MINOR PROJECT REPORT

ON

QUIZ-WHIZ

Submitted in partial fulfilment for the award of the degree of

BACHELOR OF COMPUTER APPLICATION

Submitted by: Isha Banka   Roll No.: 2211834040014

UNDER GUIDANCE OF

MRS. PARUL RASTOGI

MODERN GIRLS' COLLEGE OF PROFESSIONAL STUDIES

DEPARTMENT OF COMPUTER SCIENCE

UNIVERSITY OF LUCKNOW

SESSION: 2022-25

<u>CERTIFICATE</u>

This is to certify that project entitled **Quiz–Whiz** has been developed by Isha Banka under the supervision of Mrs. Parul Rastogi in partial fulfilment for the award of degree in Bachelor of Computer Applications (BCA) for the session 2023-2025.

(Signature)
Mrs. PARUL RASTOGI
Project Coordinator
Modern Girls' College of Professional Studies
Lucknow

<u>ACKNOWLEDGEMENT</u>

I would like to express my special thanks of gratitude to my supervisor **Mrs. Parul Rastogi**, as well as our faculty member **Mr. Neeraj Saxena** and **Mrs. Nilesh Khare** , who helped me in completing this project.

I am extremely grateful to my family and my friends who gave me valuable suggestions and guidance for completing my project. This cooperation and healthy criticism came handy and useful with them.

Hence, I would like to thank all the above mentioned people once again.

Thank You!

ISHA BANKA
BCA Sem V
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TABLE OF CONTENT

1. <u>INTRODUCTION</u>

The "Quiz Whiz" web app is designed to provide users with an interactive platform to participate in quizzes on various topics. The app allows users to test their knowledge, compete with others, and track their progress. The platform is accessible via web browsers, making it available across different devices without the need for installation.

2. <u>OBJECTIVE</u>

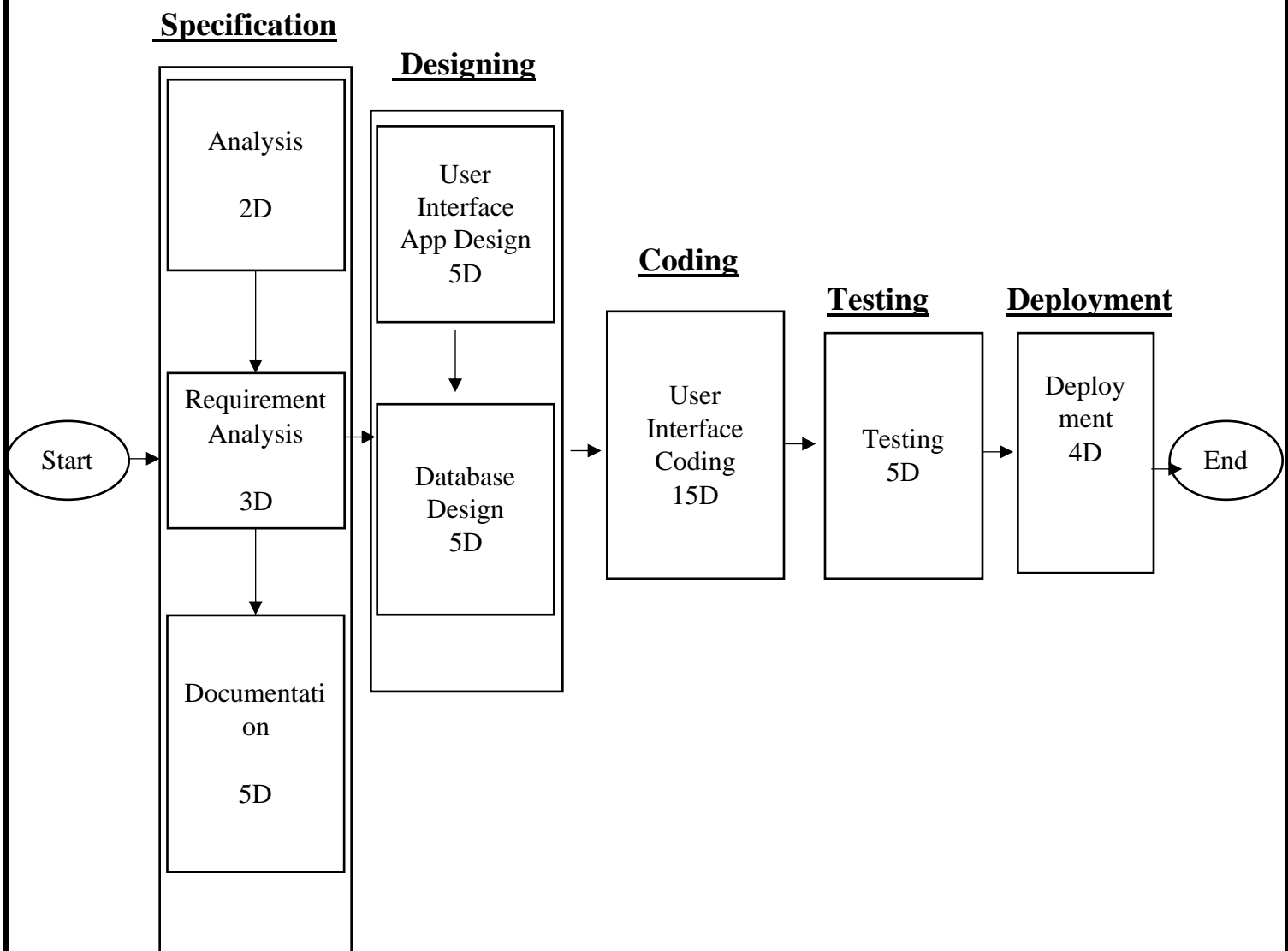The main objectives of the "Quiz Whiz" web app are:
- To provide a user-friendly platform for quiz enthusiasts.
- To allow users to create and share quizzes.
- To offer real-time results and analytics to improve learning.
- To foster a community of learners through competitive quizzes.
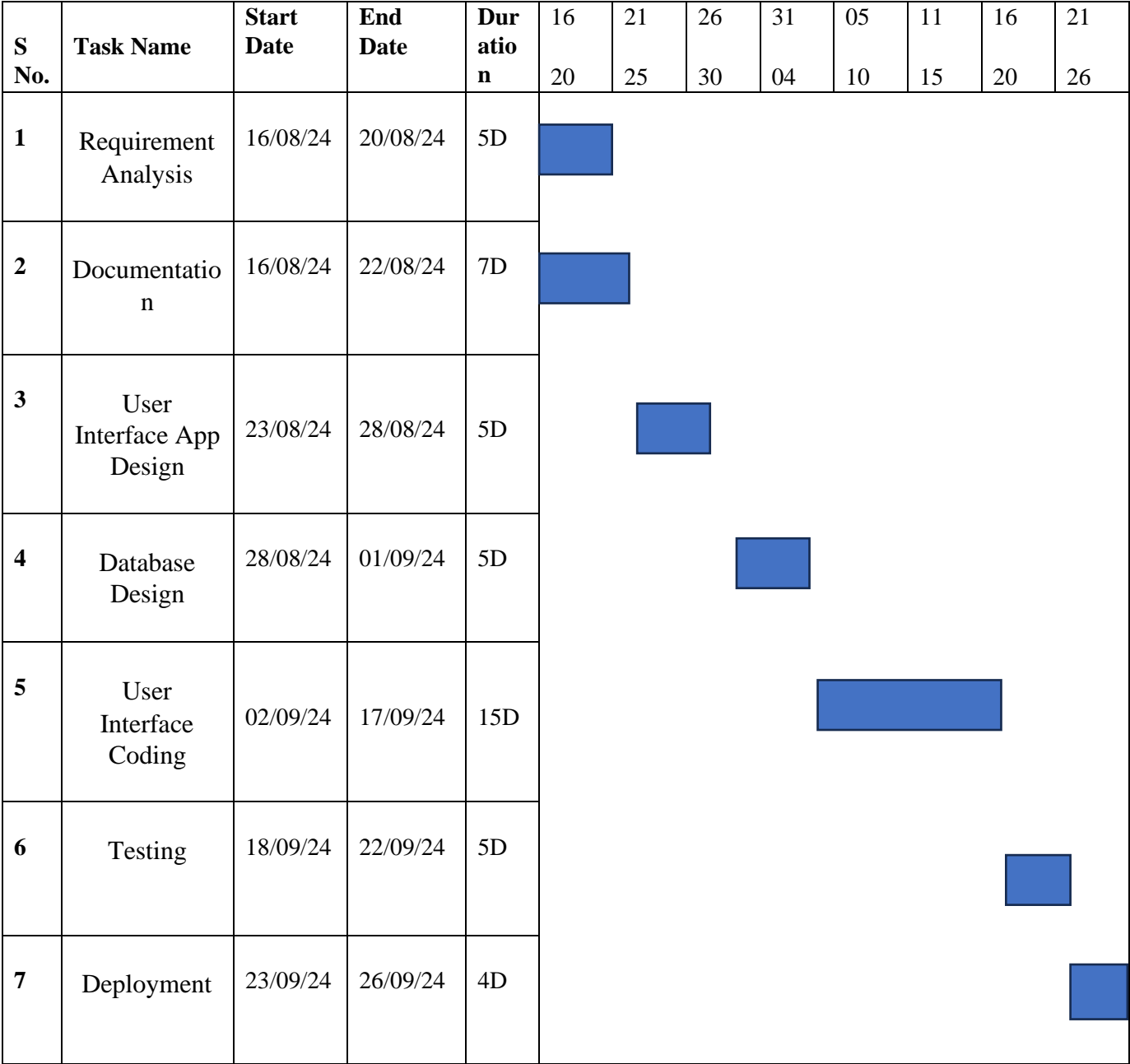
3. <u>Project Planning</u>

Software project planning is a task that is carried out in advance of the start of software creation. It is there to support software creation, but it doesn't actually entail any specific tasks that are directly related to it; rather, it consists of a number of procedures that make software production easier. Two important tools are used in project planning-

▪ Activity chart
▪ Gantt chat

3.1 <u>ACTIVITY CHART</u>

<u>Specification</u>

<u>Designing</u>

<u>Coding</u>

<u>Testing</u> <u>Deployment</u>

Analysis

2D

User
Interface
App Design
5D

Requirement
Analysis

3D

Database
Design
5D

User
Interface
Coding
15D

Testing
5D

Deploy
ment
4D

Start

End

Documentati
on

5D

3.2 GANTT CHART

S No.	Task Name	Start Date	End Date	Duration	16 20	21 25	26 30	31 04	05 10	11 15	16 20	21 26
1	Requirement Analysis	16/08/24	20/08/24	5D	▮							
2	Documentation	16/08/24	22/08/24	7D	▮							
3	User Interface App Design	23/08/24	28/08/24	5D		▮						
4	Database Design	28/08/24	01/09/24	5D			▮					
5	User Interface Coding	02/09/24	17/09/24	15D					▮			
6	Testing	18/09/24	22/09/24	5D							▮	
7	Deployment	23/09/24	26/09/24	4D								▮

4. <u>System Analysis</u>

System Analysis " the process of studying a procedure or business to identify its goal and purposes and create systems and procedures that will efficiently achieve them". Another view sees system analysis as work and interact to accomplish their purpose. The terms analysis and synthesis stems from Greek, meaning to "to take part" and "to put together", respectively. These terms are used in many scientific disciplines, from mathematics and logic to economics and psychology, to denote similar investigative procedures.

Software Engineering Paradigm Applied-WATERFALL MODEL

System analysis "the process of studying a procedure or business to identify its goal and create systems and procedures that will efficiently achieve them". Another view sees system analysis as work and interact to accomplish their purpose. The terms analysis and synthesis stems from Greek, meaning to "to take part" and "to put together", respectively. These terms are used in many scientific disciplines, from mathematics and logic to economics and psychology, to denote similar investigative procedures. The system is defined as the "the procedure by which we break down an intellectual or substantial whole into parts," while synthesis means "the procedure by which we combine separate elements or components to form a coherent whole."

4.1 Sequential Phases in the WATERFALL MODEL

Requirement Gathering and Analysis- All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.

System Design- The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture**.**
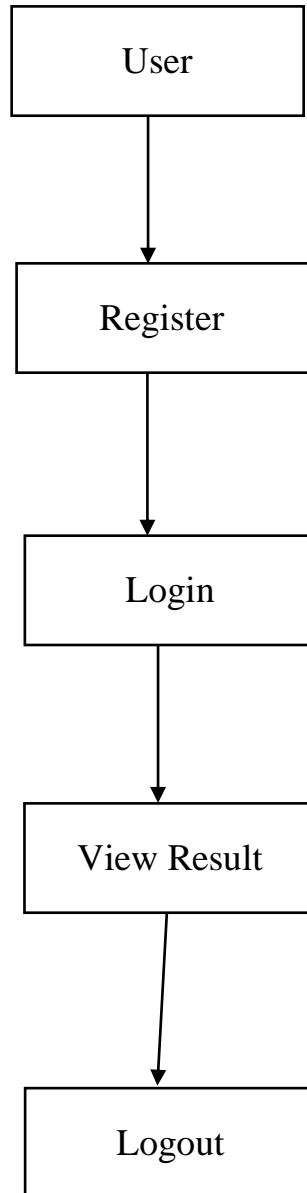
Implementation- With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.

Integration and Testing- All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
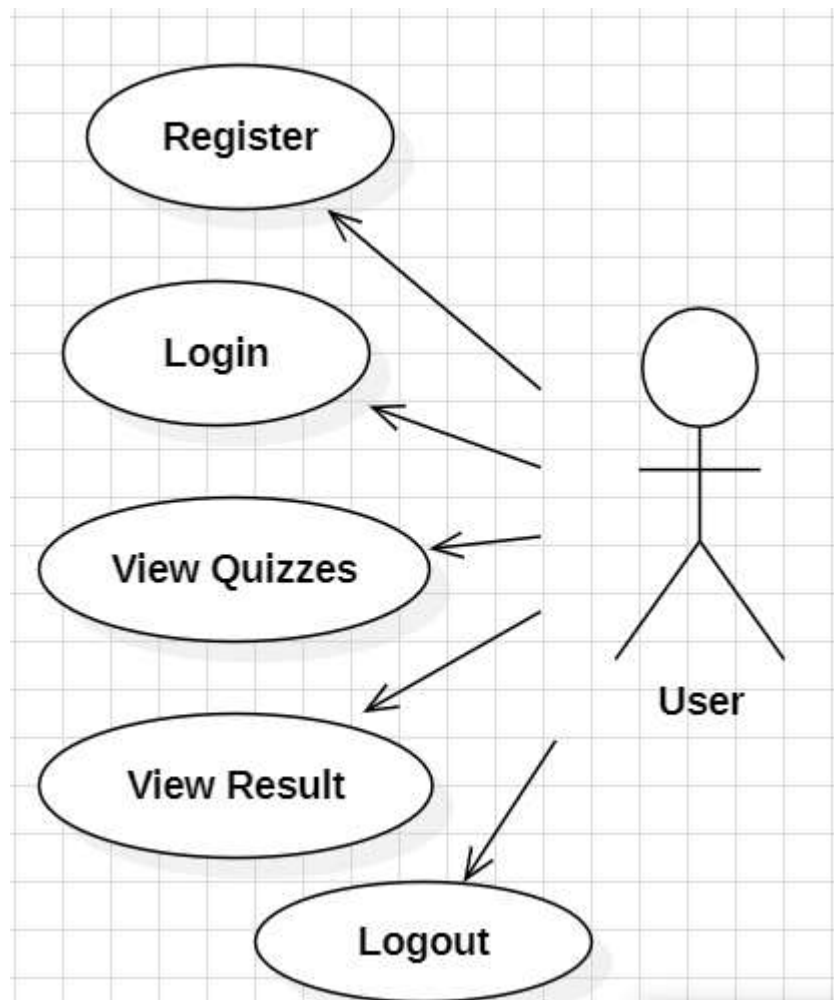
Deployment of System- Once the functional and non-functional testing is done ; the product is deployed in the customer environment or released into the market.

Maintenance- Maintenance is the most important phase of as oft ware lifecycle. The effort Spent in maintenance is the 60% of the total efforts to develop a full software.
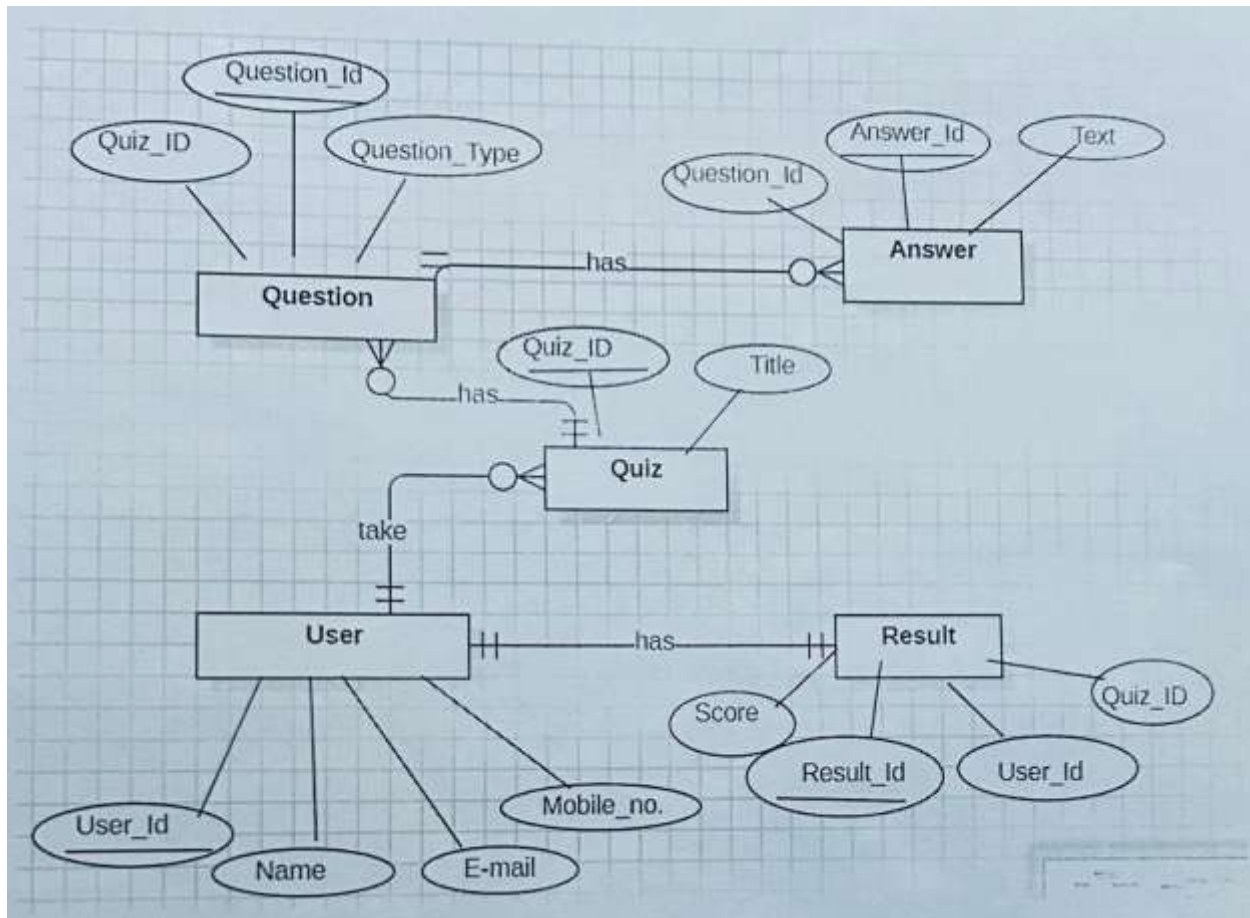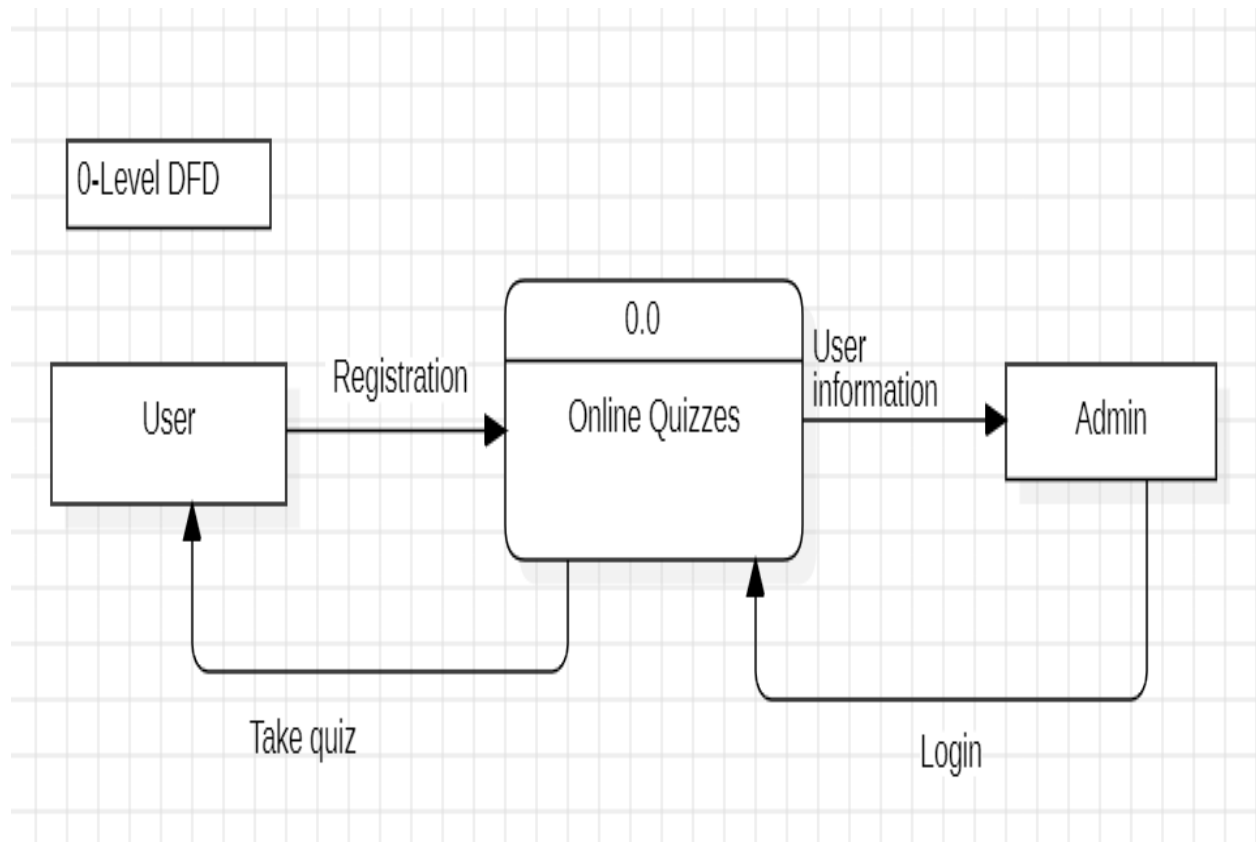
4.2 Control Flow Diagram

```
        ┌──────────────┐
        │     User     │
        └──────────────┘
                │
                ▼
        ┌──────────────┐
        │   Register   │
        └──────────────┘
                │
                ▼
        ┌──────────────┐
        │    Login     │
        └──────────────┘
                │
                ▼
        ┌──────────────┐
        │ View Result  │
        └──────────────┘
                │
                ▼
        ┌──────────────┐
        │    Logout    │
        └──────────────┘
```

4.3 USE CASE

4.4 E-R Diagram

4.5 Data Flow Diagram

0-Level DFD

4.6 Software Requirement Specification

Software Specification:

Processor	Intel CORE i5
RAM	8GB
SSD	512GB

Hardware Specification:

Operating System	Window 11
Frontend	HTML,CSS
Backend	JavaScript
Database	SQL
Deployment	GitHub

5. User Interface Design

Fig 1. Home Page

OPERATING SYSTEMS

DEMO   OS_1   OS_2   OS_3

COMPUTER NETWORKING

DEMO   CN_1   CN_2   CN_3

Contact Developer at Isha Banka
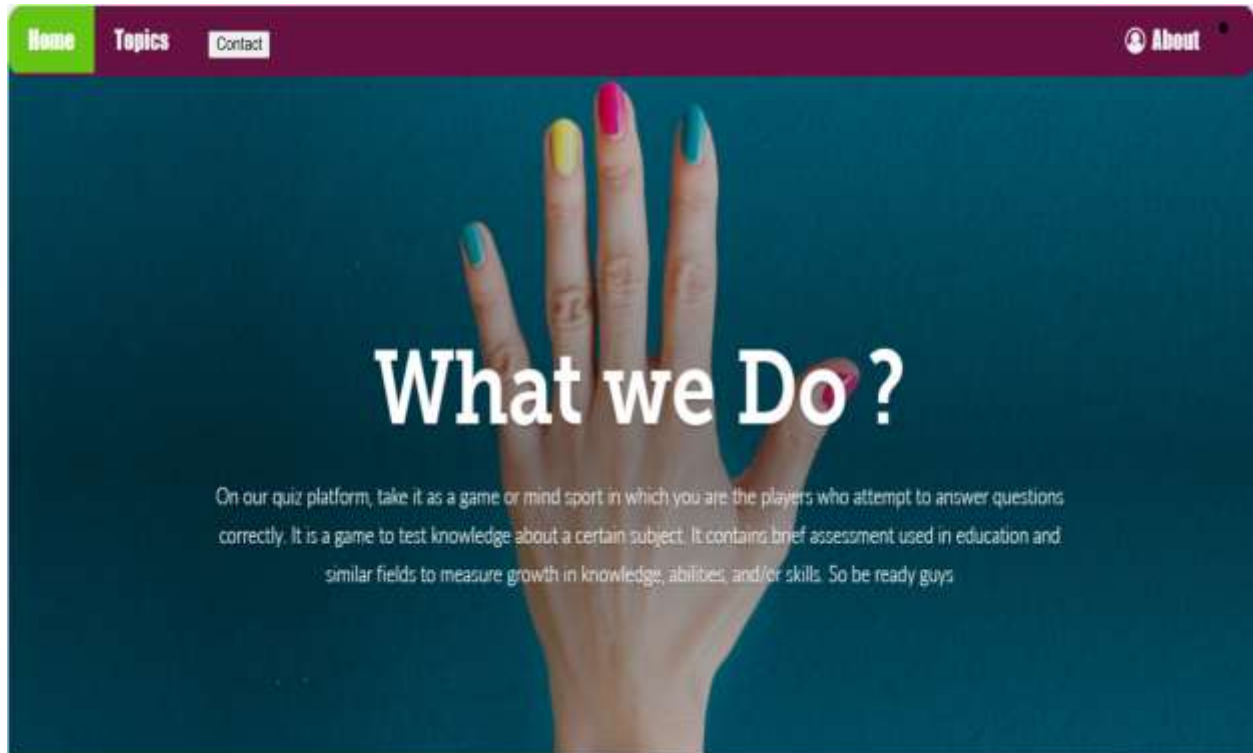
Back to Home page   Online Quiz - test your knowledge

Fig 2. Quiz Page

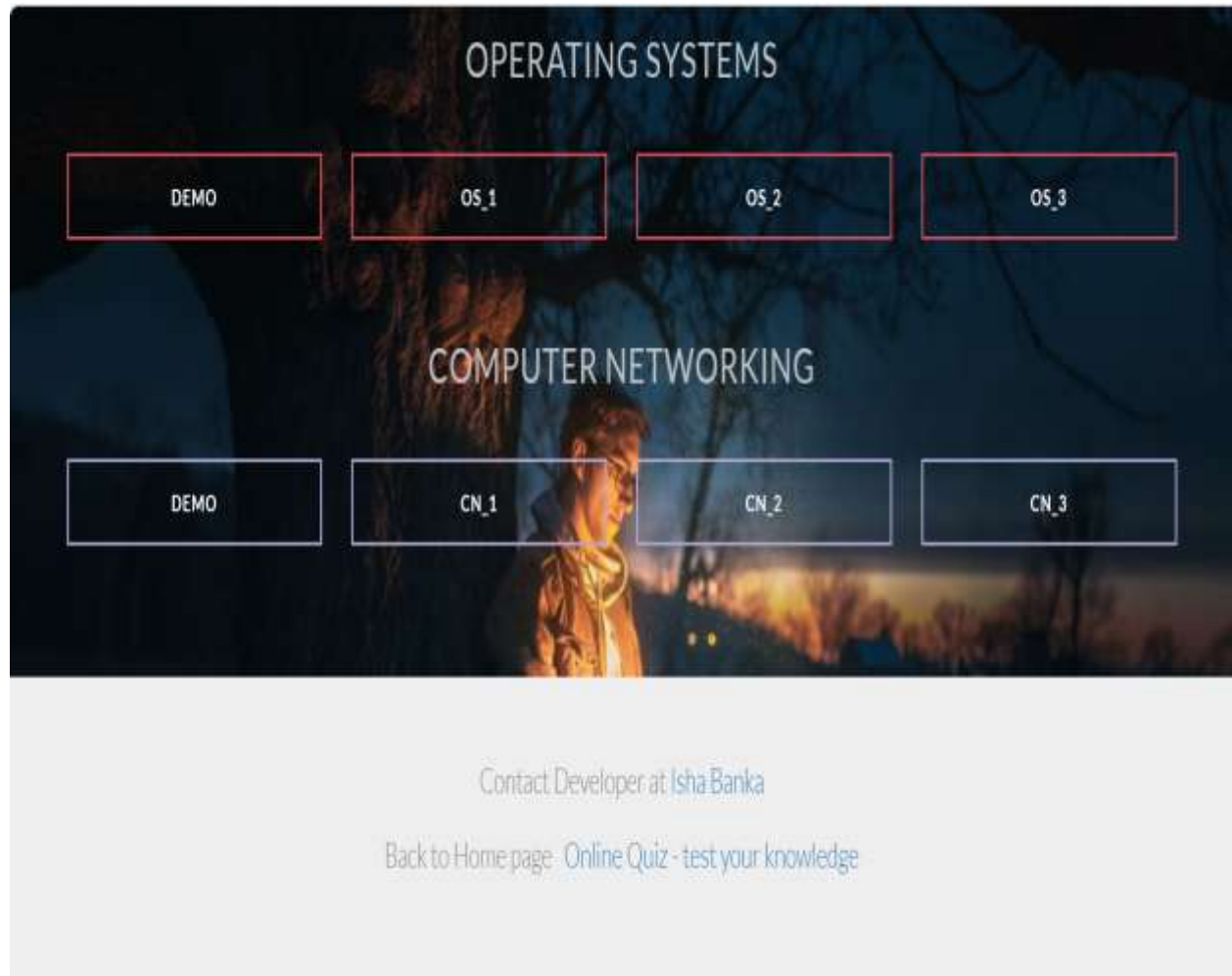**Fig 3. Quiz Page**

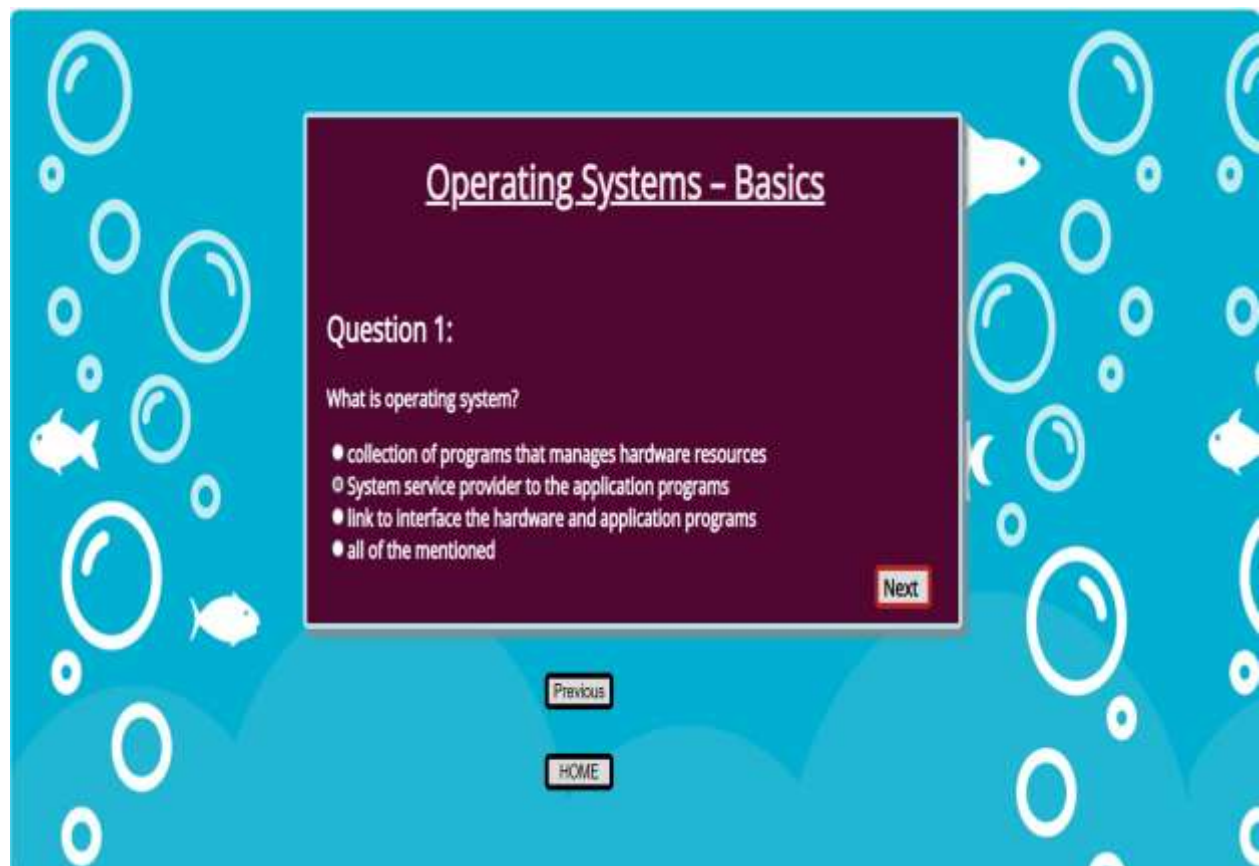**Fig 4. Result Page**

Fig 5. Demo Page

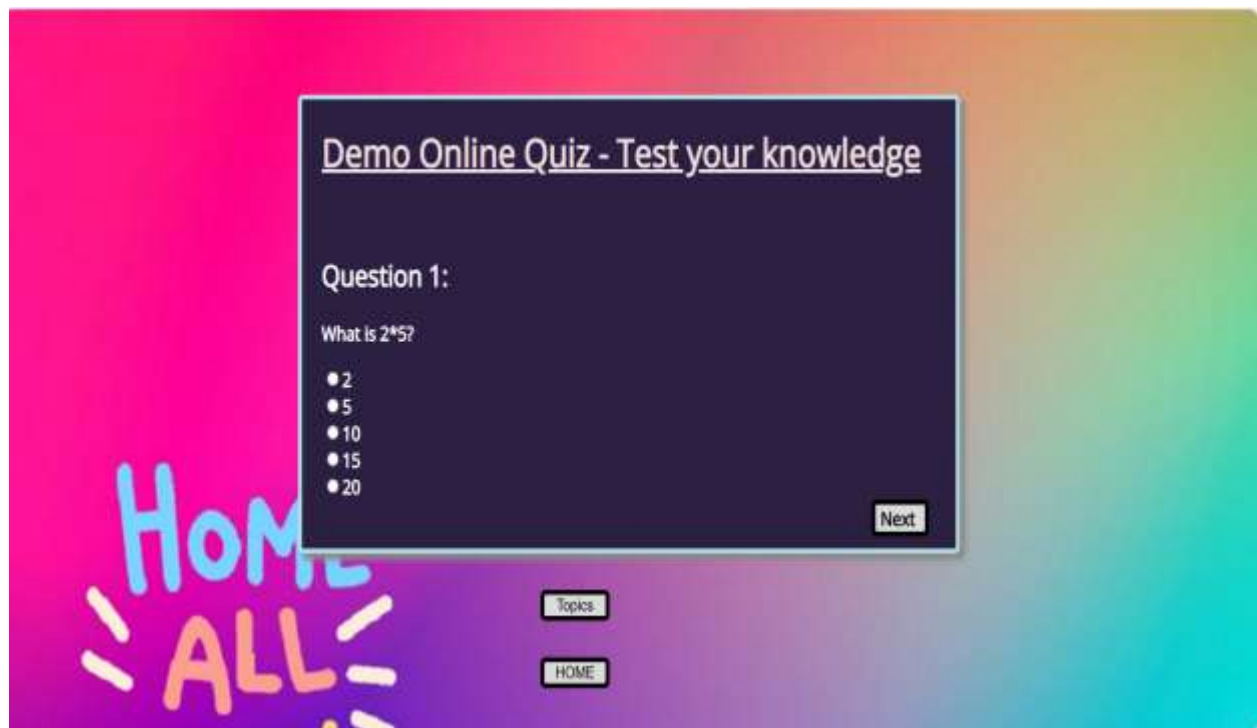# 6. Coding

Demo.html

```html
<!DOCTYPE html>
<html>
  <head>
    <style>
        body {
   font-family: Open Sans;
}

h1 {
   text-align: center;
}

#title {
   text-decoration: underline;
}

#quiz {
   text-indent: 10px;
   display:none;
}

.button {
   border:4px solid;
   border-radius:5px;
   width: 40px;
   padding-left:5px;
   padding-right: 5px;
   position: relative;
   float:right;
   background-color: #DCDCDC;
   color: black;
   margin: 0 2px 0 2px;
}

.button.active {
   background-color: #F8F8FF;
```

```css
    color: #525252;
}

button {
    position: relative;
    float:right;
}

.button a {
    text-decoration: none;
    color: black;
}

#container {
    margin-top: 70px;
    margin-left: 290px;
    width:50%;
    /* margin:auto; */
    padding: 0 25px 40px 10px;
    background-color: #2b1f42;
    border:4px solid #B0E0E6;
    border-radius:5px;
    color: #FFFFFF;
    font-weight: bold;
    box-shadow: 5px 5px 5px #888;
}

ul {
    list-style-type: none;
    padding: 0;
    margin: 0;
}

#prev {
    display:none;
}

#start {
    display:none;
    width: 90px;
}
.home_button{
    border:4px solid;
```

```css
    border-radius:5px;
    width: 70px;
    padding-left:5px;
    padding-right: 5px;
    position: relative;
    float:right;
    background-color: #DCDCDC;
    color: black;
    margin: 30px 650px 0 ;
}
.home_button a{
    text-decoration: none;
    color: black;
}
body{
    background-color: khaki;
    background-image: url(images/4bg.jpg);
}
    </style>

    <title>Demo_Quiz</title>
    <link type='text/css' rel='stylesheet' href='stylesheet.css'/>
    <link rel="stylesheet" type="text/css" href="https://fonts.googleapis.com/css?family=Open
Sans"/>
    <link rel="icon" href="images/1_quiz logo.jpg" type="image/icon type">
  </head>
  <body>
    <div id='container'>
      <div id='title'>
         <h1 style="color:rgb(240, 223, 223);">Demo Online Quiz - Test your
knowledge</h1>
      </div>
      <br/>
      <div id='quiz'></div>
      <div class='button' id='next'><a href='#'>Next</a></div>
      <div class='button' id='prev'><a href='#'>Prev</a></div>
      <div class='button' id='start'> <a href='#'>Start Over</a></div>
      <!-- <button class='' id='next'>Next</a></button>
      <button class='' id='prev'>Prev</a></button>
      <button class='' id='start'> Start Over</a></button> -->
    </div>
```

```html
    <span><button class="home_button"><a
href="1topics.html">Topics</a></button></span>  <button class="home_button"><a
href="index.html">HOME</a></button>

    <script type='text/javascript'
src='https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js'></script>
    <script type="text/javascript" src='questions.json'></script>
    <script type='text/javascript' src='demo.js'></script>
  </body>
</html>
```

```javascript
import '../styles/App.css';
import { createBrowserRouter, RouterProvider } from 'react-router-dom'

import Main from './main';
import Quiz from './quiz';
import Result from './result';
import { CheckUserExist } from '../helper/helper';

const router = createBrowserRouter(
  [
    {
     path :'/',
     element : <Main></Main>
    },
    {
     path :'/quiz',
     element : <CheckUserExist><Quiz/></CheckUserExist>
    },
    {
     path :'/result',
     element : <CheckUserExist><Result/></CheckUserExist>
    },
  ]
)

function App() {
 return (
   <>
   <RouterProvider router={router} />
   </>
```

```
 );
}

export default App;
```

About.html

```
<!DOCTYPE html>
<html>
  <head>
    <title>About</title>
    <link rel="stylesheet" type="text/css" href="style.css">
    <link href="https://fonts.googleapis.com/icon?family=Material+Icons"rel="stylesheet">
    <link rel="icon" href="images/1_quiz logo.jpg" type="image/icon type">
  </head>
  <body background="images\abstract_black_white_76012_1366x768.jpg">
    <div class="back3">
    <div>
      <p><font color="red" size="5px" ><i>This website is owned by
</i><span></span><font color="orange"><i>Nirbhay Narayan
Singh</i></font></p></font></p>

    </div>
    <div>
      <p><font color="white" size="5px">Student of <p><font color="orange">"Modern
Girls' College of Professional Studies"</font></p>
        Lucknow, 226010</font></p>
    </div>
    <div>
      <p><font color="white" size="5px">For more email:</font><a
href="mailto:banka@gmail.com"><button><span class="material-icons">
      email
      </span></button></a></p>
      <p><font color="white" size="5px">Or you can call:</font><a
href="tel:7551488455"><button><span class="material-icons">
      call
      </span></button></a></p>

      <div>
        <p><font color="white" size="5px">Go back to home page:</font><a
href="index.html"><button><span class="material-icons">
          keyboard_backspace
          </span></button></a></p>
```

```
        </div>
      </div>
    </body>
</html>
```

CN_Quiz.html

```html
<!DOCTYPE html>
<html>
  <head>
    <style>
        body {
    font-family: Open Sans;
}

h1 {
    text-align: center;
}

#title {
    text-decoration: underline;
}

#quiz {
    text-indent: 10px;
    display:none;
}

.button {
    border:4px solid;
    border-radius:5px;
    width: 40px;
    padding-left:5px;
    padding-right: 5px;
    position: relative;
    float:right;
    background-color: #DCDCDC;
    color: rgb(182, 36, 36);
    margin: 0 2px 0 2px;
}

.button.active {
    background-color: #F8F8FF;
    color: #525252;
```

```css
        }

        button {
          position: relative;
          float:right;
        }

        .button a {
          text-decoration: none;
          color: black;
        }

        #container {
          margin-top: 70px;
          margin-left: 290px;
          width:50%;
          /* margin:auto; */
          padding: 0 25px 40px 10px;
          background-color: #037737;
          border:4px solid #B0E0E6;
          border-radius:5px;
          color: #FFFFFF;
          font-weight: bold;
          box-shadow: 5px 5px 5px #888;
        }

        ul {
          list-style-type: none;
          padding: 0;
          margin: 0;
        }

        #prev {
          display:none;
        }

        #start {
          display:none;
          width: 90px;
        }
        body{
          background-color: rgb(29, 199, 162);
          background-image: url(images/1bg.jpg); position: fixed;;
```

```
        }
        .home_button{
           border:4px solid;
           border-radius:5px;
           width: 70px;
           padding-left:5px;
           padding-right: 5px;
           position: relative;
           float:right;
           background-color: #DCDCDC;
           color: black;
           margin: 30px 650px 0 ;
        }
        .home_button a{
           text-decoration: none;
           color: black;
        }
            </style>

            <title>CN_quiz_1</title>
            <link type='text/css' rel='stylesheet' href='stylesheet.css'/>
            <link rel="stylesheet" type="text/css" href="https://fonts.googleapis.com/css?family=Open
    Sans"/>
            <link rel="icon" href="images/1_quiz logo.jpg" type="image/icon type">
        </head>
        <body>
          <div id='container'>
            <div id='title'>
               <h1 style="color: black;">Computer Networks – Basics1</h1>
            </div>
            <br/>
            <div id='quiz'></div>
            <div class='button' id='next'><a href='#'>Next</a></div>
            <div class='button' id='prev'><a href='#'>Prev</a></div>
            <div class='button' id='start'> <a href='#'>Start Over</a></div>
            <!-- <button class=" id='next'>Next</a></button>
            <button class=" id='prev'>Prev</a></button>
            <button class=" id='start'> Start Over</a></button> -->
          </div>
          <span><button class="home_button"><a
    href="1topics.html">Previous</a></button></span><button class="home_button"><a
    href="index.html">HOME</a></button>
```

```
    <script type='text/javascript'
src='https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js'></script>
    <script type="text/javascript" src='questions.json'></script>
    <script type='text/javascript' src='CN1_quiz.js'></script>
  </body>
</html>
```

Quiz.js

```javascript
(function() {
   var questions = [{
     question: "The IETF standards documents are called _____",
     choices: [" RFC", "RCF", " IDs","DFC"],
     correctAnswer: 0
   }, {
     question: "In the layer hierarchy as the data packet moves from the upper to the lower layers,
headers are _____",
     choices: ["Added", "Removed", " Rearranged", "Modified"],
     correctAnswer: 0
   }, {
     question: " The structure or format of data is called _____",
     choices: ["Syntax", "Semantics","Struct "," Formatting" ],
     correctAnswer: 0
   }, {
     question: "Communication between a computer and a keyboard involves _____
transmission",
     choices: ["Automatic", "Half-duplex", "Full-duplex", "Simplex"],
     correctAnswer: 3
   }, {
     question: "The first Network was called _____",
     choices: ["CNNET","NSFNET","ASAPNET","ARPANET"],
     correctAnswer: 3
   }];

   var questionCounter = 0; //Tracks question number
   var selections = []; //Array containing user choices
   var quiz = $('#quiz'); //Quiz div object

   // Display initial question
   displayNext();
```

```javascript
// Click handler for the 'next' button
$('#next').on('click', function (e) {
  e.preventDefault();

  // Suspend click listener during fade animation
  if(quiz.is(':animated')) {
    return false;
  }
  choose();

  // If no user selection, progress is stopped
  if (isNaN(selections[questionCounter])) {
    alert('Please make a selection!');
  } else {
    questionCounter++;
    displayNext();
  }
});

// Click handler for the 'prev' button
$('#prev').on('click', function (e) {
  e.preventDefault();

  if(quiz.is(':animated')) {
    return false;
  }
  choose();
  questionCounter--;
  displayNext();
});

// Click handler for the 'Start Over' button
$('#start').on('click', function (e) {
  e.preventDefault();

  if(quiz.is(':animated')) {
    return false;
  }
  questionCounter = 0;
  selections = [];
  displayNext();
  $('#start').hide();
```

```javascript
});

// Animates buttons on hover
$('.button').on('mouseenter', function () {
  $(this).addClass('active');
});
$('.button').on('mouseleave', function () {
  $(this).removeClass('active');
});

// Creates and returns the div that contains the questions and
// the answer selections
function createQuestionElement(index) {
  var qElement = $('<div>', {
    id: 'question'
  });

  var header = $('<h2>Question ' + (index + 1) + ':</h2>');
  qElement.append(header);

  var question = $('<p>').append(questions[index].question);
  qElement.append(question);

  var radioButtons = createRadios(index);
  qElement.append(radioButtons);

  return qElement;
}

// Creates a list of the answer choices as radio inputs
function createRadios(index) {
  var radioList = $('<ul>');
  var item;
  var input = '';
  for (var i = 0; i < questions[index].choices.length; i++) {
    item = $('<li>');
    input = '<input type="radio" name="answer" value=' + i + ' />';
    input += questions[index].choices[i];
    item.append(input);
    radioList.append(item);
  }
  return radioList;
}
```

```javascript
// Reads the user selection and pushes the value to an array
function choose() {
  selections[questionCounter] = +$('input[name="answer"]:checked').val();
}

// Displays next requested element
function displayNext() {
  quiz.fadeOut(function() {
    $('#question').remove();

    if(questionCounter < questions.length){
      var nextQuestion = createQuestionElement(questionCounter);
      quiz.append(nextQuestion).fadeIn();
      if (!(isNaN(selections[questionCounter]))) {
        $('input[value='+selections[questionCounter]+']').prop('checked', true);
      }

      // Controls display of 'prev' button
      if(questionCounter === 1){
        $('#prev').show();
      } else if(questionCounter === 0){

        $('#prev').hide();
        $('#next').show();
      }
    }else {
      var scoreElem = displayScore();
      quiz.append(scoreElem).fadeIn();
      $('#next').hide();
      $('#prev').hide();
      $('#start').show();
    }
  });
}

// Computes score and returns a paragraph element to be displayed
function displayScore() {
  var score = $('<p>',{id: 'question'});

  var numCorrect = 0;
  for (var i = 0; i < selections.length; i++) {
    if (selections[i] === questions[i].correctAnswer) {
```

```
        numCorrect++;
      }
    }

    score.append('You got ' + numCorrect + ' questions out of ' +
          questions.length + ' right!!!');
    return score;
  }
})();
```

<u>OS1_quiz.js</u>

```
<!DOCTYPE html>
<html>
  <head>
    <style>
        body {
  font-family: Open Sans;
}

h1 {
  text-align: center;
}

#title {
  text-decoration: underline;
}

#quiz {
  text-indent: 10px;
  display:none;
}

.button {
  border:4px solid;
  border-radius:5px;
  width: 40px;
  padding-left:5px;
  padding-right: 5px;
  position: relative;
  float:right;
  background-color: #DCDCDC;
  color: rgb(182, 36, 36);
```

```css
    margin: 0 2px 0 2px;
}

.button.active {
    background-color: #F8F8FF;
    color: #525252;
}

button {
    position: relative;
    float:right;
}

.button a {
    text-decoration: none;
    color: black;
}

#container {
    margin-top: 70px;
    margin-left: 290px;
    width:50%;
    /* margin:auto; */
    padding: 0 25px 40px 10px;
    background-color: #520733;
    border:4px solid #B0E0E6;
    border-radius:5px;
    color: #FFFFFF;
    font-weight: bold;
    box-shadow: 5px 5px 5px #888;
}

ul {
    list-style-type: none;
    padding: 0;
    margin: 0;
}

#prev {
    display:none;
}

#start {
```

```css
    display:none;
    width: 90px;
}
body{
    background-color: rgb(29, 199, 162);
    background-image: url(images/2bg.jpg);
}
.home_button{
    border:4px solid;
    border-radius:5px;
    width: 70px;
    padding-left:5px;
    padding-right: 5px;
    position: relative;
    float:right;
    background-color: #DCDCDC;
    color: black;
    margin: 30px 650px 0 ;
}
.home_button a{
    text-decoration: none;
    color: black;
}
    </style>

    <title>OS_quiz_1</title>
    <link type='text/css' rel='stylesheet' href='stylesheet.css'/>
    <link rel="stylesheet" type="text/css" href="https://fonts.googleapis.com/css?family=Open
Sans"/>
    <link rel="icon" href="images/1_quiz logo.jpg" type="image/icon type">
  </head>
  <body>
    <div id='container'>
      <div id='title'>
        <h1 style="color: rgb(245, 235, 235);">Operating Systems – Basics</h1>
      </div>
      <br/>
      <div id='quiz'></div>
      <div class='button' id='next'><a href='#'>Next</a></div>
      <div class='button' id='prev'><a href='#'>Prev</a></div>
      <div class='button' id='start'> <a href='#'>Start Over</a></div>
      <!-- <button class=" id='next'>Next</a></button>
      <button class=" id='prev'>Prev</a></button>
```

```html
      <button class=" id='start'> Start Over</a></button> -->
    </div>
    <span><button class="home_button"><a
href="1topics.html">Previous</a></button></span><button class="home_button"><a
href="index.html">HOME</a></button>

    <script type='text/javascript'
src='https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js'></script>
    <script type="text/javascript" src='questions.json'></script>
    <script type='text/javascript' src='OS1_quiz.js'></script>
  </body>
</html>
```

```javascript
// Creating questionss and answers
//****************************************************************************
*
var question1 = {
   question: "What does HTML stand for?",
   answers: ["Hyper Text Markup Language", "HyperLinks and Text Markup Language", "Home
Tool Markup Language"],
   correct: 0
 };

var question2 = {
   question: "The Bootstrap grid system is based on how many columns?",
   answers: ['6', '9', '12', '3'],
   correct: 2
 };

var question3 = {
   question: 'What does CSS stand for?',
   answers: ['Colorful Style Sheets', 'Cascading Style Sheets', 'Creative Style Sheets', 'Computer
Style Sheets'],
   correct: 1
 }

var question4 = {
   question: "Which property is used to change the background color?",
   answers: ["bgcolor", "color", "background-color"],
   correct: 2
```

```javascript
  };

var question5 = {
  question: "Javasctipt is the same as Java?",
  answers: ["True", "False"],
  correct: 1
};

var question6 = {
  question: "Which event occurs when the user clicks on an HTML element?",
  answers: ["onchange", "onmouseclick", "onmouseover","onclick"],
  correct: 3
};

var question7 = {
  question: "Is JavaScript case-sensitive?",
  answers: ["True", "False"],
  correct: 0
};

// create an array of objects

var questions = [question1, question2, question3, question4, question5, question6, question7];

// Initialize variables
//-----------------------------------------------------------------

var tags;
var tagsClass = '';
var liTagsid = [];
var correctAns = 0;
var quizPage = 1;

var currentIndex = 0;
var currentQuestion = questions[currentIndex];

var prevousQuestion;
var previousIndex = 0;

var ulTag = document.getElementsByTagName('ul')[0];
var button = document.getElementById('submit');
var questionTitle = document.getElementById('question');
```

```javascript
//save class name so it can be reused easily
//if I want to change it, I have to change it one place
var classHighlight = 'selected';

// Display Answers and hightlight selected item
//-----------------------------------------------------------------
function showQuestions (){

if (currentIndex != 0) {
// create again submit button only for next pages
ulTag.innerHTML ='';
button.innerHTML = 'Submit';
button.className = 'submit';
button.id = 'submit';

//update the number of questions displayed
document.getElementById('quizNumber').innerHTML = quizPage;
}

//Display Results in the final page
if (currentIndex ==  (questions.length)) {
ulTag.innerHTML = '';
document.getElementById('question').innerHTML = '';

showResults();

return
}

questionTitle.innerHTML = currentQuestion.question;
console.log(currentQuestion.question);

// create a for loop to generate the answers and display them in the page
for (var i = 0; i < currentQuestion.answers.length; i++) {
// creating answers
var newAns = document.createElement('li');
newAns.id = 'ans'+ (i+1);
newAns.className = "notSelected";
var textAns = document.createTextNode(currentQuestion.answers[i]);
newAns.appendChild(textAns);
var addNewAnsHere = document.getElementById('answer');
addNewAnsHere.appendChild(newAns);
```

```javascript
console.log(currentQuestion.answers[i]);
}

//.click() will return the result of $('.notSelected')
var $liTags = $('.notSelected').click(function(list) {
list.preventDefault();
//run removeClass on every element
//if the elements are not static, you might want to rerun $('.notSelected')
//instead of the saved $litTags
$liTags.removeClass(classHighlight);
//add the class to the currently clicked element (this)
$(this).addClass(classHighlight);

//get id name of clicked answer
for (var i = 0; i < currentQuestion.answers.length ; i++) {
// console.log(liTagsid[i]);
if($liTags[i].className == "notSelected selected"){
//store information to check answer
tags = $liTags[i].id;
// tagsClass = $LiTags.className;
console.log(tags);
tagsClassName = $liTags[i];
}
}
});

//check answer once it has been submitted
button.onclick = function (){ checkAnswer()};
}

//self calling function
showQuestions();

// Show Correct Answer
//----------------------------------------------------------------
function checkAnswer (){
// get selected list
var selectedItem = document.getElementById(tags);

// check that an answer has been selected
if (selectedItem == undefined) {
alert("Please selected an answer!")
return
```

```javascript
} else {
// get user answer if form of text
var userAns = selectedItem.innerHTML;
}

// change the background of the answer according to the Results
if (userAns == currentQuestion.answers[currentQuestion.correct]) {
console.log("Correct! The answer is: "+ userAns);
// change color of selected item by changing className
selectedItem.className = 'correct';
// count the number of correct answers
correctAns++;
console.log(correctAns);
} else {
console.log("Wrong! The corrent answer is:
"+ currentQuestion.answers[currentQuestion.correct]);
//change the background of the wrong answer
selectedItem.className = 'wrong';
//hightlight the right answer if the user got it wrong
//change the class name of the correct answer
ulTag.getElementsByTagName('li')[currentQuestion.correct].className = 'correct';

console.log(currentQuestion.answers[currentQuestion.correct]);
}

// Create a next Question button once the answer has been submitted
button.innerHTML = 'Next Question';
button.className = 'next';
button.id = 'next';

prevousQuestion = currentQuestion;
quizPage++;
currentIndex++;
currentQuestion = questions[currentIndex];

// Start with the next question once the "Next" button has been clicked
button.onclick = function (){showQuestions()};
return
}

// Final score
//-------------------------------------------------------------------
function showResults () {
```

```
//deleting page number
document.getElementById('pages').innerHTML='';

// Change Title
questionTitle.innerHTML = '<h1>Your Score</h1>';

// Get the area that will be used to display the user's score
var newInfo = document.getElementById('quiz-results');
//Change the id and className of the area for the circle
newInfo.innerHTML = '';
newInfo.id = 'circle';
newInfo.className = 'circle';

//Create a Div for the fill element
var newDiv = document.createElement('div');
newDiv.className = 'fill';
var addHere = document.getElementById('circle');
addHere.appendChild(newDiv);

// add the score to the circle
var newScore = document.createElement('h3');
newScore.className = 'score';
var textScore = document.createTextNode(Math.floor((correctAns/questions.length)*100) + '%');
newScore.appendChild(textScore);
addHere.appendChild(newScore);

//use jquary to grab the text of the score
var score = $(".score").text();

//fill the circle in base of the score
$(".fill").css("height",score);

if (correctAns >= 5) {
var newCongrats = document.createElement('p');
var textCongrats = document.createTextNode('Congratulations! You did a Good Job!')
newCongrats.appendChild(textCongrats);
document.getElementById('display-area').appendChild(newCongrats);

confettiEffect();
}

}
```

```javascript
// Confetti Effect by Gtibo "Confetti Party"
//-------------------------------------------------------------------
function confettiEffect (){
//grabing area to create the effect
canvas = document.getElementById("canvas");
context = canvas.getContext("2d");
width = canvas.width = window.innerWidth;
height = canvas.height = window.innerHeight;

// creating the tabel
particle = [];
particleCount = 0,
gravity = 0.3,
colors = [
'#f44336', '#e91e63', '#9c27b0', '#673ab7', '#3f51b5',
'#2196f3', '#03a9f4', '#00bcd4', '#009688', '#4CAF50',
'#8BC34A', '#CDDC39', '#FFEB3B', '#FFC107', '#FF9800',
'#FF5722', '#795548'
];

for( var i = 0; i < 300; i++){

particle.push({
x : width/2,
y : height/2,
boxW : randomRange(5,20),
boxH : randomRange(5,20),
size : randomRange(2,8),

spikeran:randomRange(3,5),

velX :randomRange(-8,8),
velY :randomRange(-50,-10),

angle :convertToRadians(randomRange(0,360)),
color:colors[Math.floor(Math.random() * colors.length)],
anglespin:randomRange(-0.2,0.2),

draw : function(){
context.save();
context.translate(this.x,this.y);
context.rotate(this.angle);
context.fillStyle=this.color;
```

```
context.beginPath();

context.fillRect(this.boxW/2*-1,this.boxH/2*-1,this.boxW,this.boxH);
context.fill();
  context.closePath();
context.restore();
this.angle += this.anglespin;
this.velY*= 0.999;
this.velY += 0.3;

this.x += this.velX;
this.y += this.velY;

if(this.y < 0){
this.velY *= -0.2;
 this.velX *= 0.9;
};

if(this.y > height){
this.anglespin = 0;
this.y = height;
this.velY *= -0.2;
this.velX *= 0.9;
};

if(this.x > width ||this.x< 0){
this.velX *= -0.5;
};
},
});
}

function drawScreen(){
context.globalAlpha = 1;
for( var i = 0; i < particle.length; i++){
 particle[i].draw();
}
}

function loadImage(url){
var img = document.createElement("img");
img.src=url;
return img;
```

```
    }

    function update(){
    context.clearRect(0,0,width,height);
    drawScreen();
    requestAnimationFrame(update);
    }

    update();

    function randomRange(min, max){
    return min + Math.random() * (max - min );
    }

    function randomInt(min, max){
    return Math.floor(min + Math.random()* (max - min + 1));
    }

    function convertToRadians(degree) {
    return degree*(Math.PI/180);
    }

    function drawStar(cx, cy, spikes, outerRadius, innerRadius,color) {
    var rot = Math.PI / 2 * 3;
    var x = cx;
    var y = cy;
    var step = Math.PI / spikes;

    context.strokeSyle = "#000";
    context.beginPath();
    context.moveTo(cx, cy - outerRadius)
    for (i = 0; i < spikes; i++) {
    x = cx + Math.cos(rot) * outerRadius;
    y = cy + Math.sin(rot) * outerRadius;
    context.lineTo(x, y)
    rot += step

    x = cx + Math.cos(rot) * innerRadius;
    y = cy + Math.sin(rot) * innerRadius;
    context.lineTo(x, y)
    rot += step
    }
```

```
context.lineTo(cx, cy - outerRadius)
context.closePath();
context.fillStyle = color;
context.fill();


}
}
```

App.css

```css
@import url('https://fonts.googleapis.com/css2?family=Poppins&display=swap');

:root{
 --primary-color: #406a8b;
 --dark-color:#222222;
 --light-color: #f0f0f0;
}

body, html{
 height: 100%;
 background: var(--dark-color)
}

* > *{
   font-family: 'Poppins', sans-serif;
}

.container{
 display: block;
 position: relative;
 margin: 40px auto;
 height: auto;
 width: 800px;
 padding: 20px;
}

.container .title{
   font-size: 3em;
   text-align: center;
   border: 5px solid var(--primary-color);
   padding: .3em .2em;
   border-radius: 4px;
```

```css
}

.text-light {
 color: var(--light-color)
}

.container ul{
 list-style: none;
 margin: 0;
 padding: 0;
 overflow: auto;
}

.container .questions{
   padding: 3em;
}

/*
.container .questions .qid{
 padding: .2em .7em;
 color: #222222;
 background-color: #0DFF92;
 border-radius: 50px;
} */

.container .grid{
   margin-top: 3em;
   display: grid;
   grid-template-columns: 1fr 1fr;
}

.container .btn{
   padding: .2em 1.7em;
   border: none;
   border-radius: .1em;
   font-size: 1.2em;
}

.container .btn:hover{
   cursor: pointer;
   background-color: #f0f0f0;
   color: #202020;
}
```

```css
.next{
   background-color: var(--primary-color);
   justify-self: flex-end;
}

.prev{
   background-color: #faff5a;
   justify-self: flex-start;
}

ul li{
 color: #AAAAAA;
 display: block;
 position: relative;
 float: left;
 width: 100%;
 height: 100px;
 border-bottom: 1px solid #333;
}

ul li input[type=radio]{
 position: absolute;
 visibility: hidden;
}

ul li label{
 display: block;
 position: relative;
 font-weight: 300;
 font-size: 1.35em;
 padding: 25px 25px 25px 80px;
 margin: 10px auto;
 height: 30px;
 z-index: 9;
 cursor: pointer;
 -webkit-transition: all 0.25s linear;
}

ul li:hover label{
 color: #FFFFFF;
}
```

```css
ul li .check{
  display: block;
  position: absolute;
  border: 5px solid #AAAAAA;
  border-radius: 100%;
  height: 25px;
  width: 25px;
  top: 30px;
  left: 20px;
  z-index: 5;
  transition: border .25s linear;
  -webkit-transition: border .25s linear;
}

ul li:hover .checked {
  border: 5px solid #FFFFFF;
}

ul li .check::before {
  display: block;
  position: absolute;
  content: '';
  border-radius: 100%;
  height: 15px;
  width: 15px;
  top: 5px;
  left: 5px;
  margin: auto;
  transition: background 0.25s linear;
  -webkit-transition: background 0.25s linear;
}

input[type=radio]:checked ~ .check {
  border: 5px solid var(--primary-color)
}

input[type=radio]:checked ~ .check::before{
  background: var(--primary-color)
}

input[type=radio]:checked ~ .text-primary{
  color: var(--primary-color)
}
```

```css
/* To get selected option we are using this checked class */
.checked {
  border: 5px solid var(--primary-color) !important;
}

.checked::before{
  background: var(--primary-color)
}
```

Main.css

```css
.container ol li{
    font-size: 1.4em;
    color: #cecece;
}

.start{
    display: flex;
    justify-content: center;
    padding-top: 2em;
}

.start .btn{
    padding: .2em 1.7em;
    border: none;
    border-radius: .1em;
    font-size: 1.2em;
    color: #202020;
    text-decoration: none;
    background-color: #faff5a;
}

#form{
    display: flex;
    justify-content: center;
    margin-top: 4em;
}

#form .userid{
    padding: .7em 2em;
    width: 50%;
    border: none;
    border-radius: 3px;
```

```css
    font-size: 1em;
```

__Result.css__

```css
.flex-center{
   display: flex;
   justify-content: center;
   flex-direction: column;
   border: 1px solid #cecece;
   padding: 3em 4em;
   gap: 1em;
}

.container .flex{
   display: flex;
   justify-content: space-between;

}

.container .flex span {
   font-size: 1.4em;
   color: #cecece;
}

.container .flex span.achive {
   font-weight: bold;
   color: #ff2a66;
   color: #2aff95;
}

table {
   width: 100%;
}

.table-header {
   color: #cecece;
   font-size: 1.1em;
   text-align: center;
   background: #212121;
   padding: 18px 0;
}

.table-body {
```

```css
    font-size: 1.1em;
    text-align: center;
    /* color: #cecece; */
    background: #d8d8d8;
    padding: 18px 0;
}

.table-header > tr > td{
    border: 1px solid #faff5a;
}
```

```html
<!DOCTYPE html>
<html>
  <head>
    <style>
      /*========================================================
      Sitewide Styles
========================================================*/
/*multiple selector*/
* {
 margin: 0;
 padding: 0;
 box-sizing: border-box;
}

body {
 margin: 0 auto;
 font-family: 'Lato', sans-serif;
 color: #b3b3b3;
 background-color: #31a2ac;
 text-align: center;
 margin-top: 0;
}

/*========================================================
      Quiz Section
========================================================*/
/*styling quiz area*/
.main {
 background-color: white;
 margin: 0 auto;
```

```css
  width: 60%;
  margin-top: 30px;
  padding: 30px;
  box-shadow: 0 0 20px 0 rgba(0, 0, 0, 0.2), 0 5px 5px 0 rgba(0, 0, 0, 0.24);
}

/*Editing the number of questions*/
span {
  float: left;
}

/*Editing the number of questions*/
span {
  float: left;
}

/*format text*/
p {
  padding: 10px 10px 0;
}

/*Form area width*/
.form-area, ul {
  margin: 20px auto;
  max-width: 550px;
}

/*formatting answers*/
li {
  list-style-type: none;
  text-align: left;
  background-color: transparent;
  margin: 10px 5px;
  padding: 5px 10px;
  border: 1px solid lightgray;
  font-weight: normal;
}

li:hover {
  background: #ECEEF0;
}

/*Change effect of question when the questions is selected*/
```

```css
.selected, .selected:hover {
  background: #FFDEAD;
}

/*change correct answer background*/
.correct, .correct:hover {
  background: #9ACD32;
  color: white;
}

/*change wrong answer background*/
.wrong, .wrong:hover {
  background: #db3c3c;
  color: white;
}

/*===========================================================
     Submit Button
===========================================================*/
.main button {
  font-family: "Roboto", sans-serif;
  text-transform: uppercase;
  width: 20%;
  border: none;
  padding: 15px;
  color: #FFFFFF;
}

.submit:hover, .submit:active, .submit:focus {
  background: #43A047;
}

.submit {
  background: #4CAF50;
  min-width: 120px;
}

/*next question button*/
.next {
  background: #fa994a;
  min-width: 120px;
}
```

```css
.next:hover, .next:active, .next:focus {
  background: #e38a42;
}

/* .restart {
  background-color:
} */

/*========================================================
     Results
======================================================-*/
.circle{
  position: relative;
  margin: 0 auto;
  width: 200px;
  height: 200px;
  background: #bdc3c7;
  -webkit-border-radius: 100px;
  -moz-border-radius: 100px;
  border-radius: 100px;
  overflow: hidden;
}

.fill{
  position: absolute;
  bottom: 0;
  width: 100%;
  height: 80%;
  background: #31a2ac;
}

h3 {
  position: absolute;
  width: 100%;
  top: 60px;
  text-align: center;
  font-family: Arial, sans-serif;
  color: #fff;
  font-size: 40pt;
  line-height: 0;
  font-weight: normal;
}
```

```css
.circle p {
  margin: 400px;
}

/*========================================================
      Confeeti Effect
==========================================================*/
canvas{
 position:absolute;
 left:0;
 top:0;
 z-index:0;
 border:0px solid #000;
}
```

```html
    </style>
    <link rel="icon" href="images/1_quiz logo.jpg" type="image/icon type">
  </head>
  <body>
      <!-- Main page -->
      <div class="main">
       <!-- Number of Question  -->
       <div class="wrapper" id="pages">
        <span id="quizNumber">1</span><span>/7</span>
       </div>

       <!-- Quiz Question -->
       <div class="quiz-questions" id="display-area">
        <p id="question"></p>
        <ul id="answer">
        </ul>

        <div id="quiz-results">
         <button type="button" name="button" class="submit" id="submit">Submit</button>
        </div>
       </div>

      </div>

      <canvas id="canvas"></canvas>

      <script type='text/javascript'
src='https://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js'></script>
```

```html
        <script type='text/javascript' src='quiz_js_1.js'></script>
    </body>
</html>
```

```css
/* Start Contact Me */
.contact-me {
  background-color: #151718;
  overflow: hidden;
  padding-top: 50px;
  padding-bottom: 70px;
}

.contact-me h2 {
 color: #fff;
 margin-left: 40px;
}

.contact-me p , .contact-me address{
 color: #cddbd8;
 margin-left: 40px;
}
.contact-me p strong{
 color: #d1d6da;
}

.contact-me .info, .contact-me .form {
 width: 45%;
 float: left;
}
.contact-me .form{
 margin-top: 10px;
 margin-left: 5%;
}
.contact-me .form label{
 display: block;
 color: #d1d6da;
 margin-bottom: 20px;
 margin-top: 20px;
}
.contact-me .form input[type="text"]{
 color: #fff;
 background-color:#4b5557;
```

```css
  border: 0;
  width: 80%;
  padding: 10px;
  margin-bottom: 20px;
  border-radius: 5px;
}
.contact-me .form input[type="email"]{
  color: #fff;
  background-color:#4b5557;
  border: 0;
  width: 80%;
  padding: 10px;
  margin-bottom: 20px;
  border-radius: 5px;
}
.contact-me .form textarea{
  color: #fff;
  background-color:#4b5557;
  border: 0;
  width: 80%;
  padding: 10px;
  margin-bottom: 20px;
  border-radius: 5px;
}
.contact-me .form input[type="submit"]{
  background-color: #191e22;
  color: #fff;
  padding: 10px 20px;
  border: 0;
  margin-top: 20px;
  border-radius: 5px;
}
/* End Contact Me */


/*Start Fototer*/
.footer {
  background-color: #191e22;
  color: #6A6E71;
  padding: 20px 0 40px 0;
  text-align: center;
  overflow: hidden;
}
```

```css
.footer .footer-folat{
 float: left;
 width: 50%;
 text-align: center;
}
.footer ul{
 list-style: none;
 padding-left: 0;
 text-align: center;
 /*margin-top: 10px;*/
}

.footer ul li{
 width: 5px;
 height: 5px;
 display: inline-block;
 margin: 2px;
 padding: 5px;
}
.footer ul li a{
 font-size: 1em;
}
.footer a{
 color: #999;
 text-decoration: none;
 text-align: center;
 font-size: 0.9em;
}
.footer a:hover{
 color: #2dcc70;
}
/*End Footer*/

/* Start My Framework */
/* .my-button{
 background: none;
 border: 2px solid #2dcc70;
 padding: 10px 30px;
 color: #2dcc70;
 font-weight: bold;
} */
.paragrph{
 line-height: 1.5;
```

```css
    color: #666;
   }
   .he{
    color: #555;
    /*text-transform: uppercase;*/
   }
   .sp{
    line-height: 1.5;
    color: #888;
   }
   .hr{
    margin: 30px 0 30px 40px ;
    background-color: #999;
    height: 1px;
    border: 0;
    width: 95%;
   }
   /* End My Framework */
   /* Start Media Query */

   @media (max-width: 800px) {
    .features .feat {
     width: 95%;
    }
    .about-me .image {
     width: 100%;
    }
    .about-me .image img {
     width: 50%;
     height: 70%;
     margin: 0 25%;
    }
    .about-me .info, .about-me .info .hobbies .content {
     width: 95%;
    }
    .my-skills, .my-skills .skills, .my-skills .progress {
     width: 95%;
    }
    .resume {
     width: 100%;
    }
    .my-education .main, .my-education .exp {
     width: 95%;
```

```css
   padding: 0;
   margin: 0;
  }
  .my-education .main .paragrph, .my-education .exp .paragrph {
   width: 100%;
   margin: 20px 0;
  }
  .my-education .main h2, .my-education .exp h3 {
   width: 100%;
   margin: 20px 0;
   padding: 10px 0;
  }
  .my-education hr {
   margin: 20px 0;
   width: 100%;
  }
  .my-education .exp hr {
   margin: 0 auto;
   width: 50%;
  }
  .portfolio .our-work div {
   width: 100%;
  }
  .portfolio .our-work div img{
  width:70%;
   }
  .contact-me .info, .contact-me .form {
   width: 95%;
  }
  .footer .footer-folat {
   width: 95%;
  }
 }
 /* End Media Query */
```

7. <u>Testing</u>

The project involves:
• Data Collection and Cleaning: Gathering and preparing data from various sources.
• Data Analysis: Applying statistical and spatial analysis techniques.
• Visualization: Creating interactive visualizations.
• Web Application Development: Building a web application to display the analysis and visualizations.
Testing Techniques Given the nature of the project, the following testing techniques can be employed:
1. Unit Testing: o Purpose: To test individual components of the system, such as data cleaning functions, statistical analysis modules, and visualization components.
2. o Test Cases:
   ▪ Test data cleaning functions with various input types (e.g., missing values, outliers, inconsistent formats).
   ▪ Test statistical analysis functions with different datasets and expected outputs.
   ▪ Test visualization components with different data inputs and visualization types.
3. Integration Testing:
   o Purpose: To test how different components of the system interact with each other. o Test Cases:
   ▪ Test the integration between data cleaning, analysis, and visualization components.
   ▪ Test the integration of the web application with the backend components.
4. System Testing:
   o Purpose: To test the entire system as a whole.
   o Test Cases:
   ▪ Test the functionality of the web application, including user interface, data display, and interactivity.
   ▪ Test the performance of the application under different load conditions.
   ▪ Test the security of the application, including data privacy and access control. Test Suite Design A test suite is a collection of test cases designed to test a specific aspect of the system.
   For this project, test suites can be designed for:
   • Data Cleaning: Test cases to verify the accuracy and completeness of cleaned data.
   • Data Analysis: Test cases to verify the correctness of statistical and spatial analysis results.
   • Visualization: Test cases to verify the accuracy and clarity of visualizations.
   • Web Application: Test cases to verify the functionality, performance, and security of the web application.
   By employing a combination of these testing techniques and strategies, it is possible to ensure the quality, reliability, and security of the crime against women analysis proje

8. <u>Conclusion</u>

Quiz-Whiz is an interactive web app designed to make learning fun and engaging through dynamic quizzes. By fetching fresh questions from an API and managing state with Redux, it ensures a seamless user experience. The responsive design adapts to different screens, providing users with an enjoyable and intuitive interface. Robust error handling keeps users informed, enhancing reliability. With easy scalability, Quiz-Whiz can grow to include more quizzes and questions, making it a valuable educational tool for users of all ages.

9. <u>Bibliography</u>

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