**Introduction**

The Cornucopia App is a web-based restaurant finder application that helps users discover new restaurants in the Cincinnati area. The app consists of a front-end and a back-end, with the front-end being responsible for providing the user interface and communicating with the back-end.

The front-end of the Cornucopia App will be built using HTML, CSS, and JavaScript. The app will use the React library to build a dynamic and responsive user interface. The app will also use the Google Maps API to display maps and location-related information.

**Architecture**

The front-end of the Cornucopia App will consist of the following components:

**Components**

The front-end of the Cornucopia App will be organized into components. Each component will have its own HTML, CSS, and JavaScript code, and will be responsible for a specific part of the user interface.

React provides a powerful and flexible way to build components, allowing developers to create reusable and modular code. Each component will be designed to be self-contained, with its own state and props, making it easy to manage and update.

**State Management**

The state of the Cornucopia App will be managed using the Redux library. Redux is a state management library that provides a centralized store for managing application state. It allows developers to easily manage complex state changes and make them predictable and debuggable.

Redux works by dispatching actions, which are objects that describe what changes need to be made to the state. The actions are handled by reducers, which are pure functions that take the current state and an action, and return a new state.

**API Requests**

The Cornucopia App will communicate with the back-end using RESTful API requests. The app will use the Fetch API to send requests to the server and receive responses. The response data will be used to update the app state and render the user interface.

**Styling**

The Cornucopia App will use CSS for styling the user interface. The app will use a modular and scalable approach to styling, with each component having its own CSS file. The app will also use a CSS preprocessor such as Sass or Less to make styling easier and more efficient.

**Responsive Design**

The Cornucopia App will be designed to be responsive and accessible on different devices and screen sizes. The app will use responsive design techniques such as media queries, flexible grids, and flexible images to adapt to different screen sizes. The app will also be designed to be accessible for users with disabilities, following best practices such as semantic HTML, ARIA attributes, and proper contrast ratios.

**Google Maps API**

The Cornucopia App will use the Google Maps API to display maps and location-related information. The app will use the Maps JavaScript API to display the map and markers, and the Places API to search for restaurants and retrieve additional information such as photos and reviews.

**User Interface**

The user interface of the Cornucopia App will consist of the following components:

**Home Page**

The home page of the Cornucopia App will provide a search form where the user can enter their location and search for nearby restaurants. The page will also display a map with markers for the nearby restaurants.

**Restaurant Page**

The restaurant page of the Cornucopia App will display detailed information about a specific restaurant, such as its name, address, phone number, website, cuisine type, photos, and reviews. The page will also display a map with a marker for the restaurant's location.

**Navigation**

The Cornucopia App will provide a navigation menu that allows the user to switch between the home page and the restaurant page. The navigation menu will be responsive and collapse into a hamburger menu on smaller screens.

**Color Scheme**

The color scheme of the Cornucopia App will be based on a palette of warm, earthy tones that evoke a sense of comfort and hospitality. The primary color will be a deep red, with secondary colors of orange, yellow, and brown. The app will use a consistent color scheme throughout to provide visual coherence and help guide the user's attention.

**Typography**

The typography of the Cornucopia App will use a combination of serif and sans-serif fonts to create a balance of elegance and readability. The app will use a sans-serif font for headings and a serif font for body text. The font sizes will be carefully chosen to ensure readability on different devices and screen sizes.

**Images**

The Cornucopia App will use high-quality images to showcase the restaurants and their cuisine. The app will use a lazy loading technique to improve page load times and provide a smoother user experience. The app will also use image optimization techniques such as compression and resizing to reduce the file size of the images and improve page load times.

**Mobile Responsiveness**

The Cornucopia App will be designed to be fully responsive and optimized for mobile devices. The app will use a mobile-first approach, with the design and layout optimized for small screens first, and then adapted for larger screens. The app will use responsive design techniques such as flexible grids, flexible images, and media queries to ensure a consistent and usable experience on different devices.

**Accessibility**

The Cornucopia App will be designed to be accessible for users with disabilities, following best practices such as semantic HTML, ARIA attributes, and proper contrast ratios. The app will use semantic markup to ensure that the content is accessible to screen readers and other assistive technologies. The app will also use proper contrast ratios to ensure that the content is readable for users with low vision or color blindness.

**Conclusion**

In conclusion, the front-end of the Cornucopia App will be built using HTML, CSS, and JavaScript, with the React library used to build a dynamic and responsive user interface. The app will use the Google Maps API to display maps and location-related information, and the Redux library to manage the state of the app. The app will be designed to be responsive, accessible, and optimized for mobile devices, with a warm and welcoming color scheme, elegant typography, and high-quality images.