DEPARTMENT OF AI AND DS

RESTAURANT MENU PAGE

A Front-End UI UX Project

By

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ABSTRACT

This project involves designing and developing a responsive restaurant website using HTML5 and CSS3. The website features a welcoming homepage, a dynamic menu section with category filters, an about section, and a contact form. The primary goal is to create a visually appealing, accessible, and mobile-friendly interface for showcasing the restaurant's offerings. The core technologies used include semantic HTML5 for structure, CSS3 Grid/Flexbox for layout, and media queries for responsiveness. The final outcome is a clean, fully responsive website that improves customer engagement and brand presence online.

OBJECTIVES

- Create a visually appealing restaurant website using only HTML and CSS.
- Structure the website with semantic HTML5 elements for better SEO and accessibility.
- Use CSS Flexbox and Grid to achieve a responsive, adaptive layout.
- Apply ARIA attributes for improved screen reader compatibility.
- Ensure consistent appearance across devices (desktop, tablet, mobile).
- Maintain a color scheme and typography that match the restaurant's branding.

SCOPE

Includes:

- Front-end design of homepage, menu, about, and contact sections.
- Accessible navigation menu with mobile toggle button.
- Fixed-position "Order Now" button for quick action.

Excludes:

- Backend/server-side processing for orders or form submissions.
- JavaScript-based interactivity beyond menu toggle script.
- Payment gateway integration.

Target Devices: Desktop, tablet, and mobile viewports.

Tools: Open-source technologies with no external libraries for styling.

TOOLS AND TECHNOLOGY

Tool/Technology	Purpose
HTML5	Semantic content structure
CSS3	Styling, layout control, responsive behavior
VS Code	Code editor
Chrome DevTools	Live testing and debugging

HTML STRUCTURE OVERVIEW

- Uses semantic tags like `<header>`, `<nav>`, `<main>`, `<section>`, `<article>`, `<footer>`.
- Navigation menu with anchor links to different sections.
- Menu items displayed using `article` elements for better semantics.
- `alt` attributes provided for all images to improve accessibility.
- ARIA attributes (`aria-label`, `aria-controls`, `aria-labelledby`) used for screen reader support.

CSS STYLING STRATEGY

Techniques used:

- Flexbox for header and navigation alignment.
- CSS Grid for menu layout.
- Media queries for different screen sizes.
- Fixed-position call-to-action button.
- Hover effects for interactive elements.
- Consistent color palette and typography.

KEY FEATURES

Feature	Description
Responsive Design	Adapts to all screen sizes using media queries
Category Filters	Menu items grouped visually for easy browsing
Accessible Navigation	ARIA labels, keyboard focus support
Sticky Order Button	Always visible for quick user action
About & Contact Sections	Provide restaurant background and easy contact form

CHALLENGES FACED AND SOLUTIONS

Challenge	Solution
Overlapping menu items on small screens	Used CSS Grid `auto-fit` with `minmax()`
Image scaling issues	Used `object-fit: cover` to maintain aspect ratio
Navigation menu crowding on mobile	Added mobile menu toggle with media query

OUTCOME

- Achieved a fully responsive, aesthetically pleasing restaurant website.
- Improved accessibility through semantic HTML and ARIA attributes.
- Website functions well on all major browsers and devices.
- Strengthened skills in CSS Grid/Flexbox and responsive web design.

FUTURE ENHANCEMENTS

- Implement dynamic menu filtering using JavaScript.
- Add animations for smoother section transitions.
- Integrate backend form handling for reservations/orders.

SAMPLE CODE

2 PAGES OF HTML CODE(SAMPLE)

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <title>Harvest & Hearth — Menu</title>
  <meta name="description" content="Harvest & Hearth - A sample restaurant menu page. Responsive, accessible and easy to customize." />
  <link href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;400;600;700&display=swap" rel="stylesheet" />
  <link rel="stylesheet" href="css/style.css" />
</head>
<body>

  <!-- HEADER -->
  <header class="site-header">
    <div class="container header-inner">
      <div class="brand">
        <h1>Harvest &amp; Hearth</h1>
        <p class="tag">Seasonal • Fresh • Local</p>
      </div>
      <nav class="main-nav" aria-label="Main navigation">
        <button class="nav-toggle" id="navToggle" aria-expanded="false" aria-controls="navList">☰</button>
        <ul id="navList">
          <li><a href="#menu">Menu</a></li>
          <li><a href="#about">About</a></li>
          <li><a href="#contact">Contact</a></li>
        </ul>
      </nav>
    </div>
  </header>

  <!-- HERO SECTION -->
  <section class="hero">
    <div class="hero-inner container">
      <h2>Welcome to Harvest &amp; Hearth</h2>
      <p>Simple, honest food — made with seasonal ingredients.</p>
      <a class="btn primary" href="#menu">Explore Our Menu</a>
    </div>
  </section>
```

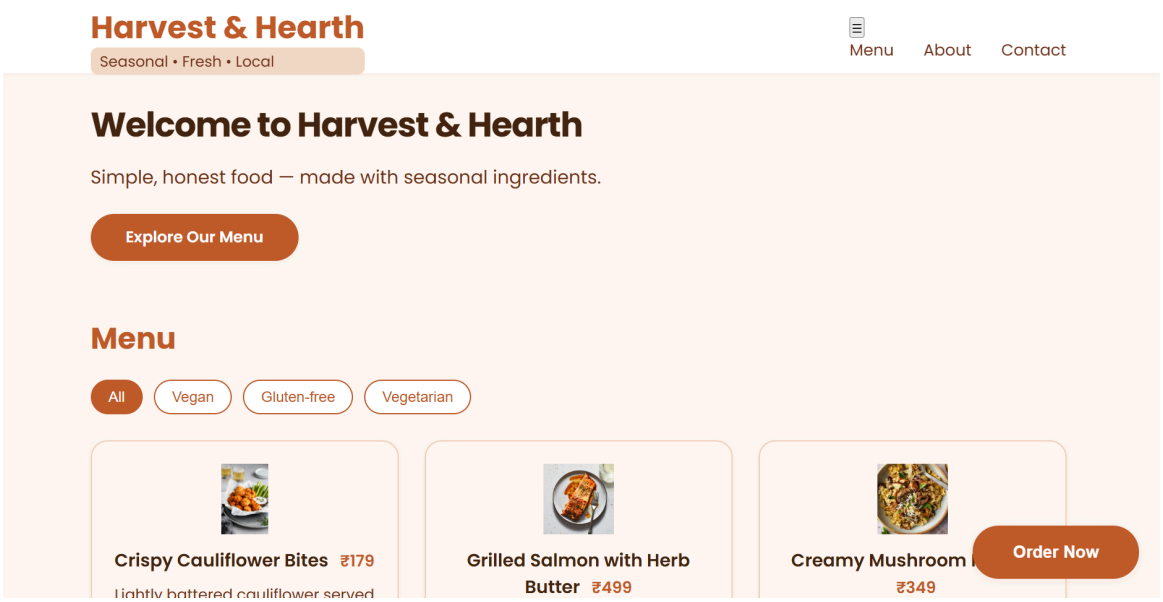
```html
<!-- MAIN CONTENT -->
<main class="container">

  <!-- MENU SECTION -->
  <section id="menu" class="menu-section" aria-labelledby="menu-heading">
    <h2 id="menu-heading">Menu</h2>
    <div class="filters" role="tablist" aria-label="Dietary filters">
      <button class="filter-btn active" data-filter="all">All</button>
      <button class="filter-btn" data-filter="vegan">Vegan</button>
      <button class="filter-btn" data-filter="gf">Gluten-free</button>
      <button class="filter-btn" data-filter="veg">Vegetarian</button>
    </div>

    <div class="menu-grid" id="menuGrid">

      <!-- Dish 1 -->
      <article class="dish-card vegan" tabindex="0">
        <img src="images/starter1.jpg" alt="Crispy Cauliflower Bites" class="dish-img" />
        <div class="dish-body">
          <h3 class="dish-title">Crispy Cauliflower Bites <span class="price">₹179</span></h3>
          <p class="dish-desc">Lightly battered cauliflower served with chili-lime aioli and microgreens.</p>
          <div class="tags">
            <span class="tag">Vegan</span>
            <span class="tag">Starter</span>
          </div>
        </div>
      </article>

      <!-- Dish 2 -->
      <article class="dish-card gf" tabindex="0">
        <img src="images/main1.jpg" alt="Grilled Salmon with Herb Butter" class="dish-img" />
        <div class="dish-body">
          <h3 class="dish-title">Grilled Salmon with Herb Butter <span class="price">₹499</span></h3>
          <p class="dish-desc">Pan-seared salmon fillet, lemon-herb butter, seasonal roasted vegetables.</p>
          <div class="tags">
            <span class="tag">Gluten-free</span>
            <span class="tag">Main</span>
```

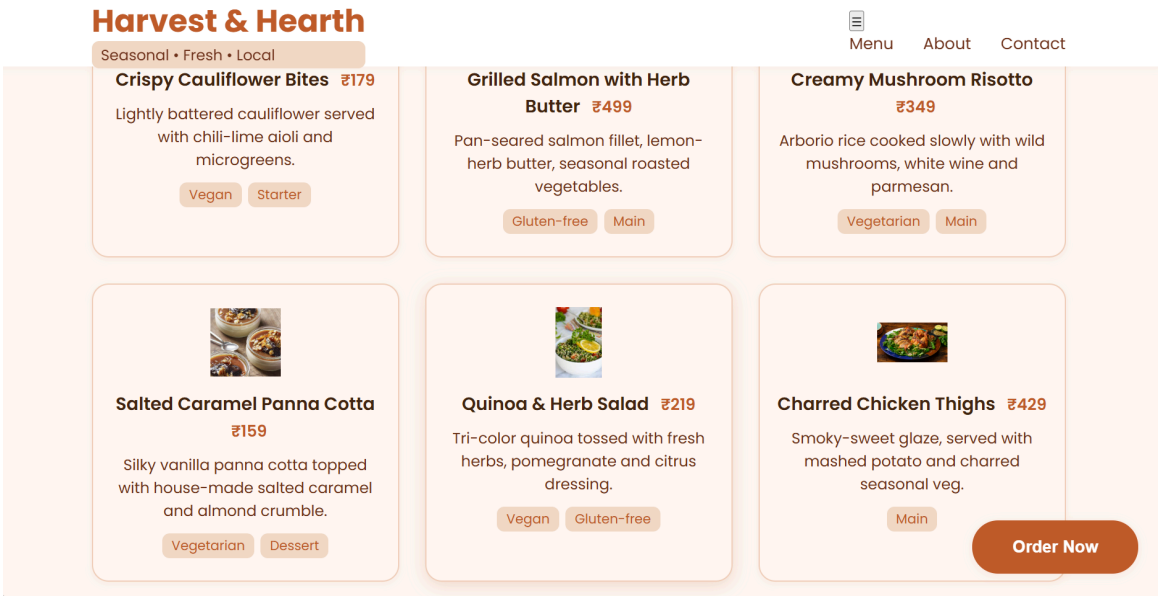
2 PAGES OF CSS CODE(SAMPLE)

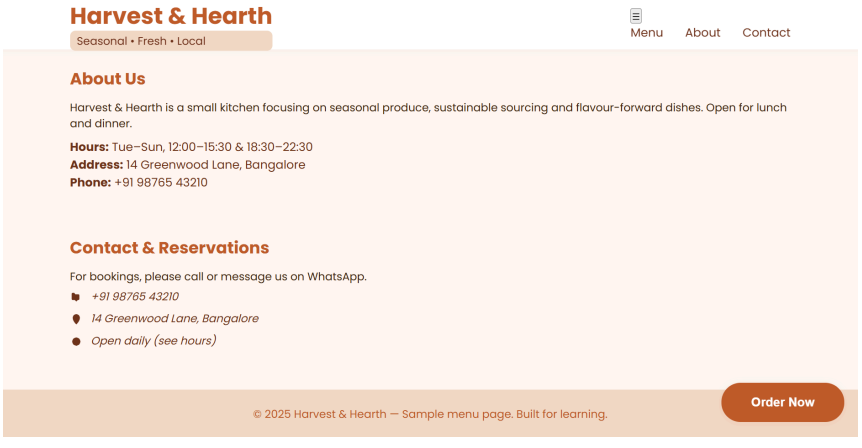
```css
* {
  margin: 0;
  padding: 0;
  box-sizing: border-box;
}

body {
  font-family: 'Poppins', Arial, sans-serif;
  color: #41270f;
  background: #fff8f3;
  min-height: 100vh;
}

/* ========================
   HEADER
======================== */
.site-header {
  position: fixed;
  top: 0;
  left: 0;
  width: 100%;
  z-index: 100;
  background: #fff;
  box-shadow: 0 2px 8px rgba(151, 81, 52, 0.06);
  height: 72px;
  display: flex;
  align-items: center;
}
```

```css
/* Navigation */
.main-nav ul {
  display: flex;
  gap: 2rem;
  list-style: none;
}

.main-nav a {
  text-decoration: none;
  color: #70331d;
  font-weight: 500;
  font-size: 1.08rem;
  transition: color 0.2s;
}

.main-nav a:hover {
  color: #bf5b2c;
}

/* Brand */
.brand h1 {
  font-size: 2.1rem;
  color: #bf5b2c;
  font-weight: 700;
}
.brand .tag {
  font-size: 1rem;
  color: #70331d;
  margin-top: -4px;
}
```

OUTPUT SCREEN







CONCLUSION

This restaurant website project demonstrates the ability to create a professional, responsive, and accessible front-end design using only HTML5 and CSS3. Through this project, I developed a deeper understanding of semantic markup, responsive design principles, and accessibility best practices. The final product not only reflects strong technical skills but also delivers a user-friendly experience for potential customers.

REFERENCES

- MDN Web Docs: https://developer.mozilla.org/
- W3C Accessibility Guidelines: https://www.w3.org/WAI/
- L&T LMS: https://learn.lntedutech.com/Landing/MyCourse