**System Design**

My app is designed to be a simple and easy-to-use recipe application. The system is built in a way that keeps everything organized, so it is easy to understand, fix, and update in the future. The main goal is to show recipe information from a JSON file that was already given by the lecturer. This JSON file is the main data source of the app and includes all the recipe details such as the name, image, ingredients, difficulty level, cooking time, and rating. When the app starts, it will load this JSON file and show the recipes on the screen. Because the data is stored locally, the app does not need the internet to work. This makes it fast and reliable for users to use anywhere.

The app has different screens that each do one main job. The Home Screen shows a list of meals or recipes with a short description and image. When the user taps on one of the recipes, the app goes to the Recipe Detail Screen, which shows full information such as the recipe name, cuisine, ingredients, nutrition, preparation time, and steps. The Daily Specials Screen shows five random recipes from the JSON file that have an “Easy” or “Medium” difficulty level. The Favorites Screen shows all the recipes that the user has liked by pressing the heart icon, while the Ingredients Screen lists all ingredients that the user has saved, grouped by category, with a trash icon to remove them. Finally, the Profile Screen is where users can view or change their saved items and settings.

The app uses a simple navigation system so users can easily move between screens. At the bottom of the app, there is a navigation bar with icons for Home, Search, and Profile. When a user taps an icon, the app moves to that screen smoothly. Each screen is built using reusable parts, like cards, buttons, and lists, which helps keep the design neat and easy to change later.

The data flow of the app happens in a few simple steps. First, when the app opens, it loads the recipes from the JSON file. Second, the recipes are shown on the screen through cards and lists. Third, when users interact with the app, such as liking a recipe or saving an ingredient, the app stores that information in localStorage, which is part of the web browser. This means that even if the user closes and reopens the app, their saved recipes and ingredients will still be there.

The app’s folder structure is also simple. It has folders for images, components, screens, and data. The data folder includes the given JSON file. The components folder stores reusable items like the navigation bar or recipe cards, and the screens folder stores pages like Home and Recipe Details. This setup makes it easy to understand and add new features later. Overall, this system design keeps things clear, fast, and easy to manage while showing all the required recipe information from the JSON file in a user-friendly way.