult butterfly", 5, 20); →
}
```

❖ When the mouse is moved over the sprite named "b9", "b8" should disappear, and the frame shifting of the sprite named "butterfly" should stop and the sixth frame should appear. For that, apply blocks as follows
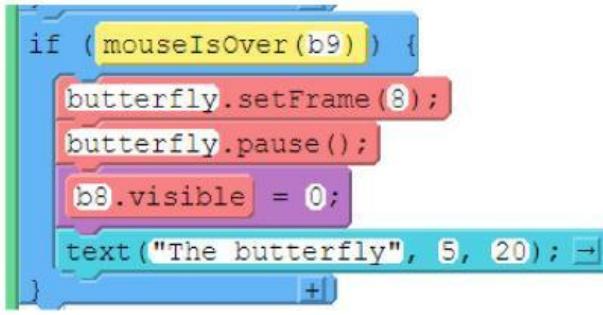
```
if ( mouseIsOver(b9) ) {
    butterfly.setFrame(8);
    butterfly.pause();
    b8.visible = 0;
    text("The butterfly", 5, 20); →
}
```

❖ When the mouse is moved over the sprite named "button", the sprites named "butterfly" and "b1" will be visible, and the frame of the sprite named "butterfly" will change, "b2", "b3", " Apply the following blocks even though the sprites named b4", "b5", "b6", "b7", "b8" and "b9" are not visible
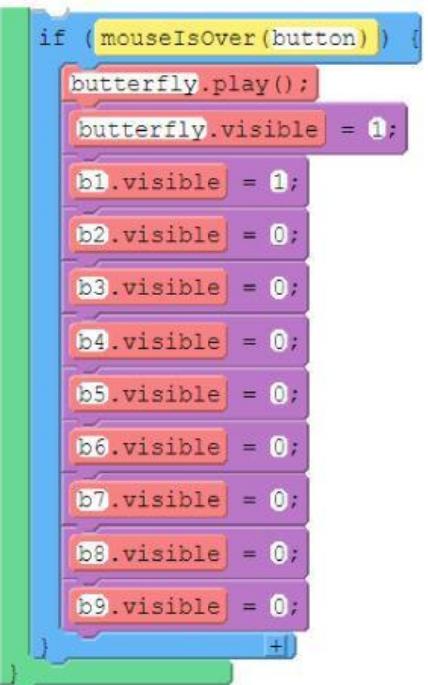
```
if ( mouseIsOver(button) ) {
    butterfly.play();
    butterfly.visible = 1;
    b1.visible = 1;
    b2.visible = 0;
    b3.visible = 0;
    b4.visible = 0;
    b5.visible = 0;
    b6.visible = 0;
    b7.visible = 0;
    b8.visible = 0;
    b9.visible = 0;
}
```