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Department of Computing

**Bsc(Hons) Artificial Intelligence and
Data Science**

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Group Coursework Report

Tutorial Group : B

Coursework Group No : No.09

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1. Introduction

Welcome to FindMyJob.com, a brand-new AI-based web application for job seekers that provides users with the most suitable vacancies based on their preferences and skills. Our team has carefully constructed this platform with several significant characteristics for a comfortable job search.

Features of FindmyJob.com

Eye-Catching Design: The design of our platform is clean and visually engaging allowing users to easily and effectively navigate the content.

Sign-Up Process: Sign-up is available for the users, and, after registration, they can set up preferences and personal data that will help our AI find the most suitable job offers.

Purchase Cosmetics and Related Equipment: An individual page for customers to purchase items relevant to readiness for employment and business attire.

User Reviews: A page that allows users to view and contribute to the comments concerning various jobs and employment experiences.

Feedback System: The clients can give feedback on their experiences in the service delivery and the areas they think need to be changed.

Gallery Page: A page with pictures and texts concerning the vacancies and the companies.

Team Members and Roles

Student 1(Avishka Madushan): Involved in the development of HTML web pages; Presentation, signup and gallery pages. JavaScript features for form validation and form interactivity were put into practice.

Student 2(Tharusha Liyanagama): Created the layout of the site, page with the quiz and a page for users to ask questions. Created JavaScript quizzes as well as form validation features.

Student 3(Vihanga Induwara): Developed the buy products page and the About Us page. Used JavaScript to add form validation as well as interactivity to the form.

Student 4(Surakkitha Galappaththi): Created the listing page and an activation form for the newsletters. Implemented new JavaScript features for switching between different background and text color and for reading data from an XML file and displaying them.

Due to the economic crisis in Sri Lanka, at present many students and people are struggling with their financial issues. Realizing this, we have come up with FindMyJob.com to help students and graduates to search for a part-time and full-time job vacancy. To some extent, our platform seeks to help reduce the economic stress by providing users with the jobs that suit them and their desires, thus helping them find ways to earn a living.

We hope that FindmyJob.com will become useful for those who are looking for a job during these difficult years.

- The user interface (UI) of the application consists of the following pages:

- ☐ Sign Up Page
- ☐ Home Page
- ☐ Quiz Page
- ☐ Product Page
- ☐ Listing Page
- ☐ Gallery Page

- The team members involved in developing this project are:

Student 01 – Avishka Madushan -20232819-2409098

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- This report details technical features within the front-end design and provides a critical analysis of the UI design: color, font, and design decisions in relation to user experience.

2. Research on existing systems

1. LinkedIn Job Search

➤ Features

- **Personalized Job Recommendations:** The personalization feature of LinkedIn uses data from a user's profile, previous job roles, skills, and education to tailor job recommendations that will be most relevant to them.
- **Easy Apply:** Users can apply with one or two clicks for jobs using the information already stored in their LinkedIn profiles. This is an increase in application rate since the time used up applying for jobs is reduced, meaning less effort is employed.
- **Networking:** Allows users to leverage the power of their professional network through potential referrals and inside information on companies. This can therefore substantially increase the chance of users being hired.
 - **Appropriateness for FindMyJob:**
These features may be of great help to "FindMyJob" by increasing user engagement and making the process of applying smooth. Combining networking with a job recommendation system thus places "FindMyJob" uniquely, not only as a job search application but also a place for professional development.

2. Indeed

➤ Features

- **Company Reviews and Salaries:** "Indeed" has wide company reviews and salary data, helping a user understand an employer to a greater extent.
- **Job Alerts:** Users may set up alerts on new job postings that would match their criteria so that one is ever alert on such a new opportunity.
- **Advanced Search Filters:** "Indeed" offers highly elaborated search filters including, among others, location, salary range, job type, and level of experience, making it extra-relevant.

- **Appropriateness for FindMyJob:** Adding company reviews and salary data for jobs posted on "FindMyJob" is also going to be a good proposition towards increasing transparency, which empowers users with great insights into making informed decisions. The availability of advanced search filters and job alerts makes "FindMyJob" user-friendly in meeting the diverse needs of users. Both LinkedIn and Indeed include some features that can be very valuable and might serve to inspire and refine "FindMyJob." Both offer feature sets that are supportive of a holistic, user-cantered approach to job searching. All such qualities are important for a successful job recommendation system.

3. Technical Discussion

Common Problems and Solutions:

1. Communication Distance Problems Solution:

Problem: Members of the team had a problem collecting and discussing the project because of geographical barriers.

Solution:

WhatsApp Group: For communication and updates to be shared with everyone at any time, a WhatsApp group was created. This made the sharing of ideas easier because it was quick and hence easy for members to deliberate on issues and come up with fast decisions.

2. Initially Didn't Understand Coursework Requirements Problem:

The group faced an initial challenge related to the coursework requirements and the extent of the project.

Solution:

Calls and Meetings Several calls were scheduled to discuss and elaborate on the requirements. Dividing the coursework into easily understandable portions and briefing the team about each section enabled them to develop a better understanding of the extent and scope of the project.

3. Division of Subassemblies and Subassemblies Problem:

There was confusion as to the parts of the coursework that should be handled by each student.

Solution:

Task Assignment Matrix: The team drew a matrix that clearly showed the task outline and task allocation. This matrix facilitated efficiency in work organization and served as an aid in not leaving any stone unturned in the coursework.

4. People do not know how to use AI

Problem:

The team did not possess adequate expertise in how to bring AI into the project.

Solution:

Senior Consultation: The team also consulted with seniors who had experience in AI web applications, yielding insights on how AI features would be integrated and how to properly use machine learning.

5. Implementation Challenges Error:

Question:

The team began to encounter various technical difficulties and challenges during the implementation phase.

Solution:

Nightly Zoom Calls: The team began scheduling regular Zoom meetings every evening to help with debugging and reviewing code, discussing how to overcome certain technical challenges, etc.

6.Team Dynamics and UI/UX Design Issues:

Question:

There were issues with team dynamics and aligning on UI/UX design principles.

Scheduling Flexibility: Breaks were taken in the timetable so that the team could come together and collectively develop the course pieces. This allowed for better collaboration and agreement on how to go about the design.

7. Team-Based Setting Problem:

The team needed a central place for collaboration and sharing of their ongoing work. Humanness GitHub Repository: A GitHub repository was established for managing and sharing code, documentation, and other project files. The site allowed version control and collaborative ease. 8. Finalise the Project report and XML file Problem: The work of finalizing the project report and XML file was a bit more laborious and needed a greater level of coordination. Solve: Face-to-Face Meeting: The team met at the house of one of their friends to finalize the project report and the XML file. The completed coursework had been finalized and properly reviewed.

- **Student 1 Avishka Madushan**
- **Student 2 Tharusha Liyanagama**
- **Student 3 Vihanga Induwara**
- **Student 4 Surakkitha Galappaththi**

Overview: The tasks involved designing a webpage in which the user could view reviews, add new reviews, subscribe to the newsletter, and change the colour of the background and text using dropdown menus. This entailed the application of HTML, CSS, and JavaScript to implement a website design that is responsive, interactive, and dynamic.

Approach Taken:

Strategy Used: HTML Layout

The definition of the structure and layout was done with semantic HTML elements. Added Reviews sections, Review submission form and Newsletter subscription form. Added dropdowns for selecting background and text colours. CSS Styling
Made web page look pretty and consistent. Made the design responsive for easy display on various screen sizes. Created dynamically styled elements to maintain a clear view.

JavaScript Functionality:

Dynamically added functionality to fetch and display reviews. Added client-side validation and dynamic content updating to the review submission form. Gave a colour to the background and text with real-time updates using drop-down menus.

STUDENT 01

(Avishka Madushan)

Responsibilities of Student 1:

01)Presentation Page Overview

Aesthetic page containing the project title and list of team members. After a very short interval, it will automatically redirect to the homepage.

Purpose:

The Presentation Page serves as the introductory page for the website, providing an overview and introducing the project team. It sets the tone and directs users to the main content.

Structure and Features

Welcome Message:

A brief welcome message introduces the website and its purpose, including the project title, tagline, and an introduction to the team.

Example Code:

Team Introduction:

This section highlights the team members involved in the project, detailing their names, roles, and contributions.

Example Code:

Automatic Transition:

After a brief display period (e.g., 5 seconds), the page automatically transitions to the main page using JavaScript.

UX Considerations:

The page offers a clear and concise introduction, setting user expectations.

The automatic transition keeps users engaged by quickly directing them to the main

content.

02)Signup Page Overview

Purpose:

The Signup Page collects user information and preferences, essential for generating personalized job recommendations and providing access to customized content on the site.

Structure and Features: -

Form Fields:

The form captures essential details such as personal information and job preferences.

Example Code:

```
<form class="registration">
  <div class="Details">
    <fieldset class="main">
      <h2>Get started with your account</h2>
      <h5 style="text-align: center;">Already have an account? <a href="login.html">Login here</a></h5>
      <fieldset>
        <h4>Personal Details</h4>
        <div class="text-label">
          <label>First name</label>
          <input type="text" placeholder="" >
        </div>
        <div class="text-label">
          <label>Last name</label>
          <input type="text" placeholder="">
        </div>
        <div class="text-label">
          <label>Birthday</label>
          <input type="date" placeholder="">
        </div>
        <div class="gender">
          <label>Gender</label>
          <div class="gender-male">
            <label for="m">Male</label>
            <input type="radio" name="gender" id="m">
          </div>
          <div class="gender-female">
            <label for="f">Female</label>
            <input type="radio" name="gender" id="f">
          </div>
        </div>
        <div class="text-label">
          <label>Email</label>
          <input type="email" placeholder="" id="email">
        </div>
        <div class="text-label">
```

Validation:

JavaScript validates the form fields, ensuring all required information is provided before submission. This allows for custom error messages and handling.

Example Code:

```
document.getElementById('signupForm').onsubmit = function(e) {  
  e.preventDefault(); // Prevents the default form submission  
  var isValid = true;  
  var requiredFields = ['name', 'age', 'occupation', 'preferences'];  
  
  requiredFields.forEach(function(field) {  
    if (!document.getElementById(field).value) {  
      isValid = false;  
      alert(field + ' is required.');    }  
  });  
  
  if (isValid) {  
    alert('Form submitted successfully!');  
    // Further processing (e.g., AJAX submission)  
  }  
};
```

Submission Feedback:

Upon successful submission, users receive a confirmation message, either through a pop-up alert or a redirect to a thank-you page.

Example Code:

```
alert("Dear [User Name], thank you for signing up. Your personalized job  
recommendations will be available shortly.");
```

UX Considerations:

The form is designed to be user-friendly, with clear labels and placeholders to guide users through data entry.

Validation ensures data integrity and provides immediate feedback, enhancing the user experience.

03)Gallery Page Overview

Purpose:

The Gallery Page displays images related to job opportunities, company profiles, and other relevant content. It provides a visual exploration tool, enhancing engagement and offering insights into various career paths.

Structure and Features: -

Thumbnail Images:

A grid of thumbnails represents different jobs or companies. Clicking on a thumbnail displays a larger image and description.

Example Code:

```
<html lang="en">
<body>

  <div class="wrapper">
    <h1 class="section-header">Gallery Page</h1>
    <div class="main-content">
      <div class="box">
        
        <div class="immg-text">
          <div class="content" style="width: 100%; height: 100%;text-align: center; padding: 20px; justify-content: left;">
            <h4>Team Collaboration</h4>
            <p>Team collaboration is the process<br> where multiple individuals work together<br> towards a shared objective, leveraging each<br> other's stre
            It involves open communication,<br> mutual respect,
            and coordinated efforts to<br> achieve common goals.<br>
            Effective collaboration enhances<br> productivity, fosters innovation,<br> and creates a cohesive work environment,<br> making it essential fo
          </p>
        </div>
      </div>
    </div>
    <div class="box">
      
      <div class="immg-text">
        <div class="content">
          <h4>Successful Interviews</h4>
          <p>A successful interview involves<br> clear communication, confidence, thorough<br> preparation, and the ability to<br> articulate relevant skill
        </p>
      </div>
    </div>
    <div class="box">
      
      <div class="immg-text">
        <div class="content">
          <h4>Job Fair Events</h4>
          <p>A job fair is an event where <br>employers and job seekers meet to<br> discuss employment opportunities.<br> Companies set up booths to provide
        </p>
      </div>
    </div>
  </div>
</body>
</html>
```

Display Area:

A designated area shows the selected image and its description, updating dynamically based on user interactions.


```
<div id="display">
  
  <p id="imageDescription">Select an image to see the description.</p>
</div>
```

JavaScript Functionality:

JavaScript handles image selection and display logic, showing the corresponding large image and description when a thumbnail is clicked.

Example Code:

```
var thumbnails = document.querySelectorAll('.thumbnail img');
thumbnails.forEach(function(thumbnail) {
  thumbnail.addEventListener('click', function() {
    var largeImageSrc = this.getAttribute('data-large');
    var description = this.getAttribute('data-description');

    document.getElementById('largeImage').src = largeImageSrc;
    document.getElementById('imageDescription').innerText = description;
  });
});
```

UX Considerations:

The gallery layout is visually appealing and easy to navigate, offering a seamless user experience.

Dynamic display enhances engagement, allowing users to interactively explore different images and content.

JavaScript Functionalities Overview

Purpose:

JavaScript functionalities enhance the user experience by adding interactivity and smooth navigation across the Presentation, Signup, and Gallery pages.

Functionalities Implemented: -

Automatic Page Transition:

Ensures smooth user navigation from the presentation page to the main content.

Example Code:

```
setTimeout(function() {  
  window.location.href = 'main.html';  
}, 5000);
```

UX Considerations:

The functionalities offer a seamless and intuitive experience, from automatic transitions to real-time form validation and dynamic content updates.

Accessibility is prioritized, ensuring the site is navigable and usable for all users.

STUDENT 02

(Tharusha Liyanagama)

Tasks of the Student 2

Main Page Design:

The home page functions as a centre for other parts of the web. Buttons with hover effects can navigate the user to the most important elements: the signup page, quiz, and gallery.

Main Page Information:

The main station is the homepage. It gives an impression and overview of the site as it gives easy access to most of the site's sections. It should be visually appealing, navigational, and smooth in the user experience. Some key features are:

Includes the site logo and a menu bar. The menu bar contains links to various sections like Home, Sign Up, Quiz, Gallery, Products, and Contact Us.

Code Example:

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Find My Job | Discover your dream job</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <header class="header">
    <section class="flex">
      <div id="menu-btn" class="fas fa-bars-staggered"></div>
      <a href="index.html" class="logo"><i class="fas fa-briefcase"></i>Find My Job</a>
      <nav class="navbar">
        <a href="index.html">Home</a>
        <a href="quizes.html">Quizes</a>
        <a href="Shop/home.html">Shop</a>
        <a href="gallery.html">Gallery</a>
        <a href="jobs.html">All Jobs</a>
        <a href="account.html">Account</a>
        <a href="review.html">Reviews</a>
        <a href="about.html">About Us</a>
      </nav>
      <a href="#" class="btn" style="margin-top: 0;">POST JOB</a>
    </section>
  </header>

  <div class="index-container">
    <section class="index">
      <form action="" method="post">
        <h3>Discover Your Next Opportunity</h3>
        <p>job title<span>*</span></p>
        <input type="text" name="title" placeholder="keyword, category or company" required maxlength="20" class="input">
        <p>job location</p>
        <input type="text" name="location" placeholder="city, state or country" required maxlength="50" class="input">
        <input type="submit" value="search job" name="search" class="btn">
      </form>
    </section>
  </div>

```

Main Content Area:

It features button or linked-styled CTA elements that drive users to various sections of a website. Such buttons should have hover effects to give visual feedback.

Footer:

Adds the possibility of contact for the user, social media links, and a link to the profile of another user.

Sample Code:

```

<footer>
  <div class="row">
    <div class="col">
      
      <p>FindMyJob.com is one of the leading and most trusted job finding platforms globally,
      dedicated to bridging the gap between top talent and exceptional career opportunities.
      Our commitment to personalized job matching, comprehensive career resources, and industry-leading
      networking features ensures that every user can unlock their full potential and achieve their professional goals.
      </p>
    </div>

    <div class="col">
      <h3>Office
      | <div class="underline"><span></span></div>
      </h3>
      <p>Dreamland Castle,</p>
      <p>No.17, Flying Carpet Street,</p>
      <p>Wonderland City, Fantasy Island,</p>
      <p>Sri Lanka.</p>
      <p class="CompanyEmail">findmyjob@outlook.com</p>
      <h4>+94 71 234 5678</h4>
    </div>

    <div class="col">
      <h3>Quick Links
      | <div class="underline"><span></span></div>
      </h3>
      <ul>
        <li><a href="">Home</a></li>
        <li><a href="">Services</a></li>
        <li><a href="">About Us</a></li>
        <li><a href="">Features</a></li>
        <li><a href="">Contacts</a></li>
      </ul>
    </div>
  </div>

```

Styling and UX Considerations:

- Same colour scheme and typography on every piece.
- Make sure that usability is assured on different devices.
- Human-readable labels for easy navigation.

Quiz Page Info

Objective:

The quiz page's design is to engage with users, give them recommendations, and find a way to engage them in your website even more. It also works as an interactive tool for keeping users on the site longer.

Quiz Structure:

A very short introduction to explain why they are being asked to take the quiz, and how their quiz results will help optimize their site experience.

Code Example:

```
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4    <meta charset="UTF-8">
5    <meta name="viewport" content="width=device-width, initial-scale=1.0">
6    <title>Quizes</title>
7    <link rel="stylesheet" href="quize.css">
8  </head>
9  <body>
10   <div class="app">
11     <h1>Quize</h1>
12     <div class="quiz">
13       <h2 id="question">Question goes here</h2>
14       <div id="answer-buttons">
15         <button class="btn">Answer1</button>
16         <button class="btn">Answer2</button>
17         <button class="btn">Answer3</button>
18         <button class="btn">Answer4</button>
19       </div>
20       <button id="next-btn">Next</button>
21     </div>
22   </div>
23   <script src="quiz.js"></script>
24 </body>
25 </html>
26
```

Questions:

There are five multiple-choice questions about the whole aspect of job-hunting processes or preferences. For each question, there are several choices, and a user needs to select one answer for each question.

Code Example:

```
const questions = [
  {
    question: "What is a common mistake to avoid during a job interview?",
    answers: [
      { text: "Asking about the company culture", correct: false },
      { text: "Being honest about your weaknesses", correct: true },
      { text: "Checking your phone", correct: false },
      { text: "Being late", correct: false },
    ]
  },
  {
    question: "What is a common benefit of doing an internship?",
    answers: [
      { text: "Guaranteed job placement", correct: false },
      { text: "Gaining hands-on experience in your field", correct: true },
      { text: "Earning a high salary", correct: false },
      { text: "Traveling to different countries", correct: false },
    ]
  },
  {
    question: "Which of the following is an effective way to follow up after a job interview?",
    answers: [
      { text: "Sending a thank-you email", correct: true },
      { text: "Calling every day", correct: false },
      { text: "Sending a gift", correct: false },
      { text: "Visiting the office unannounced", correct: false },
    ]
  },
  {
    question: "Which platform is most commonly used by recruiters to find potential candidates?",
    answers: [
      { text: "LinkedIn", correct: true },
      { text: "Facebook", correct: false },
      { text: "Twitter", correct: false },
      { text: "Instagram", correct: false },
    ]
  }
],
```

JavaScript-based Features:

It is used in controlling the logic of a quiz, including scoring and feedback based on the user's responses.

Sample Code:

```

48
49 const questionElement = document.getElementById("question");
50 const answerButtons = document.getElementById("answer-buttons");
51 const nextButton = document.getElementById("next-btn");
52
53 let currentQuestionIndex = 0;
54 let score = 0;
55
56 function startQuiz() {
57     currentQuestionIndex = 0;
58     score = 0;
59     nextButton.innerHTML = "Next";
60     showQuestion();
61 }
62
63 function showQuestion() {
64     resetState();
65     let currentQuestion = questions[currentQuestionIndex];
66     questionElement.innerHTML = currentQuestion.question;
67
68     currentQuestion.answers.forEach(answer => {
69         const button = document.createElement("button");
70         button.classList.add("btn");
71         button.innerText = answer.text;
72         button.addEventListener("click", () => selectAnswer(answer.correct));
73         answerButtons.appendChild(button);
74     });
75 }
76
77 function resetState() {
78     nextButton.style.display = "none";
79     while (answerButtons.firstChild) {
80         answerButtons.removeChild(answerButtons.firstChild);
81     }
82 }
83

```

```

74 | });
75 | }
76 |
77 | function resetState() {
78 |     nextButton.style.display = "none";
79 |     while (answerButtons.firstChild) {
80 |         answerButtons.removeChild(answerButtons.firstChild);
81 |     }
82 | }
83 |
84 | function selectAnswer(isCorrect) {
85 |     if (isCorrect) {
86 |         score += 2;
87 |     } else {
88 |         score -= 1;
89 |     }
90 |
91 |     Array.from(answerButtons.children).forEach(button => {
92 |         button.disabled = true;
93 |     });
94 |
95 |     nextButton.style.display = "block";
96 | }
97 |
98 | nextButton.addEventListener("click", () => {
99 |     currentQuestionIndex++;
100 |     if (currentQuestionIndex < questions.length) {
101 |         showQuestion();
102 |     } else {
103 |         questionElement.innerHTML = `Quiz completed! Your score is ${score}.`;
104 |         answerButtons.innerHTML = "";
105 |         nextButton.style.display = "none";
106 |     }
107 | });
108 |
109 | startQuiz();

```

UX Considerations:

Clearly written prompts and formatting of questions.

Immediate feedback on submit to keep your users informed and engaged.

Make your layout mobile friendly to everyone.

Query to a Contact Us Page Details

Purpose:

The question page will enable one to inquire about anything they might have in mind or contact the website's support team for feedback or to express a concern. It offers users the best user experience by creating an opportunity for them to reach out to the website

support team.

Personal Data Fields:

Users input their name, email address, and optionally, a phone number.

Query Details:

Text area for the user to enter their question or feedback. Include a select or radio buttons for selecting the type of question: General Inquiry, Feedback, Technical Support.

JavaScript Form Validations:

It makes sure that every required field has an entry and that the format of the email is correct. Gives feedback on how users have erred while submitting information.

Source Code:

```
1 let navbar = document.querySelector('.header .flex .navbar');
2
3 document.querySelector('#menu-btn').onclick = () => {
4   navbar.classList.toggle('active');
5 }
6
7 window.onscroll = () => {
8   navbar.classList.remove('active');
9 }
10
11 document.querySelectorAll('input[type="number"]').forEach(inputNumber => {
12   inputNumber.oninput = () => {
13     if (inputNumber.value.length > inputNumber.maxLength)
14       inputNumber.value = inputNumber.value.slice(0, inputNumber.maxLength);
15   };
16 });
17
18
19 document.querySelector('#queryForm').onsubmit = (event) => {
20   event.preventDefault();
21
22   let name = document.querySelector('#queryName').value;
23   let email = document.querySelector('#queryEmail').value;
24   let theme = document.querySelector('input[name="queryTheme"]:checked') ?
25     document.querySelector('input[name="queryTheme"]:checked').value : "";
26   let details = document.querySelector('#queryDetails').value;
27
28   if (name && email && theme && details) {
29     alert(`Name: ${name}\nEmail: ${email}\nSubject: ${theme}\nDetails: ${details}`);
30     document.querySelector('#queryForm').reset();
31   } else {
32     alert('Please fill in all the required fields.');
```

STUDENT 03

(Vihanga Induwara)

Product Purchase Page Overview

Purpose:

The Product Purchase Page is designed for users to explore and buy products that assist with job searching. This includes items like resume templates, interview preparation kits, and professional attire. It's an essential part of the website's revenue generation.

Structure and Features

Product Display:

At least three products are displayed on the page.

Each product includes a thumbnail image, a brief description, and pricing information.

Example Code:

```
<div class="pro">
  
</div>
<div class="des">
  <span>Cream</span>
  <h5>luxerius Cream Bottle</h5>
  <div class="star">
    <i class="fas fa-star"></i>
    <i class="fas fa-star"></i>
    <i class="fas fa-star"></i>
    <i class="fas fa-star"></i>
    <i class="fas fa-star"></i>
  </div>
  <h4>$78</h4>
</div>
<a class="cart" onclick="addToCart('Cream', 'luxerius Cream Bottle', 78, 'New folder/cream bottle 4.jpg'); playPopSound();">
  <i class="fa-solid fa-cart-shopping"></i>
</a>
</div>
```

Purchase Form:

Users provide personal details and select products with desired quantities. Form fields include Name, Email, Address, and other contact information.

Example Code:

```
<!-- Checkout form section -->
<section id="product1" class="section-p1">
<link rel="stylesheet" href="checkout.css">
  <h2>Year Details</h2>
  <p id="checkout-form">Give us your Details</p>
  <div class="">
    <form action="">
      <div class="row">
        <div class="column">
          <h3>Billing Address</h3>
          <div class="input-box">
            <label for="fullName">Full Name</label>
            <input type="text" id="fullName" name="fullName" placeholder="Enter Your Name">
          </div>
          <div class="input-box">
            <label for="email">Email</label>
            <input type="email" id="email" name="email" placeholder="example@example.com">
          </div>
          <div class="input-box">
            <label for="address">Address</label>
            <input type="text" id="address" name="address" placeholder="Address">
          </div>
          <div class="input-box">
            <label for="city">City</label>
            <input type="text" id="city" name="city" placeholder="City">
          </div>
          <div class="input-box">
            <label for="state">State</label>
            <input type="text" id="state" name="state" placeholder="State">
          </div>
          <div class="input-box">
            <label for="zip">Zip Code</label>
            <input type="text" id="zip" name="zip" placeholder="1234">
          </div>
        </div>
      </div>
    </form>
  </div>
```

Dynamic Pricing with JavaScript:

JavaScript calculates the total price based on selected products and their quantities. Discounts are applied based on user points, e.g., 10% off for 10 points.

Example Code:

```
document.addEventListener('DOMContentLoaded', () => {
  const form = document.querySelector('form');
  const fullName = document.getElementById('fullName');
  const email = document.getElementById('email');
  const address = document.getElementById('address');
  const city = document.getElementById('city');
  const state = document.getElementById('state');
  const zip = document.getElementById('zip');
  const cardName = document.getElementById('cardName');
  const cardNumber = document.getElementById('cardNumber');
  const expMonth = document.getElementById('expMonth');
  const expYear = document.getElementById('expYear');
  const cvv = document.getElementById('cvv');

  form.addEventListener('submit', (e) => {
    e.preventDefault();

    // Clear any previous error messages
    document.querySelectorAll('.error').forEach(el => el.remove());

    let isValid = true;

    // Check if fields are empty or invalid
    if (fullName.value.trim() === '' || /\d/.test(fullName.value)) {
      showError(fullName, 'Full Name is required and cannot contain numbers');
      isValid = false;
    }
    if (email.value.trim() === '') {
      showError(email, 'Email is required');
      isValid = false;
    } else if (!validateEmail(email.value)) {
      showError(email, 'Invalid email format');
      isValid = false;
    }
    if (address.value.trim() === '') {
      showError(address, 'Address is required');
      isValid = false;
    }
    if (city.value.trim() === '' || /\d/.test(city.value)) {
```

Order Confirmation:

A confirmation message displays the order summary, including products, quantities, and total cost.

- **Example Code:**

```
// Function to handle order confirmation
function displayOrderConfirmation() {
  const orderSummaryElement = document.getElementById('order-summary');
  orderSummaryElement.innerHTML = ''; // Clear previous order summary

  if (const orderSummaryElement: HTMLElement | null
    orderSummaryElement.innerHTML = '<p>Your cart is empty. Please add items to your cart before confirming your order.</p>';
    return;
  }
```

UX Considerations:

The layout is user-friendly with clear labels and a clean interface.

Form fields are validated for correct and complete data entry.

The page is responsive, ensuring a seamless experience across devices.

About Us Page Overview

Purpose:

The About Us page introduces the team behind the website, providing a personal touch and building credibility. It includes information about team members, their roles, and their contributions.

Structure and Features

Team Member Profiles:

Each team member has a photo, name, role, and a brief description of their responsibilities.

Example Code:

```
<!-- Cards Container -->
<div class="cards-container">
  <!-- Card Container -->
  <div class="card">
    <!-- Card Image -->
    
    <!-- Card Body -->
    <div class="card-body">
      <!-- Card Title -->
      <h1 class="card-title">Vihanga induwara</h1>
      <!-- Card Subtitle -->
      <p class="card-sub-title">undergraduate</p>
      <!-- Card Information -->
      <p class="card-info">Vihanga Induwara, 21, is an undergraduate student pursuing a degree in
        Artificial Intelligence and Data Science. Currently enrolled in the Web Technology subject, Vihanga is
        dedicated to expanding his knowledge and skills in the field of web development.</p>
      <!-- Card Button -->
      <a href="vihanga -editors page/editors page.html" class="card-btn">More</a>
    </div>
  </div>
</div>
```

Interactive Features:

Additional information is displayed when users hover over or click on a team member's photo.

```

1094 |
1095 |     /* General Hover Effects */
1096 |     .pro:hover {
1097 |         box-shadow: 0 8px 20px rgba(0, 0, 0, 0.2);
1098 |     }
1099 |
1100 |     .pro:hover img {
1101 |         transform: scale(1.1);
1102 |         opacity: 0.8;
1103 |     }
1104 |
1105 |     .pro:hover .des {
1106 |         background-color: #f8f8f8;
1107 |     }
1108 |
1109 |     #navbar li a:hover,
1110 |     #navbar li a.active {
1111 |         color: var(--main-color);
1112 |     }
1113 |
1114 |     #navbar li a.active::after,
1115 |     #navbar li a:hover::after {
1116 |         content: "";
1117 |         width: 30%;
1118 |         height: 2px;
1119 |         background: var(--main-color);
1120 |         position: absolute;
1121 |         bottom: -4px;
1122 |         left: 20px;
1123 |     }
1124 |
1125 |     #feature .fe-box:hover {
1126 |         box-shadow: 10px 10px 54px var(--main-color);
1127 |     }
1128 |
1129 |     #banner button:hover {
1130 |         background-color: var(--main-color);

```

Content and Style:

The content is concise and informative, offering an overview of each member's skills and contributions.

A consistent style is maintained, aligning with the overall site branding.

UX Considerations:

- The page is visually appealing and easy to navigate.
- Images and interactive elements enhance user engagement.
- Accessibility is prioritized, ensuring usability for all visitors, including those with disabilities.

JavaScript Functionalities

Purpose:

JavaScript enhances the user experience by adding interactivity and dynamic content updates, especially for product purchasing and accessibility features.

Functionalities Implemented

Dynamic Price Calculation:

Calculates the total cost of selected products and applies discounts based on user points, updating in real-time.

Example Code:

```
// Function to update the displayed cart quantity
function updateCartQuantity() {
  const cartQuantityElement = document.getElementById('cart-quantity'); // Assuming there's an element with id 'cart-quantity' in your HTML
  cartQuantityElement.textContent = cart.length; // Update the text content to show the number of items in the cart
}

// Function to calculate cart total
function calculateCartTotal() {
  let subtotal = 0;
  for (const item of cart) {
    subtotal += item.price * item.quantity;
  }

  const subtotalElement = document.getElementById("subtotal").getElementsByName("tr")[0].getElementsByName("td")[1];
  subtotalElement.textContent = `$$${subtotal}`;

  // Update total considering potential discount (code for discount functionality not provided)
  const discount = 0; // Replace with logic to calculate discount based on applied coupon
  const total = subtotal - discount;
  const totalElement = document.getElementById("subtotal").getElementsByName("tr")[3].getElementsByName("td")[1];
  totalElement.textContent = `$$${total}`;
}
```


Order Summary and Confirmation:

Provides a summary of the user's order before final submission.

Example Code:

```
// Function to add product to cart
function addToCart(name, title, price, image) {
  const item = { name, title, price, image, quantity: 1 };

  // Check if item already exists in cart
  const existingItem = cart.find(cartItem => cartItem.name === name);
  if (existingItem) {
    existingItem.quantity++;
  } else {
    cart.push(item);
  }

  updateCart();
  updateCartQuantity(); // Update cart quantity display
}
```

UX Considerations:

- Features are designed to be intuitive and enhance user engagement.
- Real-time updates and interactive elements make the site more dynamic and responsive.
- Accessibility features, like font size adjustment, ensure the site is usable for everyone.

STUDENT 04

(Surakkitha Galappaththi)

Listing Page Overview

Purpose:

The Listing Page displays a variety of customer reviews, providing users with details about how people got renowned job opportunities from our website. It's a core feature of the website, helping users find and clarify the outcome that align with their skills and preferences.

Structure and Features

Review Display:

Reviews are presented in a structured format using XML. Each review card shows including key information such as customer name, profile picture, description, rating for the company, social media icon etc of the customer.

```
STUDENT4 > reviews.xml
1  <?xml version="1.0" encoding="UTF-8"?>
2  <reviews>
3    <review>
4      <stars>★★★★★</stars>
5      <text>"I found my dream job within a week of signing up! The interface is user-friendly, and the job recommendations were spot on. The customer support team was a
6      <user>
7        <name>Venuka Kalhan</name>
8        <time>10 minutes ago</time>
9        <image>userprofiles/1.jpg</image>
10     </user>
11     <social>fa-facebook</social>
12   </review>
13
14   <review>
15     <stars>★★★★★</stars>
16     <text>"A great resource for job seekers. I appreciated the detailed job descriptions and the ability to filter searches by location, salary, and industry. I recei
17     <user>
18       <name>Kavindu Madushanka</name>
19       <time>20 minutes ago</time>
20       <image>userprofiles/2.jpg</image>
21     </user>
22     <social>fa-facebook</social>
23   </review>
24
25   <review>
26     <stars>★★★★★</stars>
27     <text>"Very helpful for recent graduates. The entry-level job listings were abundant, and the site provided useful tips for interviews and resume writing. I found
28     <user>
29       <name>Surakkitha Galappaththi</name>
30       <time>2 days ago</time>
31       <image>userprofiles/3.jpg</image>
32     </user>
33     <social>fa-facebook</social>
34   </review>
```

UX Considerations:

The page layout is intuitive and easy to navigate, with clear labels and accessible filtering options.

Information is organized for easy scanning, allowing users to quickly find relevant job opportunities.

Newsletter Subscription Form Overview

Purpose:

The Newsletter Subscription Form allows users to subscribe to receive personalized job recommendations and updates, facilitating direct communication between the website and its users.

Structure and Features: -

Subscription Form Fields:

The form collects essential user information, including name and email address, and may include job preferences to customize newsletter content.

```
<div class="col">
  <h3>Newsletter
  | <div class="underline"><span></span></div>
  </h3>
  <p>
    <b>Join the Community!</b>
    Hey! No need to constantly check our website.<br>
    Get all the latest updates delivered straight to your inbox.
    Engage with our newsletter for the latest updates and news.
  </p>

  <form id="subscribeForm">
    <label for="subscriberName"></label>
    <i class="fa-solid fa-user"></i>
    <input type="text" id="subscriberName" name="name" placeholder="Your Name"><br>
    <br>
    <label for="subscriberEmail"></label>
    <i class="fa-solid fa-envelope"></i>
    <input type="email" id="subscriberEmail" name="email" placeholder="Email Address"><br>
    <br>
    <button type="submit">Subscribe</button>
  </form>
  <div class="SocialMediaIcons">
    <i class="fa-brands fa-facebook"></i>
    <i class="fa-brands fa-square-x-twitter"></i>
    <i class="fa-brands fa-instagram"></i>
    <i class="fa-brands fa-whatsapp"></i>
  </div>
  <div id="subscribersList"></div>
</div>
</div>
```

Validation and Confirmation:

JavaScript validation ensures that the email address is correctly formatted and that all required fields are filled out. Upon successful submission, users receive a confirmation message.

```
// Function to handle newsletter subscription form
document.getElementById('subscribeForm').addEventListener('submit', function(event) {
    event.preventDefault();
    const name = document.getElementById('subscriberName').value;
    const email = document.getElementById('subscriberEmail').value;

    if (name && email) {
        alert(`Dear ${name}, you have successfully subscribed for a personalized newsletter.`);
        // Reset the form after successful submission
        document.getElementById('subscribeForm').reset();
    } else {
        alert('Please fill in all required fields.');
```

UX Considerations:

The form is simple and user-friendly, encouraging users to subscribe with minimal effort and Clear feedback messages provide assurance of successful submission.

JavaScript Functionalities Overview: -

Purpose

The JavaScript functionalities enhance interactivity and responsiveness on the Listing Page and Newsletter Subscription Form, including filtering job listings, validating form submissions, and more.

Functionalities Implemented: -

Newsletter Subscription Validation:

Validates user information during newsletter subscription, ensuring a valid email format and that all required fields are completed.

Dynamic Content Loading:

JavaScript dynamically loads job listings or other content, enhancing page performance and providing a smooth user experience, such as loading more listings as the user scrolls.

UX Considerations:

The functionalities provide a seamless and engaging experience, from real-time form validation to dynamic content updates.

Accessibility and user experience are prioritized, ensuring the site is functional and enjoyable to use.

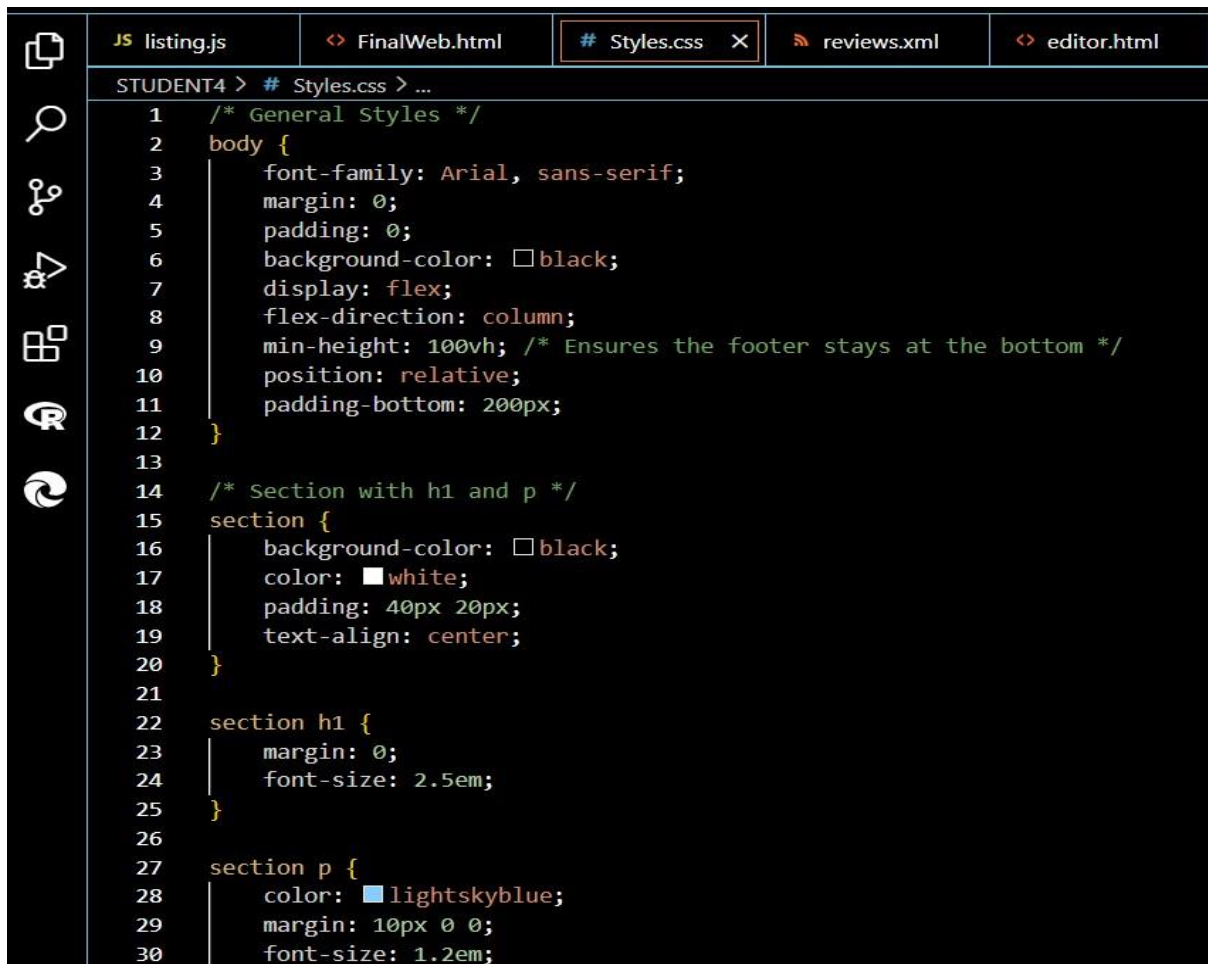
Implementation Details:

1. HTML and CSS Implementation

HTML structured the basic layout with space for the reviews to be displayed and room for forms to enable the user interactions. The CSS was linked by using a <link> tag in the <head> section.

```
<link rel="stylesheet" href="styles.css">
```

The CSS contained styling rules for various elements:

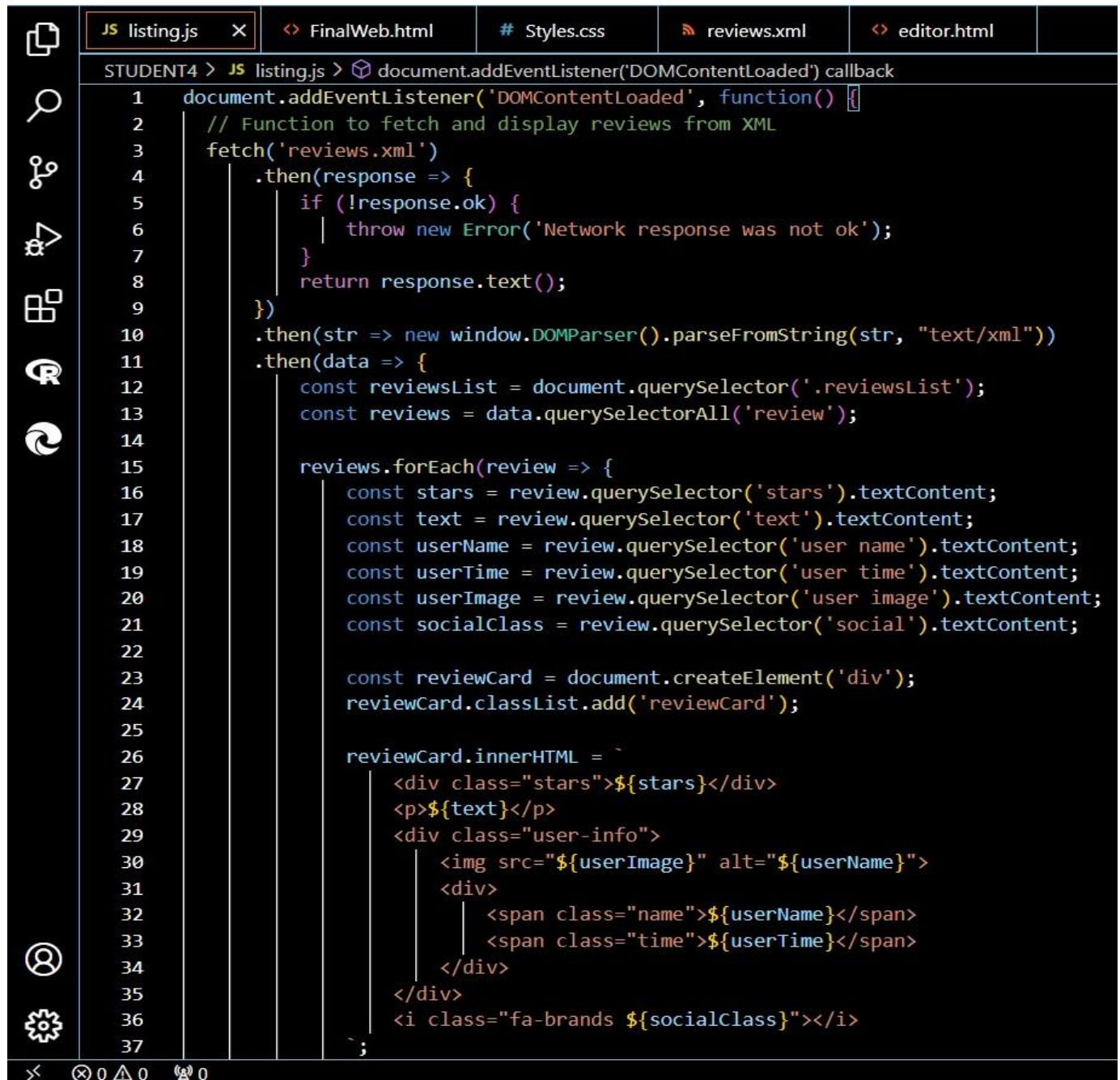
A screenshot of a code editor interface. The top bar shows several open files: 'listing.js', 'FinalWeb.html', '# Styles.css' (which is the active file), 'reviews.xml', and 'editor.html'. The main editor area displays CSS code for 'STUDENT4 > # Styles.css > ...'. The code includes a 'body' selector with various styling rules, a 'section' selector, and specific rules for 'h1' and 'p' elements within sections. The code is as follows:

```
1  /* General Styles */
2  body {
3      font-family: Arial, sans-serif;
4      margin: 0;
5      padding: 0;
6      background-color: black;
7      display: flex;
8      flex-direction: column;
9      min-height: 100vh; /* Ensures the footer stays at the bottom */
10     position: relative;
11     padding-bottom: 200px;
12 }
13
14 /* Section with h1 and p */
15 section {
16     background-color: black;
17     color: white;
18     padding: 40px 20px;
19     text-align: center;
20 }
21
22 section h1 {
23     margin: 0;
24     font-size: 2.5em;
25 }
26
27 section p {
28     color: lightskyblue;
29     margin: 10px 0 0;
30     font-size: 1.2em;
```


2. JavaScript for an Interactivity and Dynamic Content

Fetching and Displaying Reviews from an XML:

Used the fetch API of JavaScript to fetch the review data from an XML file. After this, we parsed and displayed that at the runtime.



```
JS listing.js x FinalWeb.html # Styles.css reviews.xml editor.html
STUDENT4 > JS listing.js > document.addEventListener("DOMContentLoaded") callback
1 document.addEventListener('DOMContentLoaded', function() {
2     // Function to fetch and display reviews from XML
3     fetch('reviews.xml')
4     .then(response => {
5         if (!response.ok) {
6             throw new Error('Network response was not ok');
7         }
8         return response.text();
9     })
10    .then(str => new window.DOMParser().parseFromString(str, "text/xml"))
11    .then(data => {
12        const reviewsList = document.querySelector('.reviewsList');
13        const reviews = data.querySelectorAll('review');
14
15        reviews.forEach(review => {
16            const stars = review.querySelector('stars').textContent;
17            const text = review.querySelector('text').textContent;
18            const userName = review.querySelector('user name').textContent;
19            const userTime = review.querySelector('user time').textContent;
20            const userImage = review.querySelector('user image').textContent;
21            const socialClass = review.querySelector('social').textContent;
22
23            const reviewCard = document.createElement('div');
24            reviewCard.classList.add('reviewCard');
25
26            reviewCard.innerHTML = `
27                <div class="stars">${stars}</div>
28                <p>${text}</p>
29                <div class="user-info">
30                    
31                    <div>
32                        <span class="name">${userName}</span>
33                        <span class="time">${userTime}</span>
34                    </div>
35                </div>
36                <i class="fa-brands ${socialClass}"></i>
37            `;
38        });
39    });
40}
```

Submitting Form Data and Validation:

For user reviews, we've done validation on the form submission and created a new review card:

```
// Function to handle form submission for new reviews
document.getElementById('reviewForm').addEventListener('submit', function(event) {
    event.preventDefault();

    const name = document.getElementById('name').value;
    const ratings = document.querySelector('input[name="ratings"]:checked').value;
    const description = document.getElementById('description').value;
    const imageInput = document.getElementById('image');

    const reader = new FileReader();
    reader.onload = function(event) {
        const imageUrl = event.target.result;

        const reviewCard = document.createElement('div');
        reviewCard.className = 'reviewCard';

        reviewCard.innerHTML = `
            <div class="stars">${'★'.repeat(ratings)}</div>
            <p>${description}</p>
            <div class="user-info">
                
                <div>
                    <span class="name">${name}</span>
                    <span class="time">Just now</span>
                </div>
            </div>
        `;

        document.getElementById('newUserReviews').appendChild(reviewCard);
        document.getElementById('reviewForm').reset();
    };

    reader.readAsDataURL(imageInput.files[0]);
});
```

Changing Background and Text Colours:

Dropdowns to select and set the background and text colors were added. Event Listeners were added to track change and apply the styles on-the-fly:

```

// Functionality to change background and text color
document.getElementById('backgroundColor').addEventListener('change', function() {
| document.body.style.backgroundColor = this.value;
});

document.getElementById('textColor').addEventListener('change', function() {
| document.body.style.color = this.value;
});

});

```

ACTIVATION OF A NEWSLETTER:

A basic validation has been added to make sure the name and the email fields are filled before allowing form submission:

```

<div class="col">
| <h3>Newsletter
| | <div class="underline"><span></span></div>
| </h3>
| <p>
| | <b>Join the Community!</b>
| | Hey! No need to constantly check our website.<br>
| | Get all the latest updates delivered straight to your inbox.
| | Engage with our newsletter for the latest updates and news.
| </p>
|
| <form id="subscribeForm">
| | <label for="subscriberName"></label>
| | <i class="fa-solid fa-user"></i>
| | <input type="text" id="subscriberName" name="name" placeholder="Your Name"><br>
| | <br>
| | <label for="subscriberEmail"></label>
| | <i class="fa-solid fa-envelope"></i>
| | <input type="email" id="subscriberEmail" name="email" placeholder="Email Address"><br>
| | <br>
| | <button type="submit">Subscribe</button>
| </form>
| <div class="SocialMediaIcons">
| | <i class="fa-brands fa-facebook"></i>
| | <i class="fa-brands fa-square-x-twitter"></i>
| | <i class="fa-brands fa-instagram"></i>
| | <i class="fa-brands fa-whatsapp"></i>
| </div>
| <div id="subscribersList"></div>
| </div>
</div>

```


CONCLUSION: This is a bit of semantic HTML, CSS styling, and JavaScript applied in such a way that the UI becomes responsive and interactive. In addition, the use of JavaScript will aid dynamically in modifying contents as well as interaction with contents on the page. This is seen as an assurance for a modern web application friendly in usage and adaptive for users' inputs.

4. Discussion of UX/UI principles/Applications/Justifications

This section explores the user experience (UX) and user interface (UI) design principles applied in developing the "FindmyJob.com" website. Each aspect of the design was carefully considered to ensure a cohesive, accessible, and user-friendly experience.

4.1 Navigation Techniques

Overview:

Navigation is a fundamental component of UX/UI design, facilitating efficient exploration and interaction with the website's content. The navigation system on "FindmyJob.com" is designed to be intuitive, consistent, and accessible across all devices.

Techniques Used:-

Primary Navigation Bar:

A horizontal navigation bar is positioned at the top of each page, providing links to key sections: Home, Sign Up, Quiz, Gallery, Products, and Contact Us. This bar is fixed, ensuring consistent access regardless of the user's position on the page.

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Find My Job | Discover your dream job</title>
  <link rel="stylesheet" href="style.css">
</head>
<body>
  <header class="header">
    <section class="flex">
      <div id="menu-btn" class="fas fa-bars-staggered"></div>
      <a href="index.html" class="logo"><i class="fas fa-briefcase"></i>Find My Job</a>
      <nav class="navbar">
        <a href="index.html">Home</a>
        <a href="quizes.html">Quizes</a>
        <a href="Shop/home.html">Shop</a>
        <a href="gallery.html">Gallery</a>
        <a href="jobs.html">All Jobs</a>
        <a href="account.html">Account</a>
        <a href="review.html">Reviews</a>
        <a href="about.html">About Us</a>
      </nav>
      <a href="#" class="btn" style="margin-top: 0;">POST JOB</a>
    </section>
  </header>

```

Breadcrumb Navigation:

Breadcrumbs are used on subpages to indicate the user's current position within the site's hierarchy, helping users understand their location and navigate back to previous sections.

Responsive Design:

The navigation adapts to different screen sizes, transforming into a hamburger menu on mobile devices to save space while maintaining full functionality.

Justification:

These navigation techniques ensure that users can easily find and access the content they need. The consistent layout helps users familiarize themselves with the site structure, while the responsive design ensures a seamless experience across all devices.

4.2 Color balance/selection/consistency

Overview:

The color scheme of "FindmyJob.com" was selected to create a professional, inviting, and accessible environment. The primary colors are blue and white, with accent colors used sparingly for emphasis.

Color Choices:

Primary Color: **Blue** (#0073e6) - Associated with trust, professionalism, and reliability, making it ideal for a job recommendation platform.

Secondary Color: **White** (#ffffff) - Provides a clean, uncluttered background that enhances readability and creates a sense of space.

Accent Colors: Used for buttons, links, and interactive elements to draw attention and guide user actions.

Justification:

The selected colors create a professional and trustworthy appearance, crucial for a site dealing with job opportunities. The consistent use of colors ensures that users can easily recognize interactive elements and navigate the site effectively.

Consistency:

A consistent color scheme is maintained across all pages to reinforce brand identity and provide a cohesive visual experience.

4.3 Color Contrast Test

Overview:

Ensuring adequate color contrast is essential for accessibility, as it affects the readability of text and the visibility of interactive elements. The contrast between text and background colors on "FindmyJob.com" was tested to meet the Web Content Accessibility Guidelines (WCAG) standards.

Testing Process:

A color contrast tool was used to check the contrast ratios between text and background colors. The minimum acceptable contrast ratio for normal text is 4.5:1, while large text requires a ratio of at least 3:1.

Results:

The primary color (blue) on a white background provides a high contrast ratio, making text easily readable.

All button and link colors were tested to ensure they stand out against their backgrounds, providing clear visual cues.

Justification:

Ensuring high color contrast is crucial for users with visual impairments, including those with low vision or color blindness. By adhering to these standards, "FindmyJob.com" offers an inclusive and accessible experience to all users.

4.4 Typography / consistency

Typography Choices:

Primary Font: Arial, sans-serif - Chosen for its clean and modern appearance, Arial is a highly readable sans-serif font that performs well on screens.

Font Sizes:

- Headings (h1, h2, h3): Larger and bolder to signify importance and structure the content.
- Body Text: 16px - A standard size that is comfortable for reading long passages.
- Small Text: 14px - Used sparingly for less critical information.
- Line Height and Spacing: Line height is set to 1.5 for body text to improve readability and reduce eye strain.

Consistency:

A style guide was established to ensure consistent use of fonts, sizes, and spacing across all pages.

```
/* General Styles */
body {
  font-family: Arial, sans-serif;
  margin: 0;
  padding: 0;
  background-color: black;
  display: flex;
  flex-direction: column;
  min-height: 100vh; /* Ensures the footer stays at the bottom */
  position: relative;
  padding-bottom: 200px;
}
```

Justification:

Consistent typography enhances the user experience by providing a clear hierarchy of information, making the content easier to navigate and understand. The chosen font and sizes ensure readability across different devices and screen sizes.

4.5 Accessibility

Overview:

Accessibility is a fundamental aspect of the website design, ensuring that "FindmyJob.com" is usable by everyone, including individuals with disabilities. Several HTML and CSS techniques were implemented to enhance accessibility.

Text Accessibility:

Semantic HTML tags (e.g., <header>, <nav>, <main>, <footer>) were used to define the structure and meaning of content. Alt attributes were provided for all images to describe their content for screen readers.

Image Accessibility:

Descriptive alt text for images ensures that users with visual impairments can understand the content.

Form Accessibility:

Labels are explicitly associated with form controls to aid screen reader navigation. ARIA roles and properties are used where necessary to enhance accessibility.

Justification:

By incorporating these accessibility features, "FindmyJob.com" ensures that all users,

regardless of their abilities, can access and interact with the site. This inclusive approach not only meets legal requirements but also enhances the site's reach and usability.

4.6 Accessibility Test

Overview:

Accessibility testing was conducted on two key pages: the Homepage and the Job Listings page. This testing involved using automated tools and manual checks to ensure compliance with WCAG 2.1 standards.

Testing Process and Tools:

Automated tools like WAVE and Axe were used to identify potential accessibility issues such as missing alt text, insufficient color contrast, and improper use of ARIA roles.

Manual testing included checking keyboard navigability, screen reader compatibility, and text readability.

Homepage:

Passed all major accessibility checks, including proper use of headings, alt text for images, and sufficient color contrast.

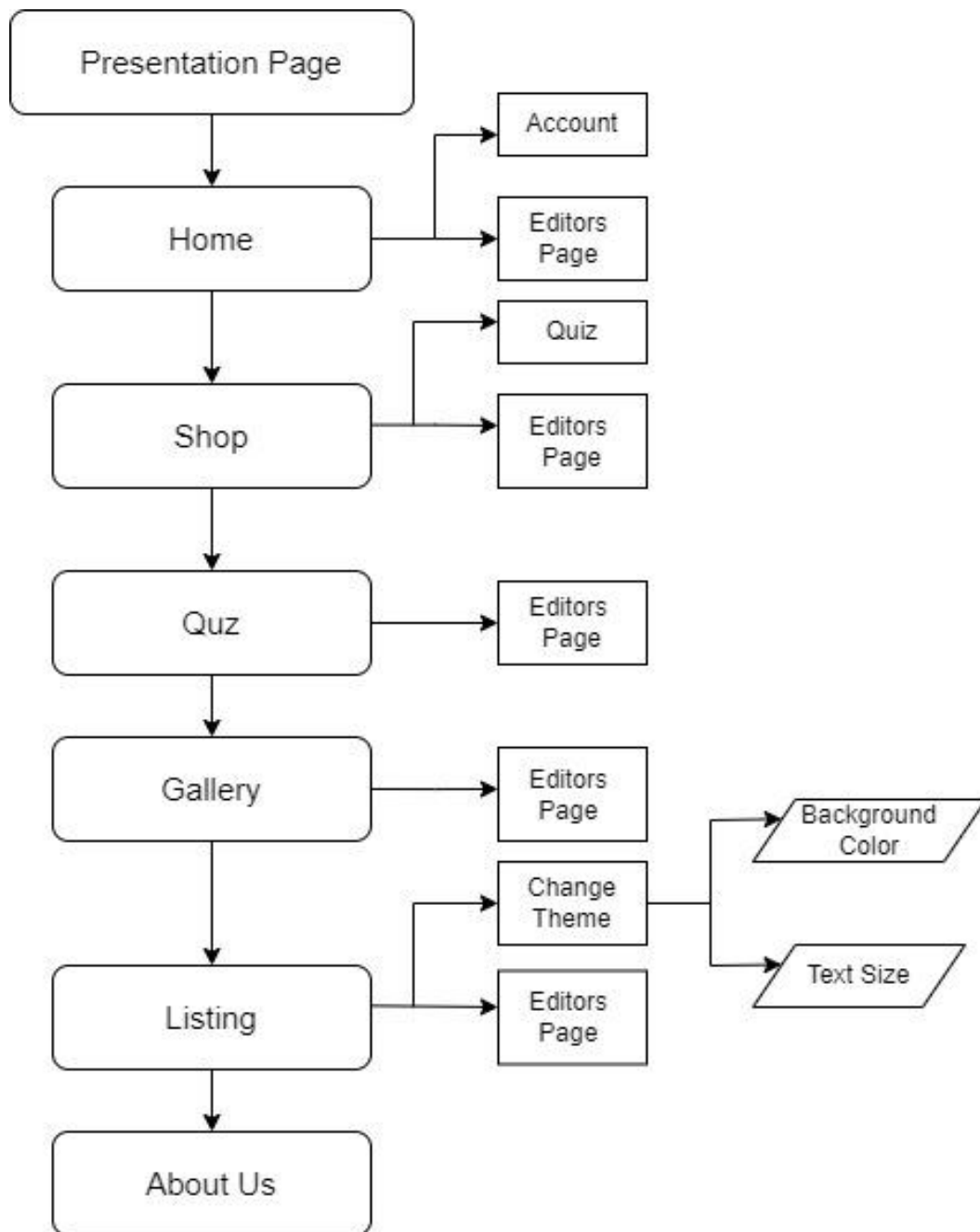
Listings Page:

Detected a few issues, such as missing ARIA roles for interactive elements, which promptly corrected. Color contrast ratios were found to meet WCAG guidelines, ensuring text readability.

Justification:

Conducting accessibility tests ensures that the website is usable by all individuals, including those with disabilities. Addressing these issues not only improves the user experience but also complies with accessibility standards, reducing legal risks.

4.7 Site Diagram



Justification:

A well-structured site diagram helps in planning the website's layout and navigation, ensuring that users can easily find the content they are looking for. It also aids developers and designers in maintaining consistency and coherence throughout the site.

5. Self-Reflection

Student 1: Avishka Madushan

Challenges:

Presentation Page: Ensuring smooth transitions between pages and creating engaging content to captivate the user's interest from the start.

Signup Page: Designing an intuitive form layout with effective data validation, ensuring that the form is user-friendly and captures all necessary information without overwhelming users.

Gallery Page: Managing the dynamic display of images and optimizing performance to ensure fast loading times and a smooth user experience.

Reflection:

I learned to balance aesthetics with functionality, particularly in frontend development. This project improved my skills in optimizing page performance and enhancing user interactions, teaching me the importance of creating a visually appealing yet efficient user interface.

Student 2: Tharusha Liyanagama

Challenges:

Main Page: Balancing visual appeal with functional navigation, ensuring that users can easily access different sections of the site while maintaining a cohesive and attractive design.

Quiz: Developing an engaging and user-friendly quiz that provides meaningful insights for job recommendations, while keeping the content accessible and straightforward.

Query Page: Designing a secure and accessible query form, ensuring data privacy and ease

of use for all users.

Reflection:

This project significantly enhanced my skills in UX design, particularly in creating accessible, user-friendly interfaces. I gained a deeper understanding of the importance of balancing aesthetics with functionality, ensuring that all design elements contribute to a positive user experience.

Student 3: Vihanga Induwara

Challenges:

Product Purchase Page: Implementing dynamic pricing and creating a secure shopping experience, ensuring that all transactions are smooth and user-friendly.

About Us Page: Crafting an engaging and interactive presentation of the team, making sure the content is informative yet not overwhelming.

Reflection:

I developed a solid understanding of e-commerce functionalities and the significance of interactive, user-friendly designs. This project emphasized the importance of effective user feedback mechanisms and how they contribute to a seamless shopping experience.

Student 4: Surakkitha Galappaththi

Challenges:

Listing Page: Organizing job listings efficiently while providing robust filtering and sorting options to help users find relevant opportunities quickly.

Newsletter Subscription Form: Ensuring a secure and user-friendly subscription process, protecting user data while making the form easy to use.

Reflection:

This project improved my skills in managing dynamic content and ensuring data security. My focus was on creating efficient, user-friendly interfaces that enhance user engagement, demonstrating the importance of clear navigation and secure data handling in web design.

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Appendix: Screenshots