**National University of Computer & Emerging Sciences, Karachi**

**Fall 2022**

**Restaurant ordering system**

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# Project Description:

The Project is meant to emulate the system of a restaurant. Our project would allow users to sign up on the app by entering their details, and once they have signed up they can order the food available on the restaurant menu, and then receive their receipt, it can be broken down to three functions:

1. Sign up
2. Ordering food
3. Getting their receipt.

Moreover restaurant class will be used for allowing customers to order her food, generating their receipt and keeping track of other relevant details. The concept of filing will be ensured while displaying the receipt at the end.

# Project Features:

# Feature 1: Linked List Implementation

# Explanation:

# The input of the customers signing up on the restaurant app will be through the use of nodes. These nodes will have the details of the customer such as their username, passwords and other details such as their spending towards the restaurant.

Moreover the food items will be stored in the nodes along with their details and sub details.

# Feature 2: Stack and Queues:

**Explanation:**

The information regarding customer and food items will be pushed and popped (as desired by the user).

# Feature 3: Trees:

**Explanation:**

The hierarchy sub-details of the food items i.e. the price and further categorization of the food items will be demonstrated through the trees.

**Miscellaneous Features:**

**Explanation:**

A sorting feature will be introduced in order to allow the customer details to be sorted according to the user’s need, along with sorting the revenue of food items based on their profitability**.** Use of searching to allow both updating user features and for various other tasks.