

Front-End UI/UX Mini Project

1. Title Page

- Project Title: “RESTAURANT MENU PAGE (static)”

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- Course: UI/UX Design Fundamentals

- Instructor Name: Ms. Nagaveena

- Institution: Christ University

- Date of Submission: 13/08/2025

2. Abstract

This project is a responsive, accessibility-friendly restaurant menu webpage titled “*Taste of World*”, designed to display a curated selection of breakfast, lunch, and dinner dishes. The main goal is to present food items with clear descriptions, prices, images, and dietary information, making it easy for customers — including those with dietary restrictions — to browse and choose meals. The menu is built using HTML5 for structure and CSS3 for styling, with semantic elements, ARIA labels, and alt text for accessibility. Key features include categorized sections, dietary icons, and a live-updating shopping cart badge. The final outcome is a user-friendly, visually appealing, and easily navigable online menu that enhances the customer experience and can be integrated with ordering systems for restaurants.

3. Objectives

The primary objectives of this project are:

1. Design a user-friendly interface following modern UI/UX principles to ensure intuitive navigation and visually appealing presentation of menu items.
2. Develop a fully responsive layout using only HTML5 and CSS3, ensuring the site adapts seamlessly to various screen sizes and devices.
3. Implement structured HTML5 semantic elements for improved readability, maintainability, and SEO optimization.
4. Apply CSS styling to establish consistent branding, attractive layout, and responsive visual behavior.
5. Ensure accessibility and readability across all devices by incorporating ARIA labels, descriptive alt texts, and optimized color contrast.

4. Scope of the Project

This project focuses exclusively on the front-end design of an online restaurant menu, presenting categorized food items with images, descriptions, prices, and dietary indicators. The scope is limited to HTML5 and CSS3 development, without the use of JavaScript, third-party frameworks, or server-side integration. The design is fully responsive, ensuring optimal viewing and usability on desktop, tablet, and mobile devices. Accessibility is prioritized through the use of semantic HTML elements, ARIA labels, and descriptive alt text. The project uses only open-source tools and writes all code from scratch, avoiding external libraries or pre-built templates. Back-end functionalities such as order processing, database connectivity, and payment gateways are outside the scope, focusing solely on delivering a static, well-structured, and visually appealing front-end interface suitable for integration into broader restaurant management systems.

5. Tools & Technologies Used

<i>Tool/Technology</i>	<i>Purpose</i>
HTML5	Markup and content structure
CSS3	Styling and layout management
VS Code	Code editor
Chrome DevTool	Testing and debugging

6. HTML Structure Overview

- Used semantic HTML5 tags: `<header>`, `<nav>`, `<main>`, `<section>`, `<footer>` for proper structure and accessibility.
- Organized into reusable sections: *About*, *Projects*, and *Contact* for easier maintenance and scalability.
- Navigation menu implemented inside `<nav>` using an unordered list (``) containing anchor (`<a>`) links.
- Smooth scrolling enabled for anchor links to enhance user experience and make navigation intuitive.
- Structured, semantic design improves SEO, responsiveness, and accessibility.

7. CSS Styling Strategy

- Used external CSS file (`styles.css`) to separate structure (HTML) from presentation.
- Organized with comments and sections for easy readability, maintenance, and scalability.
- Techniques applied:
 - Flexbox and CSS Grid for flexible and structured layout creation.
 - Media Queries to ensure responsiveness across desktop, tablet, and mobile devices.
 - CSS Variables for easy theme customization and consistent styling throughout the site.
 - Hover effects and smooth transitions to enhance interactivity and improve user experience.
 - Mobile-first design approach, ensuring optimal performance and usability on smaller devices first, then scaling up for larger screens.

8. Key Features

<i>Feature</i>	<i>Description</i>
Responsive Design	Adapts seamlessly to all screen size
Smooth Navigation	Fixed top nav with anchor link
Project Cards	Flex-based layout
Contact Form (non-functional)	Placeholder layout for inputs and button
Accessible Fonts & Color	High contrast and readable typography

9. Challenges Faced & Solutions

<i>Challenge</i>	<i>Solution</i>
Overlapping elements on small screens	Used media queries to stack element
Difficulty aligning items using float	Shifted to Flexbox and Grid
Typography scaling issue	Used relative units (em/rem) instead of px

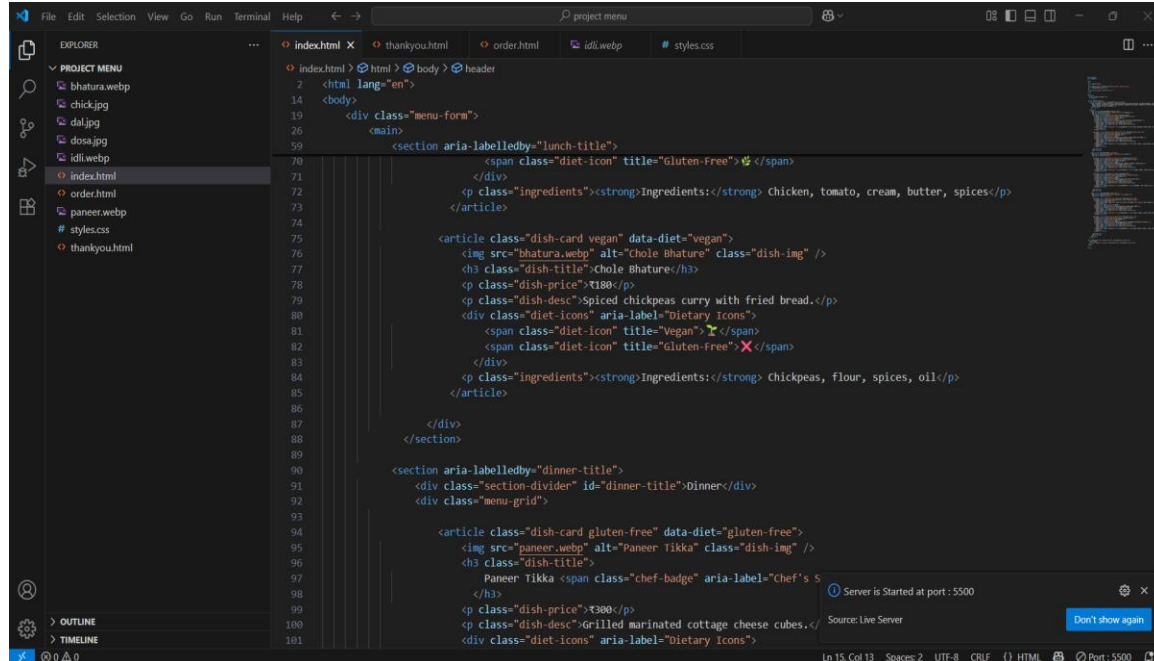
10. Outcome

- Achieved a clean, consistent, and visually engaging front-end layout that aligns with modern UI design principles.
- Implemented all key components successfully using only HTML5 and CSS3, without reliance on JavaScript or external libraries.
- Gained deeper understanding of layout responsiveness techniques (Flexbox, CSS Grid, Media Queries) and the importance of UI hierarchy in delivering a seamless user experience.

11. Future Enhancements

- Add JavaScript for enhanced interactivity, including features such as form validation, dynamic content updates (e.g., live menu filtering), and improved user engagement.
- Integrate animations or advanced transitions to create smoother user experiences and make interactions more visually appealing.
- Enable backend integration for features like order form submission, database connectivity, and real-time availability updates.
- Implement a theme toggler to allow users to switch between light and dark modes for better accessibility and personalization.

12. Sample Code



```
1 <html lang="en">
2 <body>
3   <header>
4     <div class="menu-form">
5       <main>
6         <section aria-labelledby="lunch-title">
7           <div>
8             <span class="diet-icon" title="Gluten-Free"></span>
9             <p>
10               <strong>Ingredients:</strong> Chicken, tomato, cream, butter, spices</p>
11           </div>
12           <article class="dish-card vegan" data-diet="vegan">
13             
14             <h3 class="dish-title">Chole Bhature</h3>
15             <p class="dish-price">₹180</p>
16             <p class="dish-desc">Spiced chickpeas curry with fried bread.</p>
17             <div class="diet-icons" aria-label="Dietary Icons">
18               <span class="diet-icon" title="Vegan"></span>
19               <span class="diet-icon" title="Gluten-Free"></span>
20             </div>
21             <p class="ingredients"><strong>Ingredients:</strong> Chickpeas, flour, spices, oil</p>
22           </article>
23         </section>
24         <section aria-labelledby="dinner-title">
25           <div class="section-divider" id="dinner-title">Dinner</div>
26           <div class="menu-grid">
27             <article class="dish-card gluten-free" data-diet="gluten-free">
28               
29               <h3 class="dish-title">Paneer Tikka <span class="chef-badge" aria-label="Chef's Special"></span>
30             </h3>
31             <p class="dish-price">₹200</p>
32             <p class="dish-desc">Grilled marinated cottage cheese cubes.</p>
33             <div class="diet-icons" aria-label="Dietary Icons">
34               <span class="diet-icon" title="Gluten-Free"></span>
35             </div>
36           </div>
37         </section>
38       </main>
39     </div>
40   </body>
41 </html>
```



```
index.html |> thankyou.html |> order.html X |> idli.webp |> # styles.css
order.html |> html |> head |> style |> body
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" />
6   <title>Place Your Order</title>
7   <link rel="stylesheet" href="styles.css" />
8   <style>
9     body {
10       font-family: Arial, sans-serif;
11       padding: 20px;
12       max-width: 600px;
13       margin: auto;
14     }
15     header {
16       text-align: center;
17       margin-bottom: 20px;
18     }
19     form {
20       display: flex;
21       flex-direction: column;
22       gap: 15px;
23     }
24     label {
25       font-weight: bold;
26     }
27     select, input, textarea, button {
28       padding: 8px;
29       font-size: 1rem;
30     }
31     button {
32       background-color: #4CAF50;
33       color: white;
34       border: none;
35       cursor: pointer;
36     }
37     button:hover {
```

```
index.html |> thankyou.html |> order.html X |> idli.webp |> # styles.css
order.html |> html |> head |> style |> body
2 <html lang="en">
3 <head>
8 <style>
39 }
40 </style>
41 </head>
42 <body>
43
44 <header>
45   <h1>Place Your Order</h1>
46 </header>
47
48 <main>
49   <form action="thankyou.html" method="get">
50     <label for="dish">Select Dish:</label>
51     <select id="dish" name="dish" required>
52       <option value="">-- Choose an item --</option>
53       <option value="Masala Dosa">Masala Dosa - ₹120</option>
54       <option value="Steamed Idli">Steamed Idli - ₹80</option>
55       <option value="Butter Chicken">Butter Chicken - ₹350</option>
56       <option value="Chole Bhature">Chole Bhature - ₹180</option>
57       <option value="Paneer Tikka">Paneer Tikka - ₹300</option>
58       <option value="Dal Makhani">Dal Makhani - ₹250</option>
59     </select>
60
61     <label for="quantity">Quantity:</label>
62     <input type="number" id="quantity" name="quantity" min="1" value="1" required />
63
64     <label for="notes">Special Instructions:</label>
65     <textarea id="notes" name="notes" placeholder="Any preferences or allergies?"></textarea>
66
67     <button type="submit">Place Order</button>
68   </form>
69 </main>
70
71 </body>
72 </html>
```



```

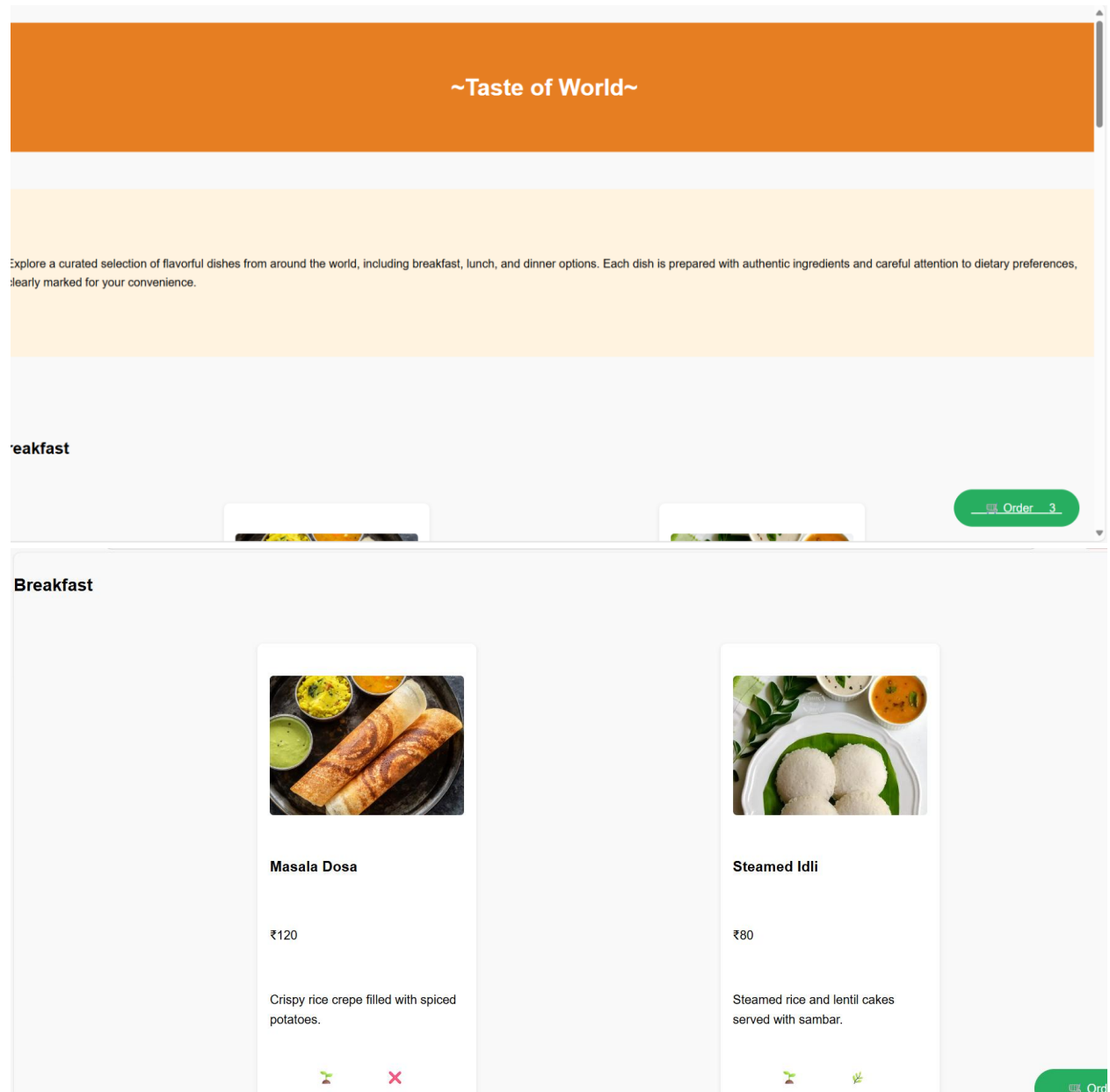
# styles.css > .filter-group
1  /* === BASIC LAYOUT (minimal example) === */
2  body {
3      font-family: sans-serif;
4      margin: 0;
5      padding: 0;
6      line-height: 1.6;
7      background: #f9f9f9;
8  }
9
10 header {
11     background: #e67e22;
12     color: white;
13     padding: 1em;
14     text-align: center;
15 }
16
17 .filters {
18     padding: 1em;
19     background: #fff3e0;
20     display: flex;
21     gap: 2rem;
22     flex-wrap: wrap;
23 }
24
25 .filter-group {
26     display: flex;
27     align-items: center;
28     gap: 0.5rem;
29 }
30
31 .section-divider {
32     font-size: 1.4rem;
33     font-weight: bold;
34     margin: 2rem 0 1rem;
35 }
36
37 .menu-grid {

```

```
index.html  < >  < >  < >  idli.webp  # styles.css  X
# styles.css > .filter-group
31 .section-divder {
35 }
36
37 .menu-grid {
38   display: grid;
39   gap: 1rem;
40   grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
41   padding: 1rem;
42 }
43
44 .dish-card {
45   background: white;
46   padding: 1rem;
47   border-radius: 8px;
48   box-shadow: 0 2px 5px rgba(0,0,0,0.1);
49   transition: all 0.3s ease;
50 }
51
52 .dish-img {
53   width: 100%;
54   height: 180px;
55   object-fit: cover;
56   border-radius: 5px;
57 }
58
59 .diet-icons {
60   margin: 0.5rem 0;
61 }
62
63 .chef-badge {
64   background: #ffcc00;
65   color: #000;
66   padding: 0.2rem 0.5rem;
67   border-radius: 4px;
68   font-size: 0.8rem;
69   margin-left: 0.5rem;
70 }
```

Ln 26, Col 17 Spaces: 2

13. Screenshots of Final Output



Lunch



Butter Chicken

₹350

Tender chicken simmered in buttery tomato gravy.



Chole Bhature

₹180

Spiced chickpeas curry with fried bread.



Dinner



Paneer Tikka

Special

Chef's

₹300

Grilled marinated cottage cheese cubes.



Dal Makhani

₹250

Creamy black lentils slow-cooked with butter and spices.



Ingredients: Black lentils, butter

Order 3

Place Your Order

Select Dish:

Masala Dosa - ₹120

Quantity:

1

Special Instructions:

Any preferences or allergies?

Place Order

Thank You!

Your order has been placed. We will prepare it shortly.

14. Conclusion

This personal portfolio website effectively showcases our skills, projects, résumé, and contact form in a clean, organized, and visually appealing manner. Developed entirely using HTML5 and CSS3, the project demonstrates strong fundamentals of front-end web development without relying on external libraries or JavaScript. Through this mini project, we strengthened our understanding of responsive design, layout structuring, and user interface aesthetics. The process provided valuable practical insights into user-centric web design, ensuring accessibility, clarity, and professionalism. Overall, this project not only serves as a professional digital presence but also reinforces our core front-end skills, paving the way for more advanced and interactive web development in future projects.

15. References

- <https://learn.intedutech.com/Landing/MyCourse>
- https://developer.mozilla.org/en-US/docs/Learn/Getting_started_with_the_web/CSS_basics
- https://www.w3schools.com/html/html5_semantic_elements.asp
- https://developer.mozilla.org/en-US/docs/Learn/HTML/Howto/Use_data_attributes