

CSC 6370 – Web Programming

Project Proposal

Group Members:

- **Chief Programmer & Designer:** Mamatha Mudunuri
- **Developer & Tester:** Shrinidhi Sivakumar

Project Summary: The Great Indian Cuisine

Indian cuisine is a celebration of diverse flavours, vibrant spices, and time-honored culinary traditions. This project will create a dynamic, interactive website showcasing traditional Indian recipes across various categories such as appetizers, curries, rice & paratha, and desserts. Each recipe page will include a comprehensive list of ingredients, step-by-step cooking instructions, nutritional information, preparation time, and servings.

The website will feature advanced **transforms, transitions, and animations** to create an engaging user experience. It will also ensure **mobile responsiveness**, making it accessible on different devices.

Key Features:

- **User-Friendly Navigation:** Simple navigation through different recipe categories and pages.
- **Detailed Recipe Pages:** Each page will contain ingredients, preparation steps, nutritional information, preparation time, and serving size.
- **Transforms, Transitions, and Animations:** Enhancing interactivity through visually engaging elements.
- **Mobile-Friendly Design:** Optimized for both desktop and mobile devices for seamless access.

Cultural Insights: Providing context and interesting facts about the traditional significance of each dish.

Proposed Wireframe:

The proposed wireframe for the project is as follows:

<https://www.figma.com/proto/p9XdKOP8osANBWyuYnPWpR/Project-1?node-id=2-2&node-type=canvas&t=clOt7PN5FCRH7p88-0&scaling=contain&content-scaling=fixed&page-id=0%3A1&starting-point-node-id=2%3A2&show-protocol-sidebar=1>

Home Page Introduction:

- **Introduction Text:** Brief description of Indian cuisine and its diversity.
- **Selection Layout:** Grid of images representing different courses: appetizers, curries, rice & paratha, and desserts.
- **Clickable Images:** Each image leads to a dedicated page for the selected course.
- **Navigation:** Clicking on a course image takes users to the respective recipe section for further selection.
- **Helper Message:** Instructional text guiding users to click on the dishes to view recipes, enhancing user interaction and navigation.

Layouts:

- **Homepage (Main Page):** Displays an overview of meal courses in a grid layout, serving as a hub for navigating to individual course pages.
 - **Appetizer Page:** Features Samosa and Bhel Puri options to navigate to their respective recipe pages.
 - **Samosa Recipe Page:** A dedicated recipe page for Samosa with interactive elements, including preparation time, ingredient list, steps, and nutritional values.

- Bhel Puri Recipe Page: A dedicated recipe page for Bhel Puri, featuring preparation time, ingredients, steps, and nutrition values.
- Curries Page: A page with Vegetarian and Non-Vegetarian curry options to select individual recipes.
 - Mutter Paneer Curry Recipe Page: A detailed page for Paneer Curry with preparation time, ingredients, steps, and nutrition values.
 - Chana Masala Recipe Page: A recipe page for Chana Masala with preparation time, ingredients, steps, and nutrition values.
 - Egg Curry Recipe Page: A recipe page for Egg Curry featuring preparation time, ingredients, cooking steps, and nutrition values.
 - Chicken Curry Recipe Page: A dedicated recipe page for Chicken Curry, providing preparation time, ingredients, steps, and nutrition values.
- Rice & Paratha Page: Includes Basmati Rice and Lachcha Paratha options to navigate to their individual recipe pages.
 - Basmati Rice Recipe Page: A recipe page for Basmati Rice, featuring preparation time, ingredients, steps, and nutrition values.
 - Lachcha Paratha Recipe Page: A dedicated page for Lachcha Paratha with preparation time, ingredients, steps, and nutrition values.
- Desserts Page: Features Kulfi and Gulab Jamun options to navigate to their respective recipe pages.
 - Kulfi Recipe Page: A dedicated recipe page for Kulfi, featuring preparation time, ingredients, steps, and nutrition values.
 - Gulab Jamun Recipe Page: A detailed recipe page for Gulab Jamun with preparation time, ingredients, steps, and nutrition values.

Functionality:

Each screen has a specific functionality to guide users through the website's structure and recipe information.

- **Homepage to Course Pages:** On the homepage, users will see a grid of images representing the meal courses: Appetizers, Curries, Rice & Paratha, and Desserts. Clicking on any of these categories will navigate the user to the respective course page, featuring hover effects like scale transformations for a visually appealing experience.
- **Recipe Pages:** Each recipe page includes preparation time, ingredients, steps, and nutrition information. Interactive elements, like hover effects, will reveal ingredient details, while recipe instructions will appear progressively as users scroll.
- **Smooth Transitions:** Transitions between screens will feature fade-in effects, ensuring a smooth flow between pages.

Transition and Transformation Details:

- **Smooth Transitions:** Between the homepage and course/recipe pages.
- **Fade-in Effects:** For content on recipe pages as users scroll.
- **Transformations:** Scale transformations on course images on hover.

Animations:

- **Homepage Animation:** Animated text welcoming users to explore Indian cuisine.
- **Progressive Recipe Steps:** Instructions are revealed as the user scrolls down the recipe page for better engagement.

User Experience:

Each screen is designed with user interaction and engagement as a priority. Below are the use cases for each screen:

- **Homepage (Main Page):**
Use Case: A first-time user visits the homepage and sees a visually appealing grid of meal courses (Appetizers, Curries, Rice & Paratha, Desserts). Hovering over a course image triggers a subtle scale transform effect. The user clicks on a course (e.g., Appetizers) and is taken to the respective page displaying the available dishes.
User Flow: The homepage welcomes users with an animated header and a helper message explaining how to navigate the site.
- **Recipe Pages (e.g., Samosa, Paneer Curry):**
Use Case: The user views the selected recipe page, where they interact with hover effects and flip cards that reveal ingredient details. As they scroll, step-by-step cooking instructions progressively appear.
User Flow: Interactive elements and smooth transitions keep the user engaged as they navigate through the recipe.
- **Consistent User Flow:**
All recipe pages, including dishes like Paneer Curry, Chana Masala, Egg Curry, and Chicken Curry, will feature consistent interactive features such as hover effects for ingredient details and smooth animations for cooking steps, ensuring an intuitive and engaging user experience.
- **Interactive Elements:**
The clickable course images on the homepage act as the primary navigation tool, allowing users to easily access the course of their choice. Within each course, dish images guide users to detailed recipe pages, making navigation simple and enjoyable.

Test Cases:

- **Usability Testing:** Conduct focus group testing to assess ease of navigation between the homepage, course pages, and recipe pages. Gather feedback on the hover effects and transitions.
- **Responsiveness Testing:** Test the website on various devices (mobile, tablet, desktop) to ensure that the layout adapts to all screen sizes and that hover effects and transitions function properly across platforms.
- **Browser Compatibility Testing:** Ensure that animations, transitions, and transforms are consistent across browsers (Chrome, Firefox, Safari, Edge) and that interactive elements work seamlessly.
- **Performance Testing:** Test the loading time of pages with images (like the homepage and course/recipe pages) to ensure optimal performance and implement lazy-loading techniques for faster page loads on slower networks.
- **Content Testing:** Verify that all content (ingredients, steps, and nutrition information) is displayed correctly without any missing or misaligned elements.

Approach to Refinement:

- **Incorporating Feedback:** Based on usability feedback, refine the layout and interactivity of the homepage, course, and recipe pages. Adjust hover effects or element behavior to ensure they meet user expectations.
- **Iterating Animations:** After testing animations and transitions, enhance their smoothness, particularly on mobile devices, to ensure consistency across platforms.
- **Optimizing Image Performance:** Reduce image file sizes and implement lazy loading to improve page load times, ensuring faster transitions and smoother navigation.
- **Agile Continuous Improvement:** Implement improvements iteratively using the plan-do-check-act cycle to continuously integrate feedback and refine the project.

Project Management:

We will use the Kanban methodology for project management:

- Limit work in progress
- Focus on flow and visualization of tasks
- Continuous improvement using plan-do-check-act cycles

Proposed APIs:

The current design of this project does not require external APIs. The focus is on creating an interactive experience using HTML and CSS with a strong emphasis on transforms, transitions, and animations.

Roles and Responsibilities:

1. **Mamatha Mudunuri (Chief Programmer & Designer):**
 - Design the website structure, layout, and visual elements.
 - Implement animations, transitions, and transforms to enhance user interactivity.
 - Ensure mobile responsiveness and accessibility.
2. **Shrinidhi Sivakumar (Developer & Tester):**
 - Develop recipe pages, ensuring functionality, interactivity, and a smooth user experience.
 - Test for usability, mobile responsiveness, and browser compatibility.
 - Troubleshoot and optimize for performance by identifying and reporting bugs.

Development Plan:

- **Phase 1:** Design website layout and visual structure.
- **Phase 2:** Develop individual recipe pages with interactive features.
- **Phase 3:** Test the website for responsiveness and user experience.
- **Phase 4:** Finalize, optimize, and deploy the website.

Conclusion:

This project seeks to celebrate the richness of Indian cuisine by offering a comprehensive guide to cooking traditional dishes, with a user-friendly design and engaging interactivity. It will provide detailed recipe pages with preparation times and servings while ensuring a visually appealing experience through transitions and animations. The project aims to be a reliable, engaging resource for food enthusiasts looking to explore or refine their Indian cooking skills.

Statement:

We, the undersigned members of the group, acknowledge that we understand the conditions outlined in this proposal. We are committed to actively participating in the implementation of the group project from start to finish. We understand that individual grades may vary based on our contributions and performance, and we agree to present an important phase of the work collectively.

Signed Proposal:

Name: Mamatha Mudunuri

Mamatha Mudunuri
Mamatha Mudunuri (Oct 6, 2024 18:28 EDT)

Name: Shrinidhi Sivakumar

Shrinidhi Sivakumar
Shrinidhi Sivakumar (Oct 6, 2024 16:53 EDT)

This proposal outlines our plan to develop an interactive website that leverages CSS to create captivating user interfaces. We believe that this project aligns with the objectives of the web development class and offers an opportunity to explore CSS transformations, transitions, and animations in a practical setting. We are excited about the potential of this project and look forward to bringing our ideas to life.