

Gramin Technical And Management Campus Nanded

Department Of Computer Engineering

MICRO PROJECT

Academic Year

2021-22

Math Game

Program : Computer Engineering

Program Code : CO5I

Course : Client Side Scripting Language

Course Code : 22519

Submitted By

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Submitted To

Mr. Wahe Sir



MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

Certificate

This is to certify that Mr. /Ms. **Jadhav Kiran Datta** Roll No. 013 (2nd Shift) of **Fifth** Semester of Diploma in Computer Engineering of Institute, Gramin Technical And Management Campus Nanded has completed the Micro Project satisfactorily in Subject – **Client Side Scripting Language (22519)** for the academic year 2021- 2022 as prescribed in the curriculum.

Place: Vishnupuri Nanded.

Enrollment No: _____

Date: _____

Exam Seat No: _____

Subject Teacher

Head of the Department

Principal



Coding:

HTML

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UACompatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initialscale=1.0">
  <title>Math Game</title>
  <link rel="stylesheet" href="style.css">
</head>

<body>
  <div id="container">
    <div id="score">Score: <span id="scoreValue"></span></div>
    <div id="correct">Correct</div>
    <div id="wrong">Try Again!</div>
    <div id="question" class="text-center"></div>
    <div id="information" class="text-center">Click on the correct answer!</div>
    <div id="choices">
      <div id="box1" class="box text-center"></div>
      <div id="box2" class="box text-center"></div>
      <div id="box3" class="box text-center"></div>
      <div id="box4" class="box text-center"></div>
    </div>
    <div id="startreset" class="text-center">Start Game</div>
    <div id="timerremaining" class="text-center">Time Remaining: <span
id="timerremainingValue"></span></div>
    <div id="gameover" class="text-center"></div>
  </div>
  <script src="main.js"></script>
</body>
</html>
```

JavaScript

// Global Variables

```
var playing = false;
var score;
var timerremaining;
var countdown;
var correctAns;
```

// Register Events

```
document.getElementById("startreset").addEventListener("click", play);
document.getElementById("box1").addEventListener("click", checkAnswer);
document.getElementById("box2").addEventListener("click", checkAnswer);
document.getElementById("box3").addEventListener("click", checkAnswer);
document.getElementById("box4").addEventListener("click", checkAnswer);
```

```
function play(e) {
  if(playing === true) {
    // You want to reset
    window.location.reload();
  } else {
    // You want to start the play
    playing = true;

    this.innerHTML = "Reset Game";

    score = 0;
    setText("scoreValue", score);

    hide("gameover");

    timerremaining = 60;
    setText("timerremainingValue", timerremaining);
    show("timerremaining");

    startCountdown();

    generateQA();
  }
}
```

```

function generateQA() {
  var x = (1 + Math.round(Math.random() * 9));
  var y = (1 + Math.round(Math.random() * 9));

  correctAns = x * y;

  let quesString = `${x} x ${y}`;
  setText("question", quesString);

  var correctPos = (1 + Math.round(Math.random() * 3));
  setText(`box${correctPos}`, correctAns);

  var answers =[correctAns];
  for(i=1; i<5; i++) {
    var wrongAns;

    if(i !== correctPos) {

      do {
        wrongAns = (1 + Math.round(Math.random() * 9)) * (1 + Math.round(Math.random() * 9));
      } while(answers.indexOf(wrongAns) !== -1);

      setText(`box${i}`, wrongAns);
      answers.push(wrongAns);
    }
  }
}

function checkAnswer() {
  if(playing === true) {
    if(this.innerHTML === correctAns) {
      score++;
      setText("scoreValue", score);
      show("correct");
      hide("wrong");
      setTimeout(function() {
        hide("correct");
      }, 500);
      generateQA();
    } else {
      show("wrong");
      hide("correct");
      setTimeout(function() {

```

```

        hide("wrong");
    }, 500);
}
}
}

function startCountdown(){
    countdown=setInterval(function(){
        timerremaining -=1;
        setText("timerremainingValue",timerremaining);

        if(timerremaining<=0){
            clearInterval(countdown);
            playing=false;
            show("gameover");
            hide("timerremaining");

            setText("scoreValue","");
            setText("startreset","Start Game");

            let msg=`<p>Game over!</p><p>Your score:${score}</p>`;
            setText("gameover",msg);
        }
    },1000)
}

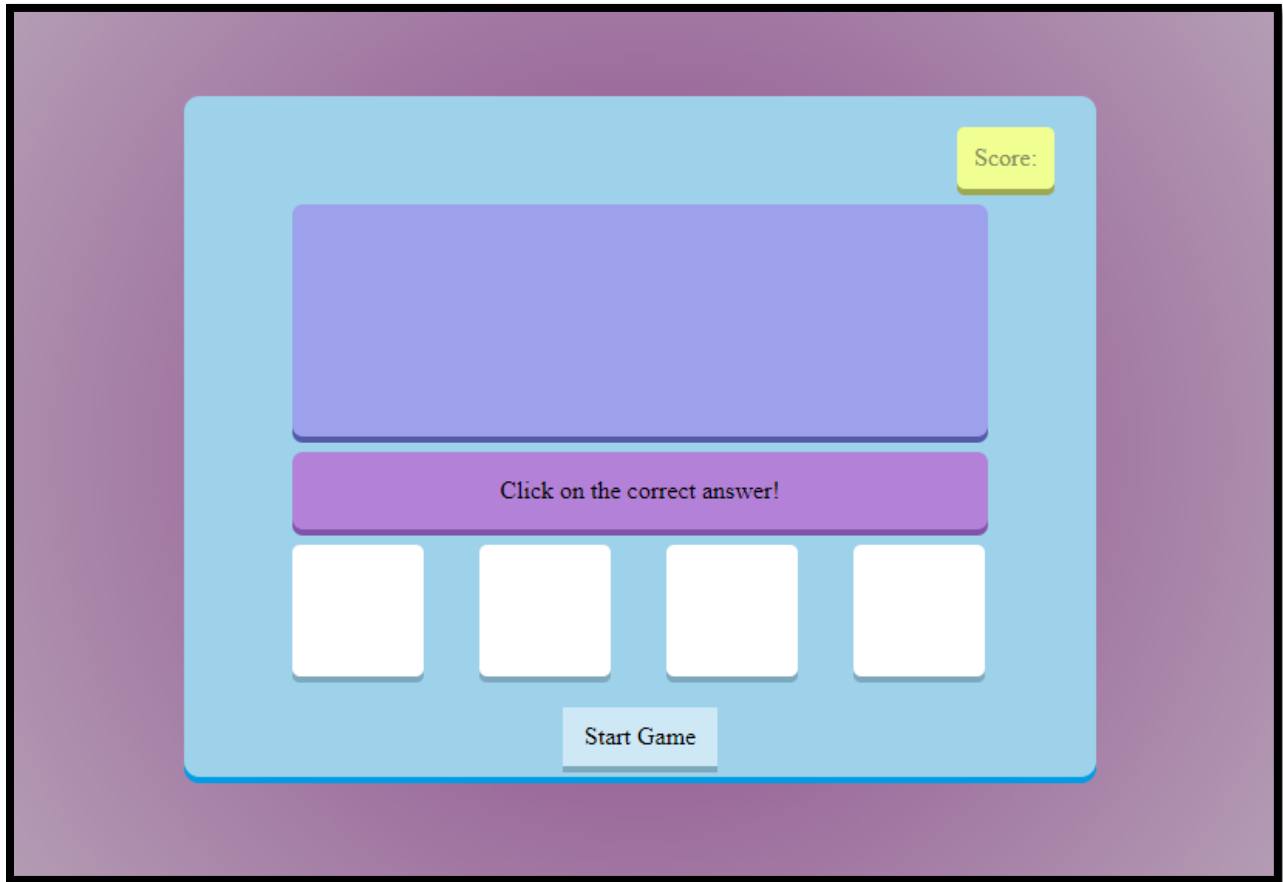
```

```

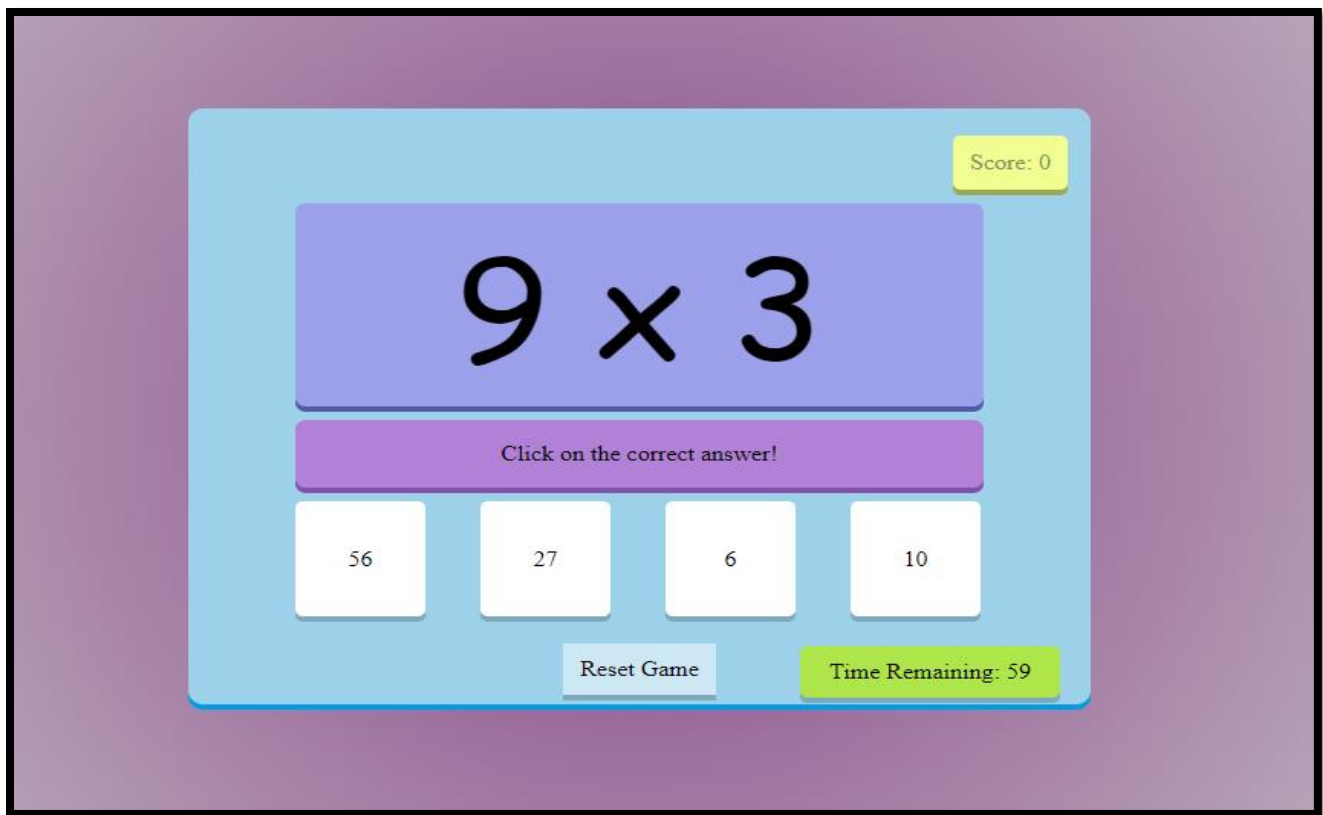
/* HELPER FUNCTIONS */
function setText(id, text) {
    document.getElementById(id).innerHTML = text;
}
function show(id) {
    document.getElementById(id).style.display = 'block';
}
function hide(id) {
    document.getElementById(id).style.display = 'none';
}

```

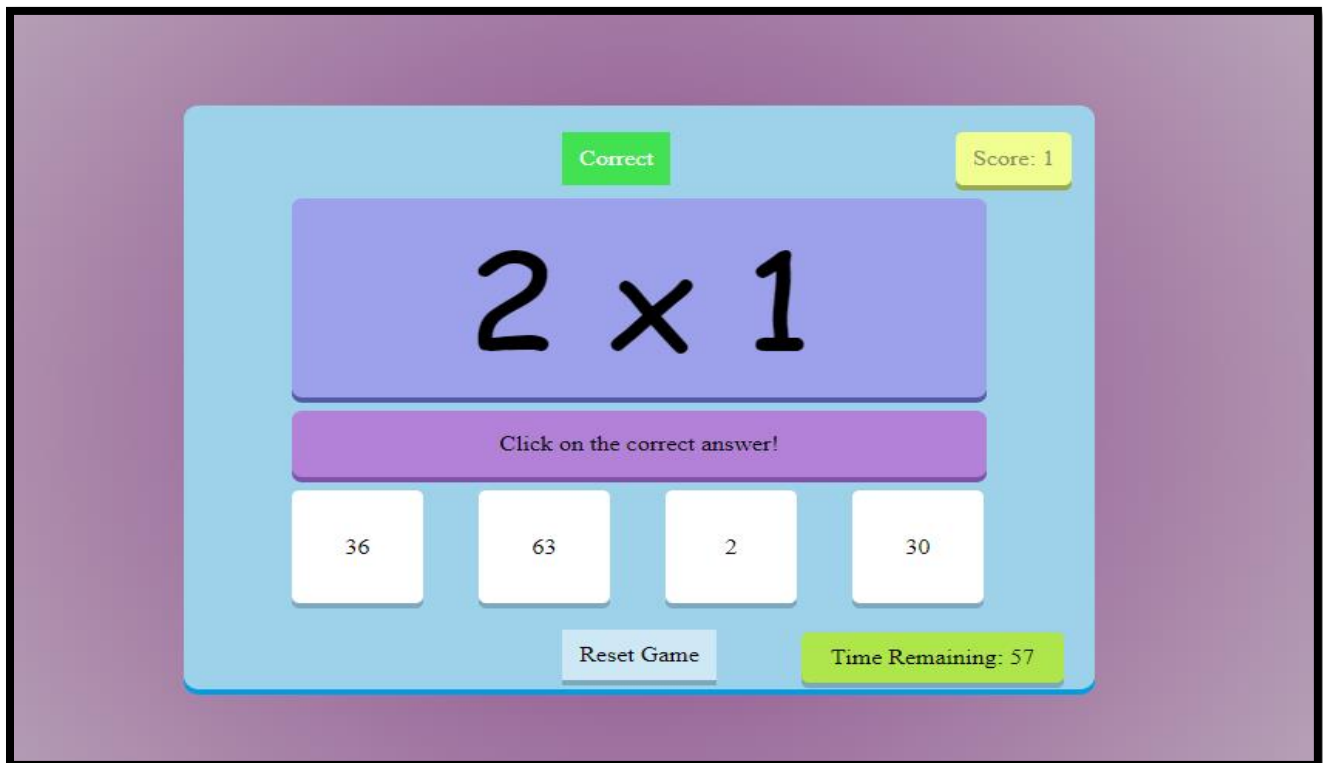
Screenshots :



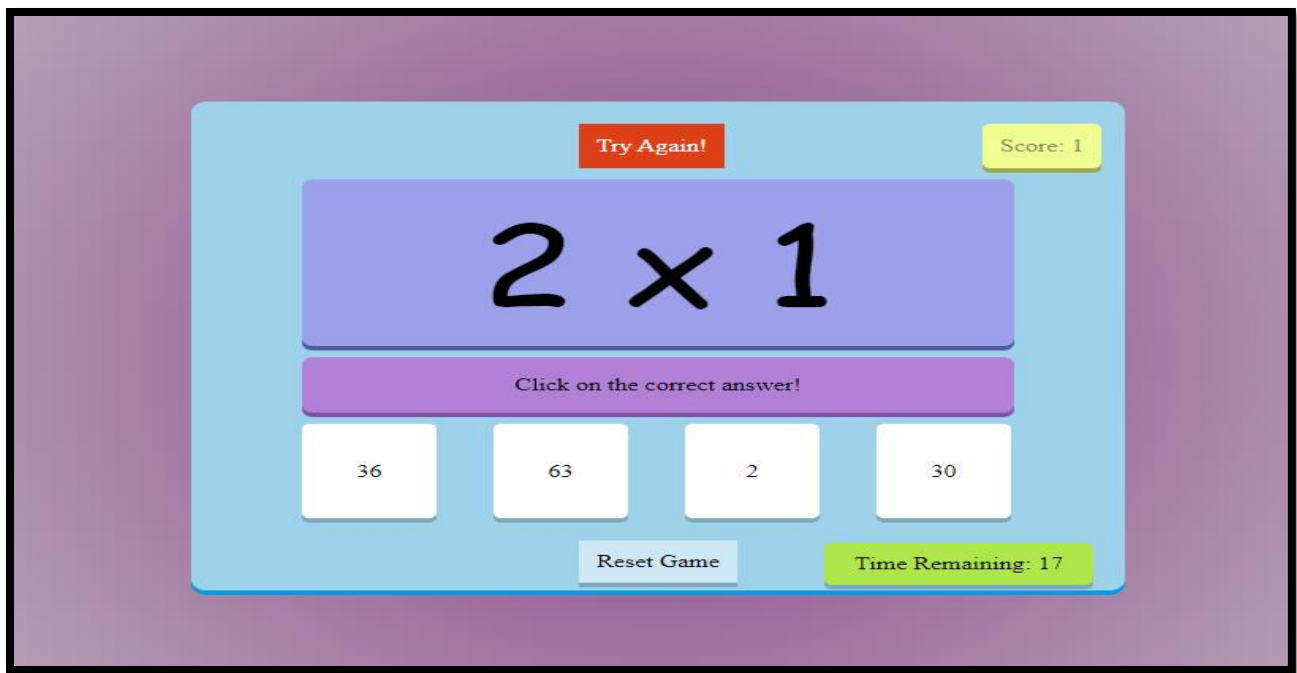
WHEN A QUESTION IS GENERATED:



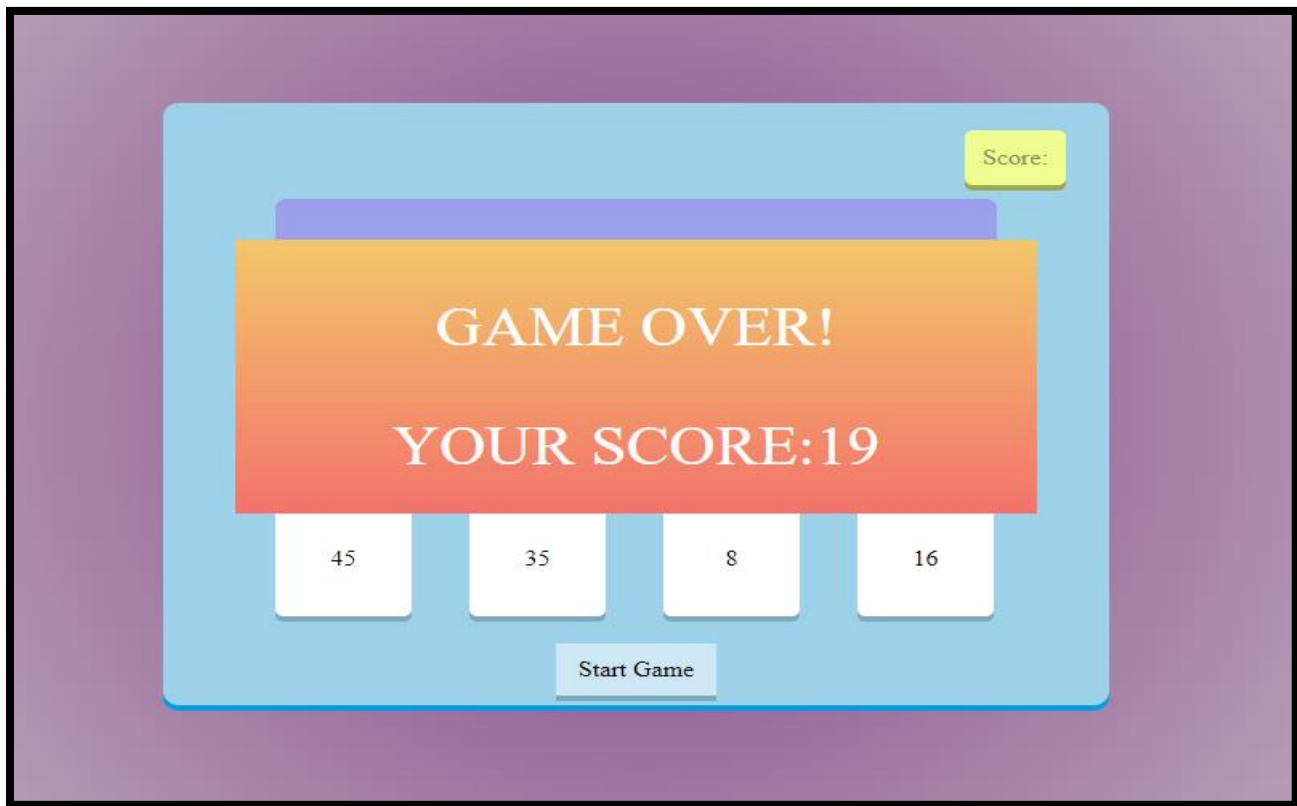
WHEN CORRECT ANSWER IS SELECTED:



WHEN AN INCORRECT ANSWER IS SELECTED:



WHEN TIMER STOPS AND FINAL SCORE IS DISPLAYED:



End Of Microproject...!!