Food Ordering System

**Introduction:**

The purpose of this project is to develop a food ordering system that can be used to transform the traditional ordering system. Generally, in restaurants menu order system is actual provided in menu card format so the customer must select the menu item then the waiter must come and take the order, which is a long processing method.

So, I have designed Food Ordering System that displays food items for customers on their available devices such as user phone, Tablet etc. to give input their orders directly by touching. The system automatically completes data display, receiving, sending, storage of data and analysis.

It is providing many advantages as great user-friendly, saving time, portability, reduce human error, flexibility and provide customer feedback etc. This system required large numbers of manpower to handle customer reservation, ordering food, reminding dishes of customer. “Intelligent Automated Restaurant” it is all about getting all your different touchpoints working together connected, sharing information, speeding processes, and personalizing experiences. E-menu is an interactive ordering system with new digital menu for customers.

**Solution Approach:**

The digital world is vast, with limitless boundary. And it does not have to make anyone wait. And that's the very reason, I have decided to make a food ordering system. This done by using Python. The menu is programmed at backend to be displayed to user. Queue Data Structure is used to take the order and dispatch it to costumers by using First-In-First-Out (**FIFO**) method. The software generates the bill as well.

**Project Features:**

**Operating System:** Windows

**IDE(s):** Google Collaboratory

**Data Structure:** Queue

**Programming Language:** Python

**Data Structure:**

Queue Data Structure is used in this project, due to the real-life depiction of food ordering system. When the customer(user) places an order, he or she must wait to get the order. Order placing is done by enqueue function and dispatchment of order is done by dequeue.

**Time Complexity:**

* The time complexity of enqueuing and dequeuing single order item O (1).
* The time complexity of enqueuing and dequeuing multiple order item O(n).

**Functional specification:**

Food ordering software is having many modules, which make the software more efficient and user friendly.

**Modules:**

* Main Menu
* Food items
* Drinks item
* Desserts
* Check cart
* Payment
* Exit

**Screenshots:**

Menu

Text

Description automatically generated

Flavor

Graphical user interface, text

Description automatically generated

Size and Quantity

Text

Description automatically generated

Order Placed in Queue

Text

Description automatically generated

Burger menu and Choice

Text

Description automatically generated

Fries’ menu

Text

Description automatically generated

Dessert’s menu

Text

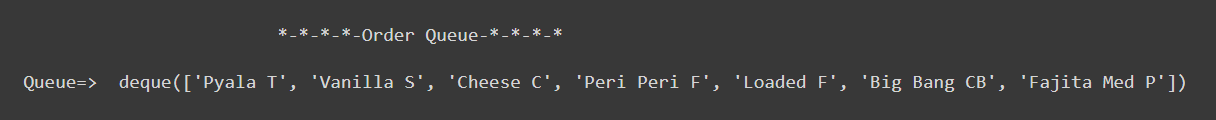
Description automatically generated

Drinks menu

Text

Description automatically generated

Checking Cart / Order Queue



Payment

Text

Description automatically generated

A black screen with white text

Description automatically generated with low confidence

**Applications:**

This software can be used in any part of food industry such as:

* Hotels
* Restaurants
* Mess
* Canteens
* Grocery stores
* Food store

**Future work:**

Following section describe the work that will be implemented with future release of the software:

* Customize orders: Allow customers to **customize** food order.
* Enhance **user interface** by adding more user interactives futures: Provide deals and promotional offers, Provide recipes of the day.
* **Payment** options: PayPal, Gifts cards etc.
* **Delivery** option.
* Visual **graphical order** status bar.
* Show only **active order** to employees.
* Restaurant **locator**.