



DP
EDUCATION

Coding School

How It Works

Start Here

Run

See the App

Built on Code Studio

- ❖ Let's set up an app to create a model of the urine filtration process.
- ❖ What happens here is that the blood coming through the superior artery undergoes hyperfiltration in the ventricle. Red blood cells, white blood cells and blood platelets. Bromine does not move to the catalyst and water moves to the bromine catalyst. Let's create an app to study that process.
- ❖ The images related to designing this app are given to you in the library.
- ❖ Let's use the following code blocks while creating the sprite

```

var guchjika = createSprite(215, 120);
guchjika.setAnimation("G.png");
guchjika.scale = 0.9;

var g = createSprite(350, 195);
g.setAnimation("line 34.png_2");
g.scale = 0.6;

var broman_promotion = createSprite(200, 260);
broman_promotion.setAnimation("Picture423.png_1");
broman_promotion.scale = 0.9;

var bp3 = createSprite(305, 190);
bp3.setAnimation("Pictureelline.png_1");
bp3.scale = 0.4;

var bp = createSprite(203, 196);
bp.setAnimation("black.png");
bp.scale = 0.4;

var n_1 = createSprite(50, 300);
n_1.setAnimation("downloadggg.png_1");
n_1.scale = 0.5;

var bp2 = createSprite(308, 70);
bp2.setAnimation("pppppper.png_1");
bp2.scale = 0.4;

```

- ❖ Prepare the variables as in the following blocks.

```

var totalblood = 0;
var groupblood = createGroup();
var totalblood3 = 0;
var groupblood3 = createGroup();
var totalwater2 = 0;
var totalblood2 = 0;
var groupwater2 = createGroup();
var groupblood2 = createGroup();
camera.on();

```

- ❖ Create a function as "prats" as below. Here, let's use blocks as below to add blood and water.

```

function parts() {
  var blood = createSprite(115, randomNumber(67, 69));
  blood.shapeColor = "red";
  blood.scale = 0.04;
  blood.lifetime = 120;
  totalblood = totalblood + 1;
  var water2 = createSprite(randomNumber(190, 200), 60);
  water2.shapeColor = "blue";
  water2.scale = 0.04;
  water2.lifetime = 120;
  totalwater2 = totalwater2 + 1;
  var blood2 = createSprite(randomNumber(190, 215), 60);
  blood2.shapeColor = "red";
  blood2.scale = 0.04;
  blood2.lifetime = 120;
  totalblood2 = totalblood2 + 1;
  var blood3 = createSprite(randomNumber(296, 300), 65);
  blood3.shapeColor = "red";
  blood3.scale = 0.04;
  blood3.lifetime = 120;
  totalblood3 = totalblood3 + 1;
}

```

The colour and size of the added dots are set for the variable called "blood"

The colour and size of the added dots are set for the variable called "water2".

The color and size of the added dots are set for the variable called "blood2"

The color and size of the added dots are set for the variable called "blood3".

- ❖ Prepare the blocks as follows and add them to the prats function. Add “blood”, “blood2”, “blood3” and “water2” to the groups “groupblood”, “groupblood2”, “groupblood3” and “groupwater2”. Create as follows for . Connect it to the function itself as “prats”.

```
groupblood.add(blood);
groupblood2.add(blood2);
groupblood3.add(blood3);
groupwater2.add(water2);
```

- ❖ “groupblood”, “groupblood2”, “groupblood3” and “groupwater2”. Give the velocities for group as follows.

```
groupblood3.setVelocityEach(0, 3);
groupblood.setVelocityEach(3, 0);
groupwater2.setVelocityEach(0, 3);
groupblood2.setVelocityEach(0, 3);
```

- ❖ Add blackground and drawSprite blocks to the function draw block.
- ❖

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

- ❖ The following blocks are also added inside the function draw block

```
for (var i = 0; i < totalblood; i++) {
  if (groupblood2.get(i) != undefined && groupblood2.get(i).collide(bp)) {
    groupblood2.get(i).destroy();
  }
}
for (var i = 0; i < totalblood; i++) {
  if (groupblood.get(i) != undefined && groupblood.get(i).collide(bp2)) {
    groupblood.get(i).destroy();
  }
}
for (var i = 0; i < totalblood; i++) {
  if (groupblood3.get(i) != undefined && groupblood3.get(i).collide(bp3)) {
    groupblood3.get(i).destroy();
  }
}
parts(); ←
```