

Casino Slot Machine using JavaScript and CSS

1. Making the static part of the website involving HTML and CSS part as follows :

HTML part :

```
Casino Slot Machine > index.html > html > head > script
1  <!DOCTYPE html>
2
3  <html>
4    <head>
5      <meta charset="utf-8">
6      <meta http-equiv="X-UA-Compatible" content="IE=edge">
7      <title></title>
8      <meta name="description" content="">
9      <meta name="viewport" content="width=device-width, initial-
10     <link rel="stylesheet" href="style.css">
11     <script async defer src="script.js"></script>
12   </head>
13   <body>
14     <div class="machine">
15       <div class="slot" id="slot1">
16         <span class="value" id="value1">🎰</span>
17       </div>
18       <div class="slot" id="slot2">
19         <span class="value" id="value2">😞</span>
20       </div>
21       <div class="slot" id="slot3">
22         <span class="value" id="value3">😄</span>
23       </div>
24     </div>
25   </body>
26 </html>
```

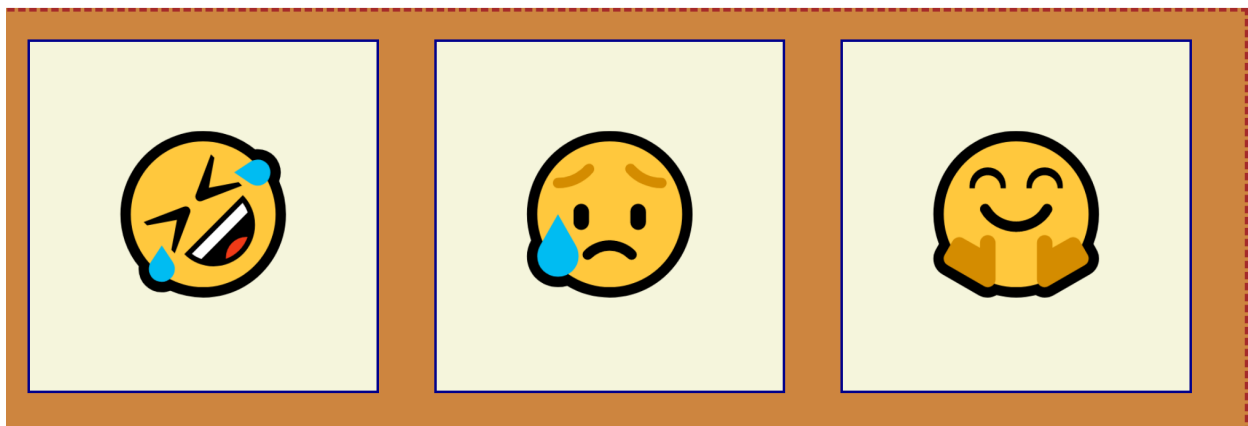
(ii) CSS part concerning the styling of machine and slots class is done as follows:

```

5  .machine{
6      background-color: peru;
7      border: dashed brown 3px;
8      height: 300px;
9      width: 900px;
10     margin: 50px;
11
12
13     z-index: 5;
14
15     display: flex;
16 }
17
18 .slot{
19     height: 250px;
20     margin: 20px;
21     width: 250px;
22     background-color: beige;
23     border: solid darkblue 2px;
24     text-align: center;
25     font-size: 100pt;
26     line-height: 250px;
27     overflow: hidden;
28     z-index: 1;
29 }

```

Output of the static part involved is as follows :



2. Adding the animation part was done by configuring the slotspin animation as follows :

```
.slot > .value{
  z-index: 3;
  display: inline-block;
  animation-name : slotspin ;
  animation-iteration-count: infinite;
  animation-duration: calc(1/var(--speed));
}

@keyframes slotspin{
  0%{
    transform: translateY(-200px);
  }
  100%{
    transform: translateY(200px);
  }
}
```

3. Next our aim is to generate different emoji values in the slot by using the Math.random function :

Here comes the application of javascript :

```
let value1 = document.getElementById('value1')
let value2 = document.getElementById('value2')
let value3 = document.getElementById('value3')

let values = [
  '😄', '😁', '😂', '😃', '😅', '😆',
  '😇'
]

function getRandomValue(){
  return values[Math.floor(Math.random() * 7)]
}

setInterval(() => {
  value1.innerText = getRandomValue()
  value2.innerText = getRandomValue()
  value3.innerText = getRandomValue()
}, 300)
```

4. The speed of rolling can be controlled by defining variables. Here we see the first application of css variable and is defined in the root document as follows :

```
✓ :root{  
  --speed : 5;  
}
```

Also we can put it in the animation duration in order to control the speed as follows :

```
animation-duration: calc(1s / var(--speed));
```

5. Now the next step is to build an input text box wherein the number entered will actually control the speed of spinning and also animation changing as follows :

(i) Define the input box in the index.html file as follows :

```
<input id="inpSpeed" type="number" min="1" max="10">
```

(ii) Style in the input box as follows :

```
#inpSpeed{  
  font-size: 30pt;  
  margin-left: 30px;  
  width: 50px;  
}
```

(iii) Next we are adding functionality of changing the spinning speed according to the value entered inside the input box

```
inpSpeed.onchange = function (ev){
  //console.log('value changed')

  //changing the speed variable using the value entered inside
  // the text box

  //document.documentElement -> this is the :root of the speed
  document.documentElement.style.setProperty('--speed', ev.target.value)
}
```

(iv) Next a function called `updateAnimation` is defined in order to control the speed of emoji change according to the value entered inside the input box as follows :

```
let animationId;
function updateAnimation(newSpeed){
  if (animationId) clearInterval(animationId)

  animationId = setInterval(() => {
    value1.innerText = getRandomValue()
    value2.innerText = getRandomValue()
    value3.innerText = getRandomValue()
  }, 1000/newSpeed)
}
```

Inference : Here the current rate of animation is captured inside the variable `animationId` and then first using the `clearInterval` function we remove the reset the current `animationId` followed by this using the `setInterval` function the new rate of emoji change is put in place.

(v) Next task was to build a spin and stop button. The wheel will start spinning once the value is entered inside the input box and SPIN button is clicked the wheel starts spinning in that speed accordingly. Code concerning the aforementioned part is as follows :

```
inpSpeed.onChange = function (ev){
    //console.log('value changed')

    //changing the speed variable using the value entered inside
    // the text box

    //document.documentElement -> this is the :root of the speed
    spin.onclick = function(){
        document.documentElement.style.setProperty('--speed', ev.target.value)
        updateAnimation(ev.target.value)
    }
}
```

(vi) Next we build the STOP button as follows. Here we also try to compare the values and display the congratulatory message accordingly as follows :

```
let stop = document.getElementById('stop')
stop.onclick = function(){
    document.documentElement.style.setProperty('--speed', 0)
    clearInterval(animationId)

    //declaring that the player has won
    let slot1 = $('#value1').textContent
    let slot2 = $('#value3').textContent
    let slot3 = $('#value3').textContent

    //if the outcome comes as true then display alert to the player that player won or else lost
    if((slot1 == slot2) && (slot2 == slot3) && (slot1 == slot3)){
        alert("Congratulations! you have won")
    }
    else{
        alert("Try again!")
    }
}
```

However currently there is some problem in getting the correct message displayed. Will update soon.