

A Python Tkinter-Based Dual-Role Food Ordering and Management System

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Abstract: *This research presents the design and implementation of a desktop-based food ordering and management system built using Python's Tkinter graphical interface and SQLite database engine. The system provides separate interfaces for customers and sellers, allowing both roles to interact with the platform according to their requirements. Customers can browse dishes, apply live search filters, adjust quantities, place orders, track their order status, and provide feedback. Sellers can manage menus, monitor incoming orders in real time, update order status, and modify their restaurant details. The application integrates dynamic theming, image handling, and interactive widgets to enhance user experience. The system offers a lightweight, offline-compatible solution suitable for small-scale restaurants and college projects, eliminating the dependence on costly online systems. Experimental testing demonstrates that the system is responsive, stable, and efficient for typical food-ordering operations*

Keywords: Python Tkinter, Food Ordering System, SQLite Database, Offline Application, Restaurant Management, Graphical User Interface (GUI)

