

Project: Online Test Application.

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GitHub Link: [SwatiJajoriya/OnlineTestApplication \(github.com\)](https://github.com/SwatiJajoriya/OnlineTestApplication)

PROJECT DESCRIPTION:

Created the Online Test Application system that enables users to provide online tests, review them, and display the results.

System Details This system contains three main modules: Quiz, Review, and Result. The quiz section of the online test application accepts the questions in JSON format. The JSON file can be easily shared from the server in the pre-defined format. The application renders the test at the client-side. The “Review and display result” section allows users to declare the results immediately. You can simply call another JSON with the answers in it and evaluate and display the results immediately.

Run the Application in Visual Studio Code.

Home page will be displayed.

Home page contains list of quizzes that user can choose from. Based on User’s Choice, Quiz is rendered in the Client Side by fetching data from Quiz Server or JSON file with Questions and Answers. User can select option for a question. After completing the quiz, Users have the option to Check the Answers and Back to Quiz. Here user can see details of answered . After completing the quiz, User can submit the quiz where the Quiz Score is displayed on the Results page. User can see their responses are right or wrong through Color, Red will indicate Wrong answer whereas Green will indicate Correct Answer .

Technologies Used:

HTML5 CSS3 Bootstrap5 Angular JSON TypeScript VsCode(Editor)

Source Code of the Project:

#html file

```
<!DOCTYPE html>

<html lang="en">

<head>

    <title>Document</title>

<!-- css file link -->

<link rel="stylesheet" href="onlinequiz.css">

</head>

<body>

    <h1 id="title">Today's Quiz</h1>

<!-- quiz-container -->

    <div id="quiz-container">

        <!-- question container -->

        <div class="questions">

            <h2 id="question"></h2>

            <ol type="A">

                <li class="option"><span id="option0"
onclick="calcScore(this)"></span></li>

                <li class="option"><span id="option1"
onclick="calcScore(this)"></span></li>

                <li class="option"><span id="option2"
onclick="calcScore(this)"></span></li>

                <li class="option"><span id="option3"
onclick="calcScore(this)"></span></li>

            </ol>

        </div>

    </div>

</body>

</html>
```

```

        </ol>

        <h4 id="stat"></h4>

    </div>

    <div class="buttons">

        <button type="button" class="next">Next</button>

    </div>

</div>

<!-- scoreboard section -->

<div id="scoreboard">

    <h2 id="score-title">Your Score</h2>

    <h2 id="score"></h2>

    <button type="button" id="score-btn" onclick="backToQuiz()">Back to
Quiz</button>

    <button type="button" id="check-answer" onclick="checkAnswer()">Check
Answers</button>

</div>

<!-- answers section -->

<div id="answerBank">

    <h2>Answers :</h2>

    <ol type="1" id="answers">

        </ol>

        <button type="button" id="score-btn" onclick="backToQuiz()">Back
to Quiz</button>

    </div>

<!-- javascript file source -->

    <script src="onlinequiz.js"></script>

</body></html>

```

#CSS File

```
*{  
    margin: 0;  
    padding: 0;  
    box-sizing: border-box;  
}  
body{  
    font-family: sans-serif;  
    background: linear-gradient(115deg,  
aqua,rgba(202,102,211,0.5)),url(/quizbg.jpg);  
    background-size: cover;  
    background-position: center;  
    background-repeat: no-repeat;  
    height: 100vh;  
}  
img{  
    width: 5.5rem;  
    height: 5.2rem;  
    border-radius: 50%;  
}  
.img{  
    position: fixed;  
}  
#title{  
    text-align: center;  
    padding: 0.8rem 0;
```

```
    font-size: 3rem;
    color: rgb(49,70,7);
    background: rgba(105,224,90,0.55);
    font-family: Georgia, 'Times New Roman', Times, serif;
}
.questions{
    margin: 3rem auto;
    width: 90vw;
    padding: 2rem;
    background: rgba(0,255,221,0.45);
    cursor: default;
    border-radius: 1rem;
}
#question{
    margin-bottom: 1rem;
}
.option{
    margin-bottom: 0.5rem;
    font-size: 1.2rem;
    border-bottom: solid 0.1rem blue;
    width: 15rem;
    background: lightblue;
    border-radius: 1rem;
}
.option:hover{
    color: white;
}
ol{
    position: relative;
```

```
padding: 0 1.5rem;
color: rgb(1,73,73);
}
span{
display: block;
padding: 0.1rem 0.7rem;
border-radius: 1rem;
}
#answer{
margin-top: 2.5rem;
}
#stat{
margin-top: 1.5rem;
color: rgb(6,17,168);
}
.buttons{
text-align: center;
}
button{
padding: 0.2rem 1.5rem;
border: none;
outline: none;
font-size: 1.5rem;
border-radius: 1.5rem;
color: rgba(93,53,156,0.98);
background: rgba(161,177,19,0.82);
}
button:active{
background: lavender;
```

```
}  
  
#scoreboard,#answerBank{  
    width: 20rem;  
    background: rgba(230,230,250,0.77);  
    padding: 2rem;  
    text-align: center;  
    margin: auto;  
    position: relative;  
    top: 5rem;  
    display: none;  
}  
  
#score-title{  
    margin: 1rem 0;  
}  
  
#score-btn,#check-answer{  
    margin-top: 1rem;  
}  
  
#score{  
    font-size: 2.5rem;  
}  
  
#answerBank li{  
    text-align: left;  
    margin-bottom: 0.2rem;  
    font-size: larger;  
}  
  
#answers{  
    margin-top: 1rem;  
}
```

#JS File

//Question bank

```
var questionBank= [
  {
    question : 'Which language runs in a web browser?',
    option : ['Java','C','Python','JavaScript'],
    answer : 'JavaScript'
  },
  {
    question : 'What of the following is the default value of an instance variable?',
    option : ['Null', '0','Depends upon the type of variable','Not assigned'],
    answer : 'Depends upon the type of variable'
  },
  {
    question : 'What is the default value of Object variable?',
    option : ['Undefined','0','Null','Not defined'],
    answer : 'Null'
  },
  { question : 'What year was JavaScript launched?',
    option : ['1996','1995','1994','None of the above'],
    answer : '1995'
  },
  {question : 'Method Overriding is an example of?',
    option : ['Static Binding','Dynamic Binding','Both of the above','None of the above'],
    answer : 'Dynamic Binding'
  },
]
```



```

{
    question : 'What is the size of float variable?',
    option : ['8 bit','16 bit','32 bit','64 bit'],
    answer : '32 bit'
},
{
    question : 'What happens when thread sleep() method is called?',
    option : ['Thread returns to the ready state','Thread returns to the
waiting state','Thread starts running','None of the above'],
    answer : 'Thread returns to the waiting state'
},
{
    question : 'which operator is considered to be with highest precedence?',
    option : ['() []', '- =', '- ?', '- %'],
    answer : '() []'
}
]

var question= document.getElementById('question');
var quizContainer= document.getElementById('quiz-container');
var scorecard= document.getElementById('scorecard');
var option0= document.getElementById('option0');
var option1= document.getElementById('option1');
var option2= document.getElementById('option2');

```

```

var option3= document.getElementById('option3');
var next= document.querySelector('.next');
var points= document.getElementById('score');
var span= document.querySelectorAll('span');
var i=0;
var score= 0;
//function to display questions
function displayQuestion(){
    for(var a=0;a<span.length;a++){
        span[a].style.background='none';
    }
    question.innerHTML= 'Q.'+(i+1)+' '+questionBank[i].question;
    option0.innerHTML= questionBank[i].option[0];
    option1.innerHTML= questionBank[i].option[1];
    option2.innerHTML= questionBank[i].option[2];
    option3.innerHTML= questionBank[i].option[3];
    stat.innerHTML= "Question"+" "+(i+1)+" '+'of'+ ' "+questionBank.length;
}
//function to calculate scores
function calcScore(e){
    if(e.innerHTML===questionBank[i].answer && score<questionBank.length)
    {
        score= score+1;
        document.getElementById(e.id).style.background= 'limegreen';
    }
}

```

```
else{
    document.getElementById(e.id).style.background= 'tomato';
}
setTimeout(nextQuestion,300);
}
```

```
//function to display next question
```

```
function nextQuestion(){
    if(i<questionBank.length-1)
    {
        i=i+1;
        displayQuestion();
    }
    else{
        points.innerHTML= score+ '/' + questionBank.length;
        quizContainer.style.display= 'none';
        scoreboard.style.display= 'block'
    }
}
```

```
//click events to next button
```

```
next.addEventListener('click',nextQuestion);
```

```
//Back to Quiz button event
```

```
function backToQuiz(){  
    location.reload();  
}
```

```
//function to check Answers
```

```
function checkAnswer(){  
    var answerBank= document.getElementById( 'answerBank' );  
    var answers= document.getElementById( 'answers' );  
    answerBank.style.display= 'block';  
    scoreboard.style.display= 'none';  
    for(var a=0;a<questionBank.length;a++)  
    {  
        var list= document.createElement( 'li' );  
        list.innerHTML= questionBank[a].answer;  
        answers.appendChild(list);  
    }  
}
```

```
displayQuestion();
```