Sample Project - Code Breaker

This project showcases the skills needed for students to accomplish by the end of the unit.

HTML code

```
<!DOCTYPE html>
<html>
 <head>
   <title> Project 1 Code Breaker</title>
   <style> </style>
 </head>
   <meta charset="utf-8">
   <meta name="viewport" content="width=device-width">
   <title>repl.it</title>
   <link href="style.css" rel="stylesheet"
type="text/css" />
   <script src="script.js"></script>
 <body onload = "startup();">
   <h1> Welcome to CodeBreaker </h1>
   <p> The Computer has created 3 digit number with each
digit between 1 and 3 <br/> You have 7 guesses attempt
</p>


   <button onclick = "startGame();">
     Start a new Game
   </button>
   </br>
   <button onclick = "oneclicked();">
```

```
      One
    </button>
    <button onclick = "twoclicked();">
      Two
    </button>
    <button onclick = "threeclicked();">
      Three
    </button>
    </br>
    Your guess for Vault: <span id = "final"></span>
    </br>
    Status: <span id = "BS"> </span>
    </br>
    Clock left: <span id = "tries">7</span>
    </br>
    <button onclick = "clean();">
      Clear games
    </button>
  </body>
</html>
```

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Java Script Code

```
//startup functions, setting up the game in general
      function startup()
      {
        NumOfTryOutput = document.getElementById("tries");
```

```
  NumOfFinal = document.getElementById("final");
  BigSmall = document.getElementById("BS");

  tries = 7;
  final = "";
  displayTries();
  displayNum();


  firstDigit = 0;
  secondDigit = 0;
  thirdDigit = 0;
  victory = false;
  computerFinal = 0;
}
//startGame start the game
function startGame()
{
  startup();
  concatenateNum();
}
//generating each digit (computer)
function generateSingleDigits()
{
  var Rn = Math.random();
  Rn *= 3;
  Rn = parseInt(Rn);
  Rn += 1;
```

```
        return Rn;
      }
      //concatenate each digit and adding it to
computerFinal
      function concatenateNum()
      {
        firstDigit = generateSingleDigits();
        secondDigit = generateSingleDigits();
        thirdDigit = generateSingleDigits();
        computerFinal = "" + firstDigit + secondDigit +
thirdDigit;
        console.log("Answer: " + computerFinal);
      }
      //checking whether the number the user guesses is
correct or not, and if they failed or not
      function check()
      {
        if(tries > 0)
        {
          if(final.length == 3)
          {
            var numF = parseInt(final);
            var numCF = parseInt(computerFinal);
            if(numF == numCF)
            {
              victory = true;
              console.log("victory: " + victory);
```

```
            BS = "You Entered the Vault, Victory!! Press
start a new game for another go";
            displayBS();
          }
          if(numF > numCF)
          {
            tries -= 1;
            final = "";
            BS = "Too Big";
            console.log("try smaller number,tries
remain: " + tries)
            displayTries();
            displayBS();
            if(tries == 0)
            {
              console.log("lost");
              BS = "You died lol, Press start a new game
for another go";
              displayBS();
            }
          }
          if(numF < numCF)
          {
            tries -= 1;
            final = "";
            BS = "Too Small";
            console.log("try bigger number, tries
remain: " + tries)
```

```
            displayTries();
            displayBS();
            if(tries == 0)
            {
              console.log("lost");
              BS = "You died lol, Press start a new game
for another go";
              displayBS();
            }
          }
        }
        else
        {
          console.log("lost");
          BS = "You died lol, Press start a new game for
another go";
          displayBS();
        }
      }
      //add 1 if 1 is clicked
      function oneclicked()
      {
        final += "1";
        check();
        console.log(final);
        displayNum();
      }
```

```
//add 2 if 2 is clicked
function twoclicked()
{
  final += "2";
  check();
  console.log(final);
  displayNum();
}
//add 3 if 3 is clicked
function threeclicked()
{
  final += "3";
  check();
  console.log(final);
  displayNum();
}
//clear guesses
function clean()
{
  final = "";
  BS = "";
  tries = 7;
  displayNum();
  displayBS();
  displayTries();
  console.log("cleared");
}
```

```
      //display the amount of tries left
      function displayTries()
      {
        NumOfTryOutput.innerHTML = tries;
      }
      //display the number that you are guessing.
      function displayNum()
      {
        NumOfFinal.innerHTML = final;
      }
      //display if the number is too big or smaller or you
win or you died
      function displayBS()
      {
        BigSmall.innerHTML = BS;
      }
```