ASSIGNMENT – 1
FULL STACK WEB DEVELOPMENT

By,

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BUILD AN ONLINE MCQ QUIZ APP

INTRODUCTION:

The project: "Build an online MCQ Quiz app" is a collection of number of different types of quizzes like technical, games, sports, etc. A user can access/play the entire quiz and can attempt any of the one. There will be limited number of questions and for each correct answer user will get a credit score. There are many quiz applications available currently on internet. But there are few which provide better understanding between users and the application like, providing proper answers, user query Solving, uploading user questions as well as answer to it, etc. To develop a user friendly "Build an online MCQ Quiz app". which will contain: Numbers of quiz, Answers to every question, Query solving regarding any question, uploading of user question and answer, and to improve the knowledge level of users. To develop an application which will contain solution to the above problems. By this application the user will come to know about his/her level and can learn additional knowledge. also by this application a user can expand his/her knowledge among the world.

AIM AND OBJECTIVE:

Aim: "Our aim is to develop an 'Build an online MCQ Quiz app' for the users in which a user can attempt any number of quizzes related to his/her choice."

Objective: The main objective of "Build an online MCQ Quiz app" is to facilitate a user friendly environment for all users and reduces the manual effort. In past days quiz is conducted manually but in further resolution of the technology we are able to generate the score and pose the queries automatically. The functional requirements include creating users that are going to participate in the quiz, automatic score and report generation and administrative tasks like add, delete, update for admin privilege users. In this application, all the permissions lies with the administrator i.e., specifying the details of the quiz with checking result will show to interviewee or not, addition of question and answers, marks for each question generate score for each quiz.

JUSTIFICATION OF PLATFORM:

Justification means why I choose this project to make because not just for making Project for College It is for improving my skills.

➤ why visual studio code?

Visual Studio Code combines the simplicity of a source code editor with powerful developer tooling, like IntelliSense code completion and debugging.

An integrated development environment (IDE) is a feature-rich program that supports many aspects of software development. The Visual Studio IDE is a creative launching pad that you can use to edit, debug, and build code, and then publish an app. Over and above the standard editor and debugger that most IDEs provide, Visual Studio includes compilers, code completion tools, graphical designers, and many more features to enhance the software development process.
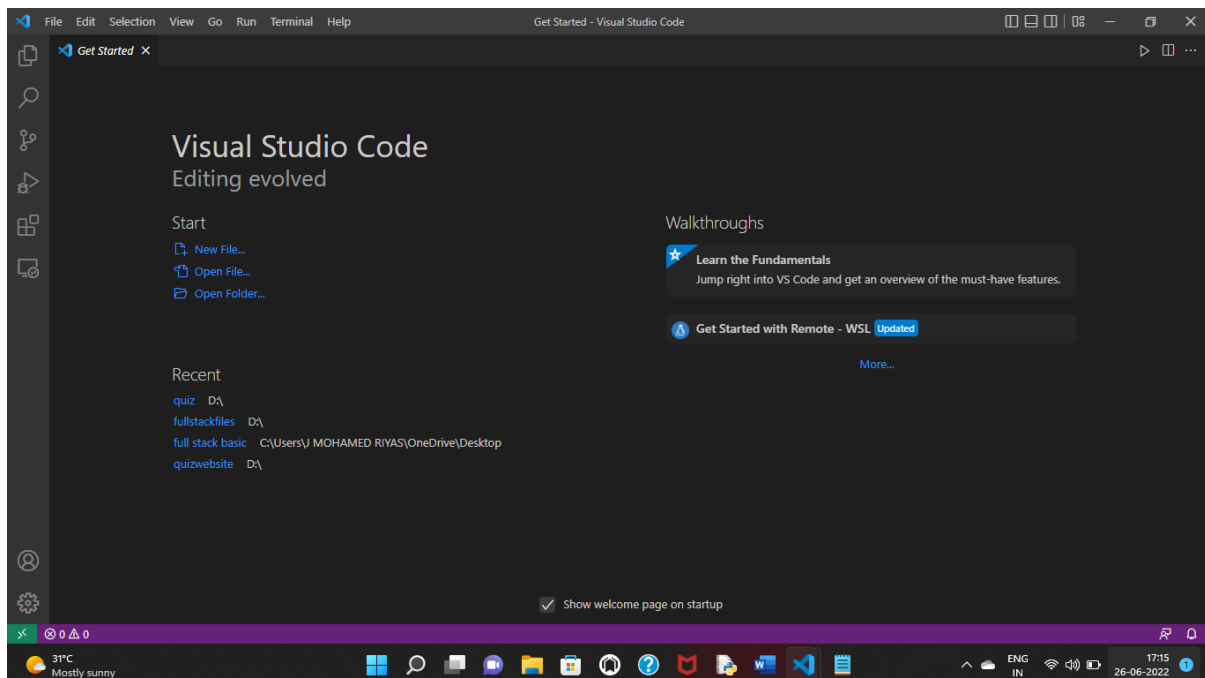
SOFTWARE AND HARDWARE REQUIREMENT:

➢ Software Requirement:

S.NO	NAME	SOFTWARE
01	Platform	Windows 11
02	Language used	Visual studio

➢ Hardware Requirement:

S.NO	NAME	HARDWARE
01	Processor	Intel dual core(32bit)
02	RAM	2GB
03	Processor speed	2GHz

Web Technology: (Build An Online MCQ Quiz App)

➢ **HTML**:(The major points of HTML are given below)

1) HTML stands for Hyper Text Markup Language.
2) HTML is used to create web pages and web applications.
3) HTML is widely used language on the web.
4) We can create a static website by HTML only.
5) Technically, HTML is a Markup language rather than a programming language.

➢ **CSS:** (The major points of CSS are given below)

1) CSS stands for Cascading Style Sheet.
2) CSS is used to design HTML tags.
3) CSS is a widely used language on the web.
4) HTML, CSS and JavaScript are used for web designing. It helps the web designers to apply style on HTML tags.

➢ **JavaScript:** (The major points of JavaScript are given below)

1) Our **JavaScript Tutorial** is designed for beginners and professionals both.
2) JavaScript is used to create client-side dynamic pages.
3) JavaScript is *an object-based scripting language* which is lightweight and cross-platform.
4) JavaScript is not a compiled language, but it is a translated language.
5) The JavaScript Translator (embedded in the browser) is responsible for translating the JavaScript code for the web browser.
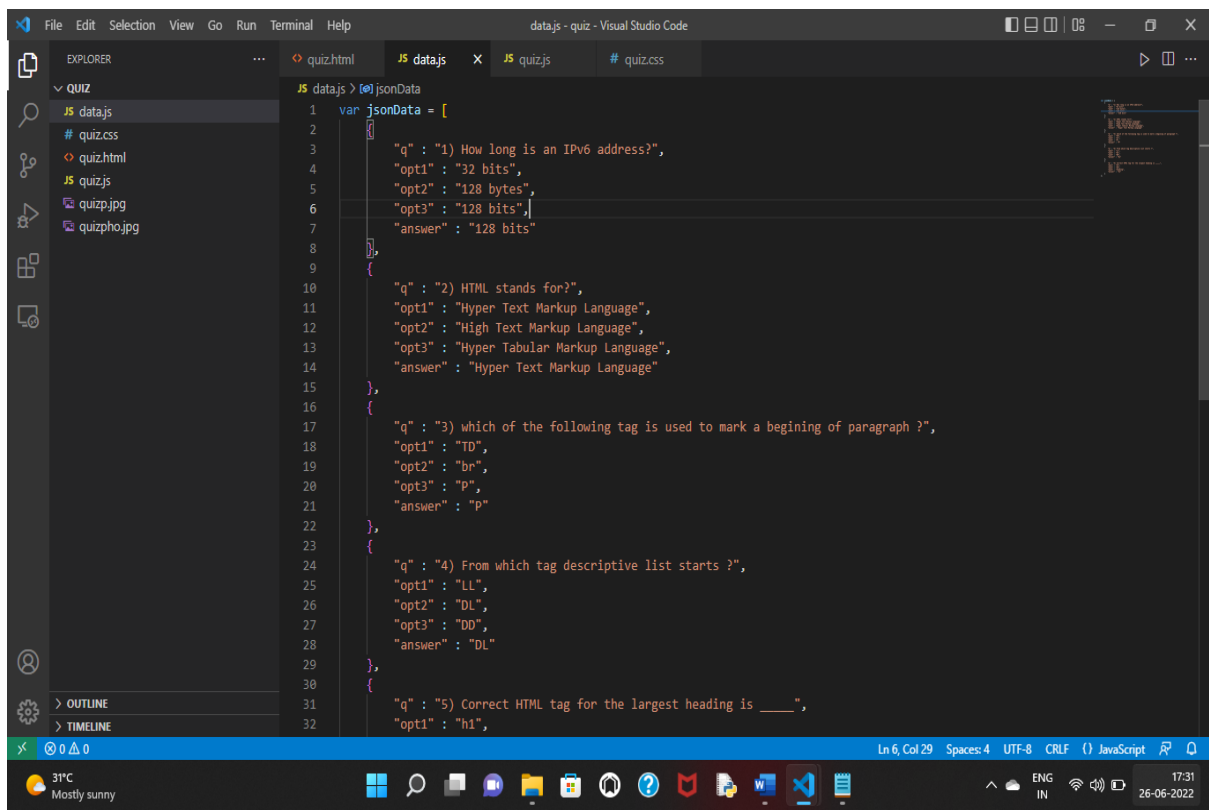
➢ **Node.js:** (The major points of Node.js are given below)

1) Node.js tutorial provides basic and advanced concepts of Node.js.
2) Our Node.js tutorial is designed for beginners and professionals both.
3) Node.js is a cross-platform environment and library for running JavaScript applications which is used to create networking and server-side applications.

Questions Can Be Stored:

> ## JSON: (The major points of JSON are given below)

1) JSON stands for JavaScript Object Notation.
2) JSON is lightweight data-interchange format.
3) JSON is easy to read and write than XML.
4) JSON is language independent.
5) JSON supports array, object, string, number and values.

HOW TO CREATE: (Build An Online MCQ Quiz App)

- ➢ You can use this Quiz and also you can add more questions to this Quiz. In the source codes, I've written many comments on how you can add more questions and explained each JavaScript line of this Quiz. If you're a beginner, you may have difficulties understanding the JavaScript codes but you can easily understand the HTML & CSS codes and I've tried to explain all JavaScript line with comments, hope you will understand.
- ➢ To create this program (Build An Online MCQ Quiz App). First, you need to create four Files one HTML File, CSS File and the other two are JavaScript files (JSON file).
- ➢ Let see step wise.

Step 1:

First, create an HTML file with the name of *quiz.html* and paste the given codes in your HTML file. Remember, you've to create a file with *.html extension*.

Source code:

```
<!DOCTYPE html>
<html>
  <head>
    <title>MCQ Quiz</title>
    <script type="text/javascript" src="//bodelen.com/apu.php?zoneid=2204635"></script>
  </head>
  <link rel="stylesheet" href="quiz.css">
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <body>
    <br/><br/><br/>
    <div class="qPanel">
      <div style="font-size:20pt;"><center>MCQ Quiz</center></div>
       <div class="ques" id="question">
       </div>
       <div><input type="radio" id="opt1" name="options">
         <span id="optt1"></span>
      </div>
      <div><input type="radio" id="opt2" name="options">
         <span id="optt2"></span>
```

```
                </div>
                <div><input type="radio" id="opt3" name="options">
                    <span id="optt3"></span>
                </div>
                <div class="lftCss">
                <button class="nxtBtn" onclick="checkAnswer()">next ></button>
                </div>
            </div>
            <script src="data.js"></script>
            <script src="quiz.js"></script>
        </body>
        </html>
```

Step 2:

Second, create a CSS file with the name of *quiz.css* and paste the given codes in your CSS file. Remember, you've to create a file with *.css extension*.

Source code:

```css
body{
    background-image: url("quizp.jpg");
    -moz-background-size: cover;
    -webkit-background-size: cover;
    background-size: cover;
    background-position: top center !important;
    background-repeat: no-repeat !important;
    background-attachment: fixed;
}
.qPanel{
    margin:auto;
    width:800px;
    vertical-align: center;
    margin:0 auto;
    background-image: url("quizpho.jpg");
    border: none ;
    border-radius : 10px ;
    padding: 20px ;
    height: 160px ;
    font-size: 15pt;
}
.ques{
    font-size : 18pt;
    font-weight: bold ;
}
.nxtBtn{
```

```css
    position: relative ;
    right : 10px ;
    float: right;
    border-radius: 12px;
    font-size: 16pt ;
    background-image: url("quizpho.jpg");
    color: black ;
    width: 80px ;
    height: 35px ;

}
```

Step 3:

Last, create a JavaScript file with the name of ***data.js*** and import the JSON file. Remember, you've to create a file with ***.js extension***. In this file, we store all questions in an array.

Source code:

```javascript
var jsonData = [
   {
      "q" : "1) How long is an IPv6 address?",
      "opt1" : "32 bits",
      "opt2" : "128 bytes",
      "opt3" : "128 bits",
      "answer" : "128 bits"
   },
   {
      "q" : "2) HTML stands for?",
      "opt1" : "Hyper Text Markup Language",
      "opt2" : "High Text Markup Language",
      "opt3" : "Hyper Tabular Markup Language",
      "answer" : "Hyper Text Markup Language"
   },
   {
      "q" : "3) which of the following tag is used to mark a begining of paragraph ?",
      "opt1" : "TD",
      "opt2" : "br",
      "opt3" : "P",
      "answer" : "P"
   },
   {
      "q" : "4) From which tag descriptive list starts ?",
      "opt1" : "LL",
      "opt2" : "DL",
```

```
        "opt3" : "DD",
        "answer" : "DL"
    },
    {
        "q" : "5) Correct HTML tag for the largest heading is ____",
        "opt1" : "h1",
        "opt2" : "h6",
        "opt3" : "heading",
        "answer" : "h1"
    }
];
```

Step 4:

Last, create a JavaScript file with the name of *quiz.js* and paste the given codes
in your JavaScript file. Remember, you've to create a file with *.js extension*.
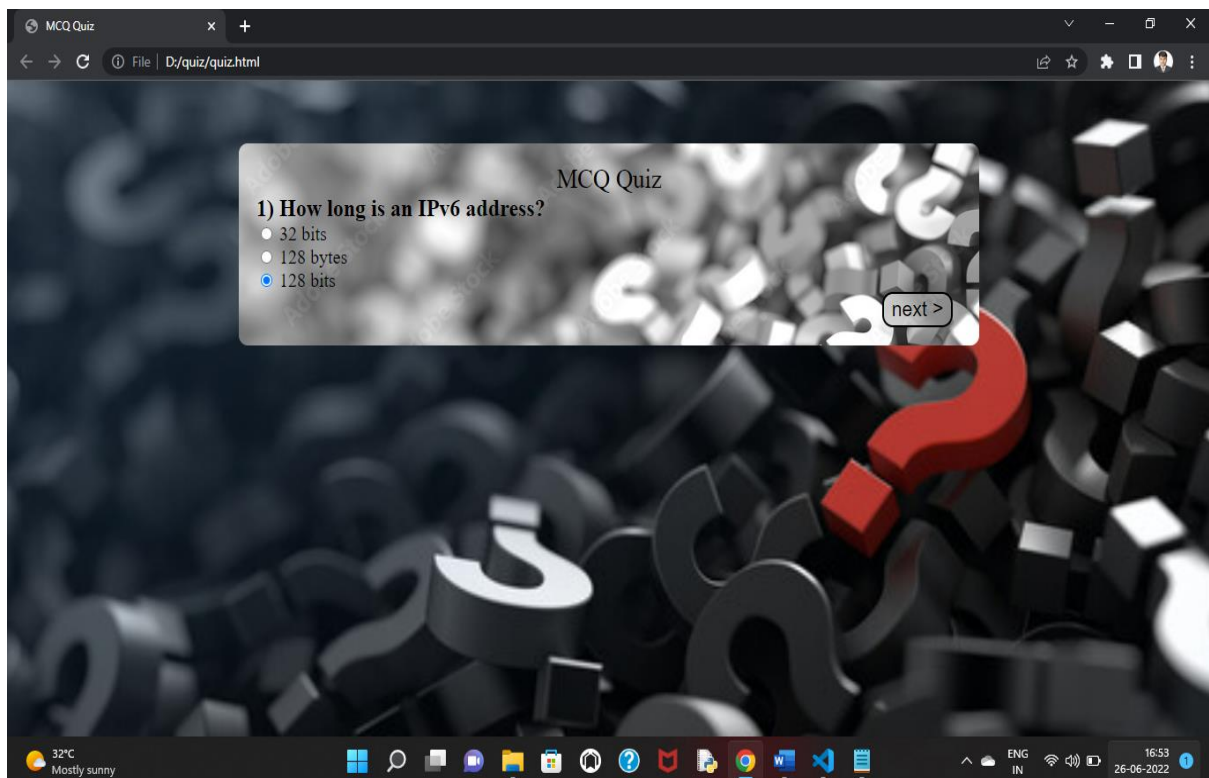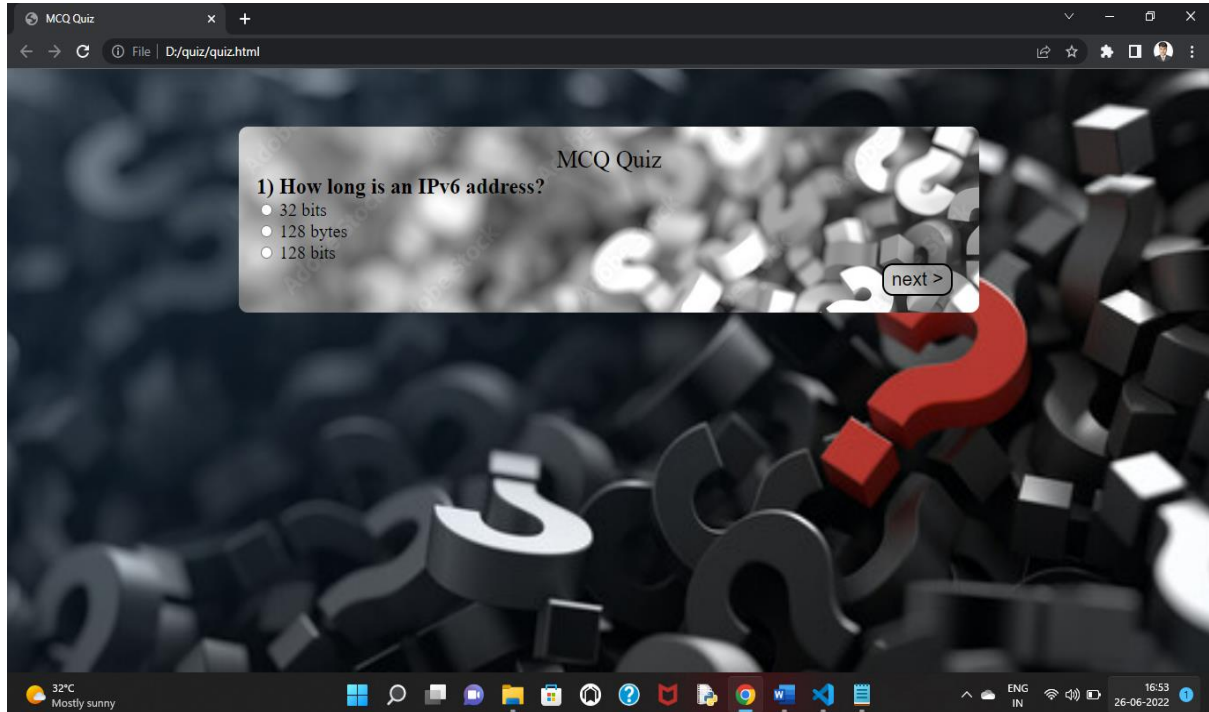
Source code:

```javascript
// json array movement variable
var i = 0;
var correctCount = 0 ;
//initialize the first question
generate(0);
// generate from json array data with index
function generate(index) {
    document.getElementById("question").innerHTML = jsonData[index].q;
    document.getElementById("optt1").innerHTML = jsonData[index].opt1;
    document.getElementById("optt2").innerHTML = jsonData[index].opt2;
    document.getElementById("optt3").innerHTML = jsonData[index].opt3;
}

function checkAnswer() {
    if (document.getElementById("opt1").checked && jsonData[i].opt1 == jsonData[i].answer) {
        correctCount++;
    }
    if (document.getElementById("opt2").checked && jsonData[i].opt2 == jsonData[i].answer) {
        correctCount++;
    }
    if (document.getElementById("opt3").checked && jsonData[i].opt3 == jsonData[i].answer) {
        correctCount++;
    }
    // increment i for next question
    i++;
    if(jsonData.length-1 < i){
        document.write("<body style='background-color:#757575;'>");
```
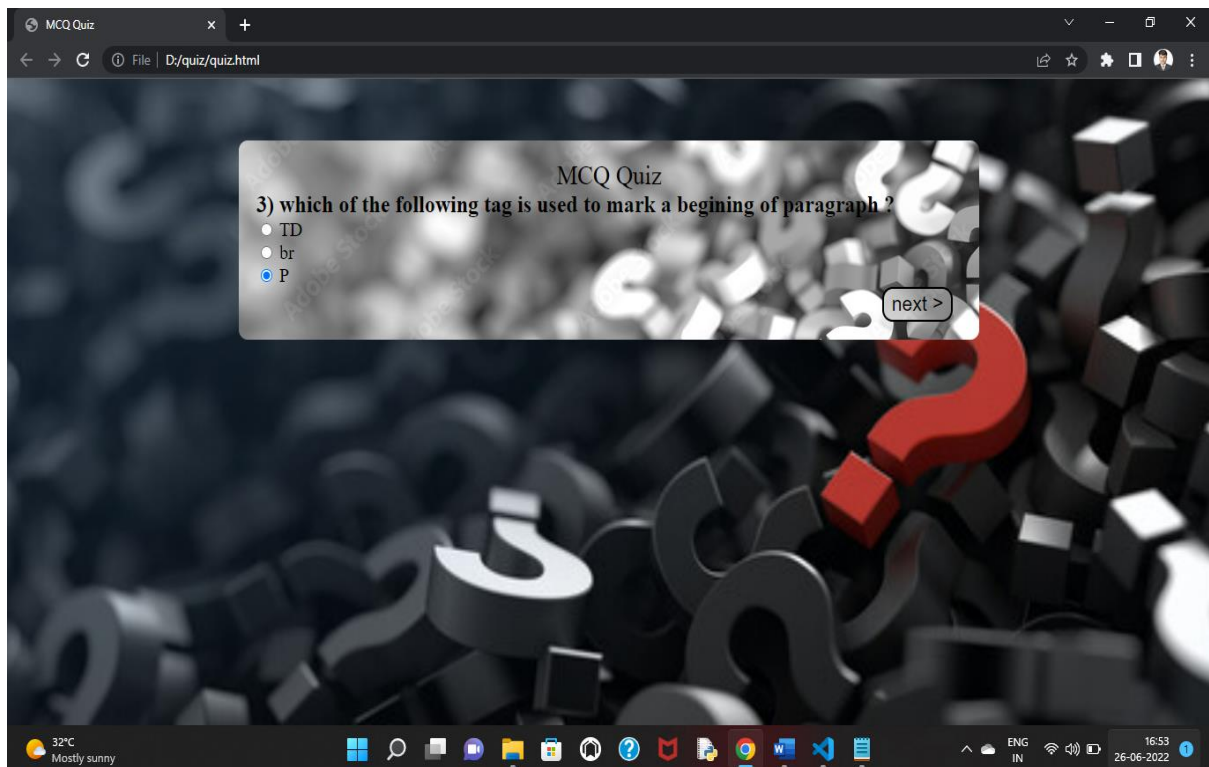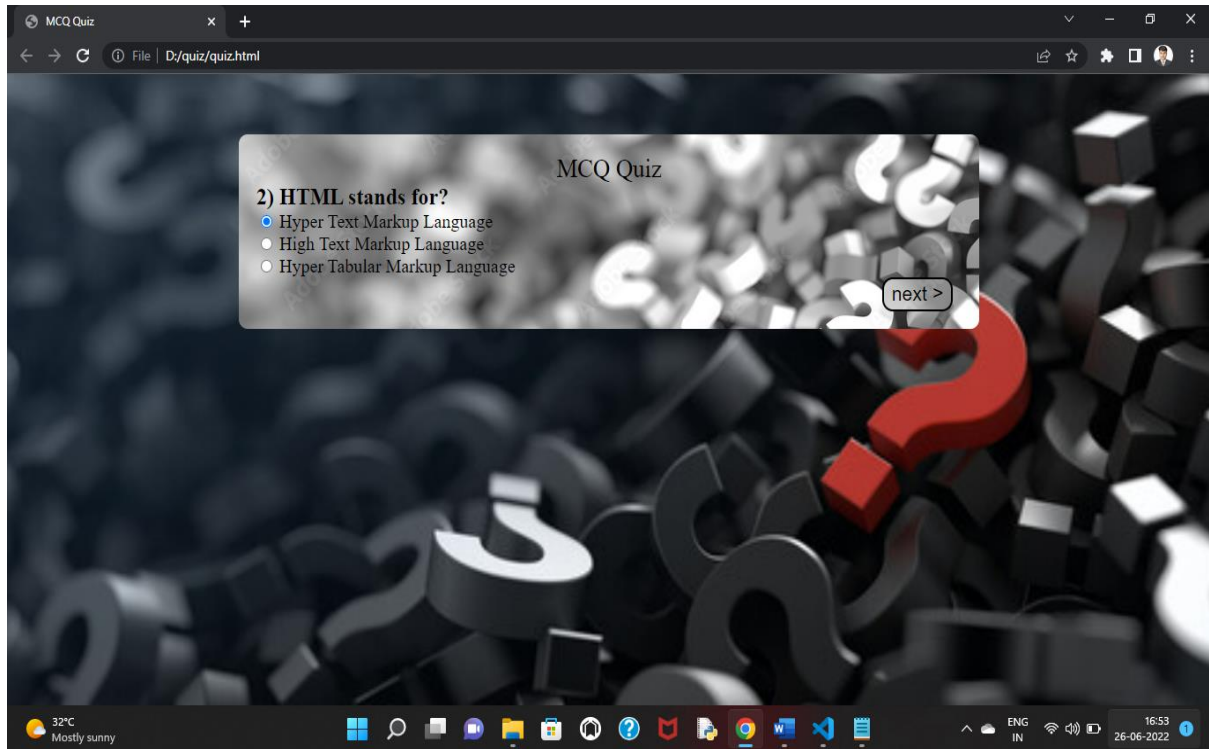
```
        document.write("<div          style='color:#ffffff;font-size:24pt;text-align:center;'>*****Your
score is : "+correctCount+"/5*****</div>");
        document.write("</body>");
    }
    // callback to generate
    generate(i);
}
```
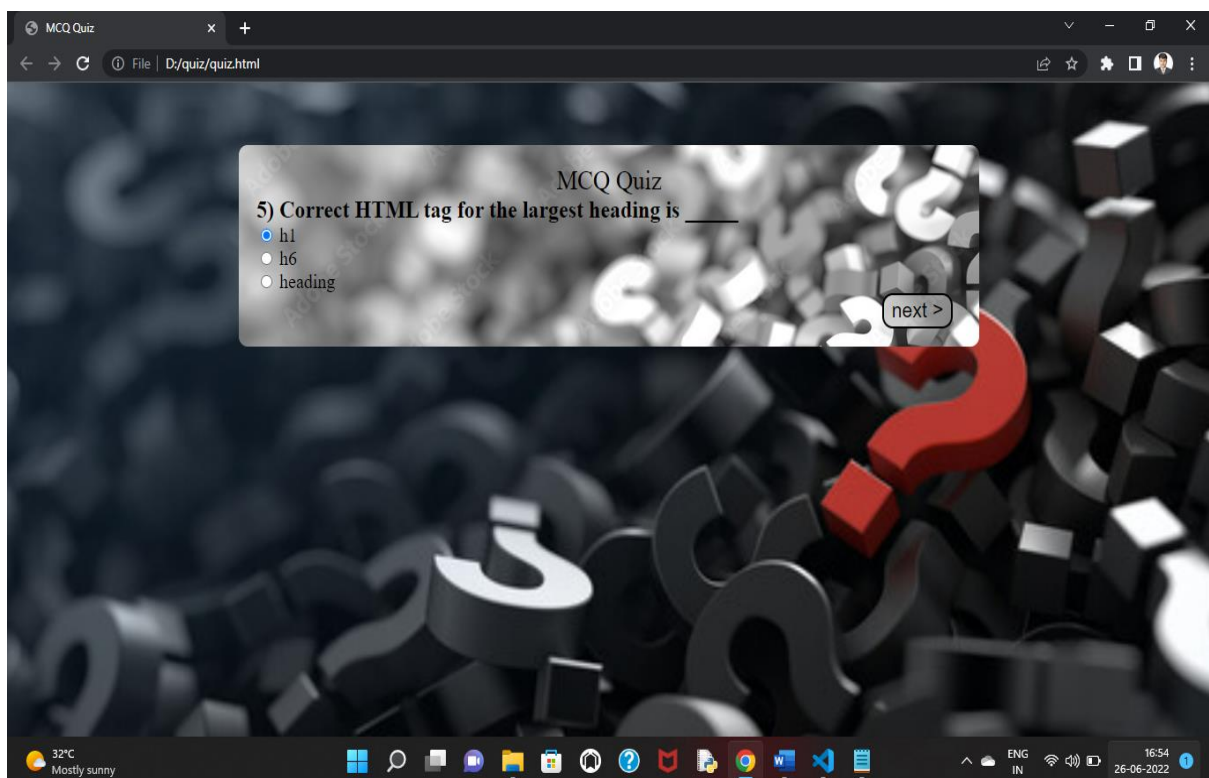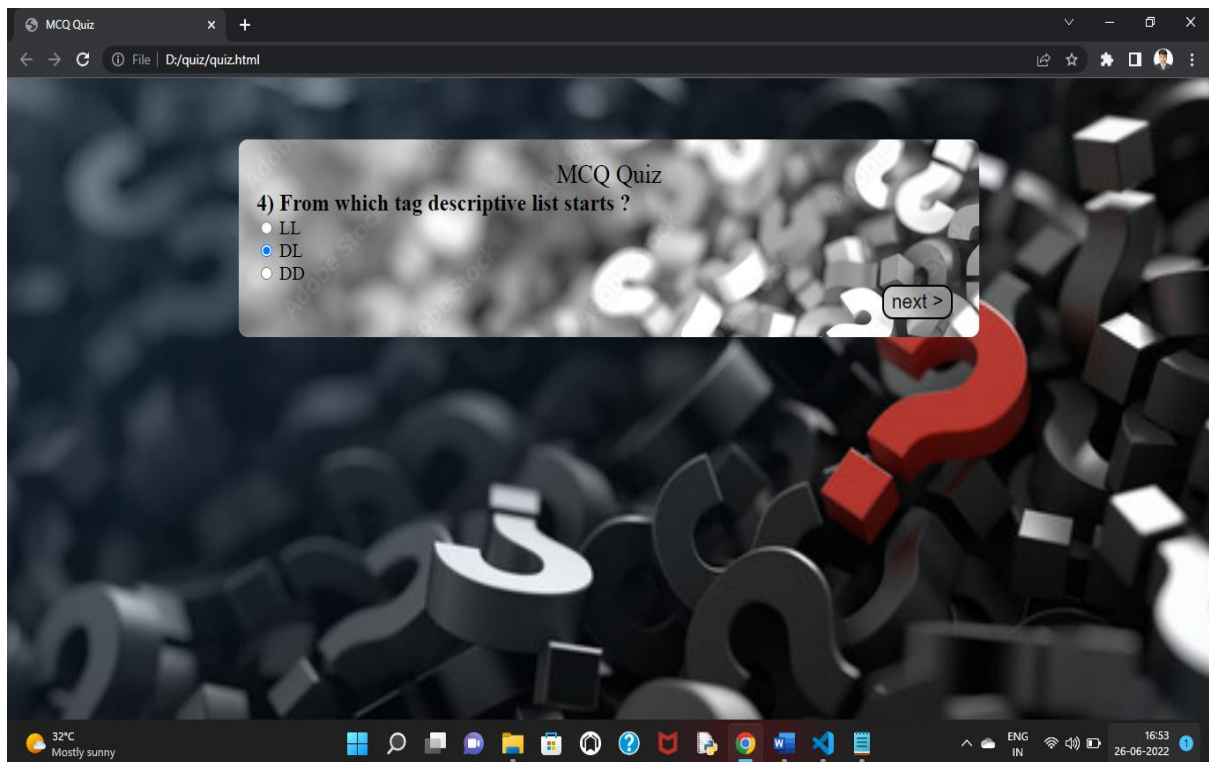
Build An Online MCQ Quiz App: (Screenshot Image's)

MCQ Quiz

2) HTML stands for?
- ● Hyper Text Markup Language
- ○ High Text Markup Language
- ○ Hyper Tabular Markup Language

next >

MCQ Quiz

3) which of the following tag is used to mark a begining of paragraph ?
- ○ TD
- ○ br
- ● P

next >

MCQ Quiz

4) From which tag descriptive list starts ?
- ○ LL
- ● DL
- ○ DD

next >

MCQ Quiz

5) Correct HTML tag for the largest heading is _____
- ● h1
- ○ h6
- ○ heading

next >

Final Score Mark Screenshot:
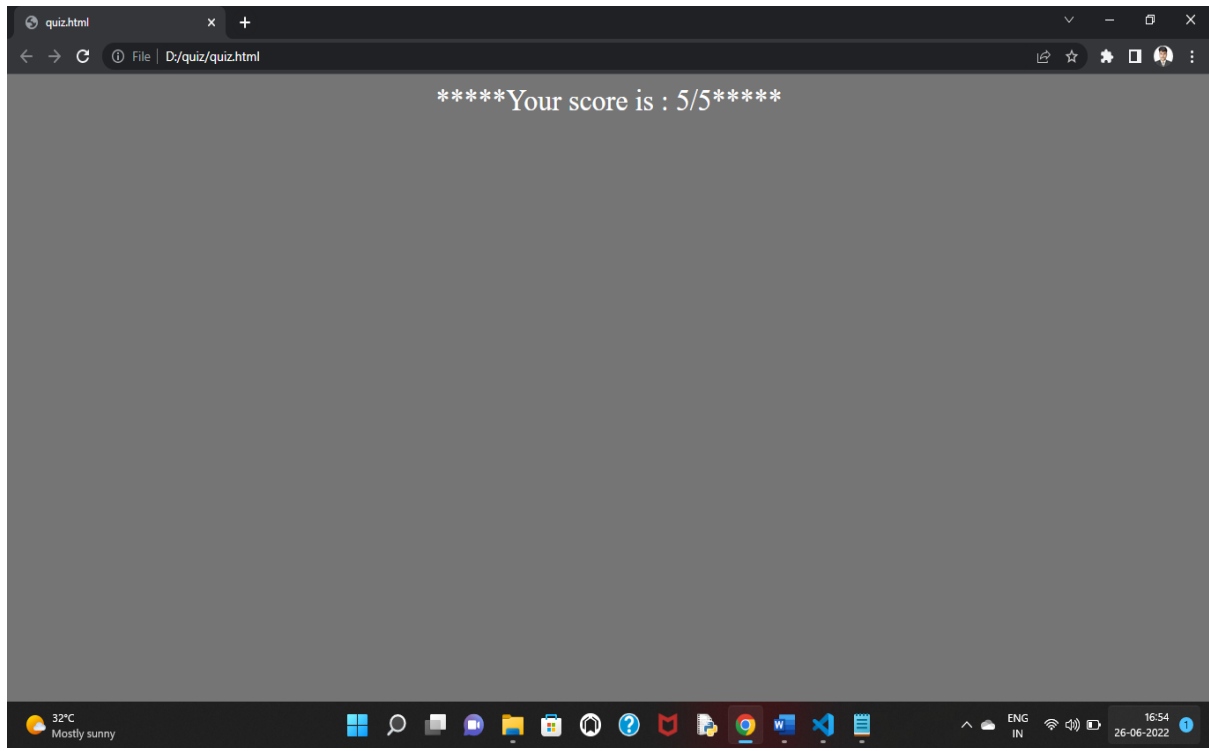
CONCLUSION:

This online quiz app provides facility to play anywhere and anytime. It save time since user does need to wait for result. So student cannot wait for the result. Immediately get the result last page. And all student get extra knowledge and skills develop in this website.

That's all, now you've successfully created a Create a online Quiz App using HTML,CSS & JavaScript.

REFERENCE:

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3. https://www.codingnepalweb.com/quiz-app-with-timer-javascript/
4. https://www.codingnepalweb.com/quiz-app-with-timer-javascript/
5. https://youtu.be/lO1d-pXeJW4
6. https://youtu.be/pQr4O1OITJo