**National University of Computer & Emerging Sciences**

**Karachi Campus**



**THE ULTIMATE RECIPE BOOK**

**Project Proposal**

**Programming Fundamentals**

**Section: CY-A**

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**Project Proposal**

* **Introduction:**

The Ultimate Recipe Book is a user-friendly C program designed to assist individuals in finding delicious recipes based on the ingredients they have at hand. It simplifies the process of meal planning and cooking by offering a curated list of recipes that match the selected ingredients.

* **Existing System:**

Currently, there are various recipe websites and apps available, but they often require users to input complex search queries or browse through extensive lists of recipes. These platforms do not offer a streamlined way to find recipes based on available ingredients, which can be a significant inconvenience for users looking to make the most of their pantry items.

* **Problem Statement:**

The existing systems lack an efficient and user-friendly way to find recipes based on available ingredients. Users often need to sift through numerous irrelevant recipes, making meal planning a time-consuming task. Our goal is to simplify this process and provide a more user-centric solution.

* **Proposed Solution:**

We intend to introduce a system that allows users to select ingredients from a predefined menu. Our program will then generate a list of recipes that can be prepared using those ingredients. To enhance user experience, we will implement a user-friendly interface and efficient algorithm for ingredient matching. Additionally, we will prioritize recipes based on the number of matched ingredients, ensuring relevance and practicality.

* **Salient Features:**

**Ingredient Selection:** Users can choose ingredients from a predefined menu.

**Recipe Recommendations:** The program will provide a list of recipes based on the selected ingredients.

**Ingredient Matching:** Efficient algorithm to match available ingredients with recipe requirements.

**Sorting:** Prioritizing recipes with the highest ingredient match for user convenience.

**User-Friendly Interface:** A simple and intuitive interface for ease of use.

**Recipe Categories:** Allows user to choose between different categories of meals i.e. breakfast, lunch, and dinner.

**Cooking Time:** An estimated cooking time for user convenience.

* **Tools & Technologies:­­­­**

Programming Language: C

Framework: None

Operating System: Windows