PROJECT PLAN: Pizza Restaurant Ordering System

Group 18

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1. Project Overview

The aim of this project is to build a software program for a pizza restaurant for managing the ordering system. It will include a GUI based on Tkinter, and we will manage the data using an SQL-based database system accessed via SQL-Connector.

2. Key Core Elements

- **Menu Presentation:** The main menu will contain three sub-menus. The pizza menu, which will represent the ingredients, prices and vegetarian/vegan information, as well as the dessert menu and drink menu, which will contain prices.
- **Order Processing:** Our software will allow customers to register, place orders, manage their delivery information, apply discounts, cancel and check up on their orders.
- **Price Calculation:** Each pizza will be calculated based on the sum of its ingredient costs, a 40% profit margin, and the inclusion of a 9% VAT.
- **Reporting:** We will generate the earnings reports filtered by customer demographics and region.
- **Database:** We plan on using a relational database for storing all program data, including customer details, orders, and delivery information.

3. Deliverables

1. A video demonstrating the project functionality and database.
2. A diagram detailing the entities, relationships, and attributes of the database.
3. An exported schema from the database management system (DBMS).
4. Python code for the system with appropriate commenting and structure.

4. Time Management

Week 1:

- **Tasks:**
  - Discuss potential solutions and distribute first tasks.
  - Define the timeline.

Week 2:

- **Tasks:**
  - Design the Entity-Relationship Diagram
  - Download SQL-Connector and Tkinter.

Week 3:

- **Tasks:**
  - Implement basic order placement methods (s.a. adding customer to database).
  - Create the base for GUI - main menu and login page.
  - Create database, with pizza's, desserts and drinks, as well as calculating the prices.

Week 4:

- **Tasks:**
  - Develop the earnings report functionality
  - Finalise the ordering process (adding discounts, canceling order, managing delivery persons)
  - Perform testing on the entire system.

Week 5:

- **Tasks:**
  - Ensure the GUI interacts with the database for real-time price calculations and menu updates.

Week 6:

- **Tasks:**
  - Record the screen presentation covering project features and database.
  - Export the database schema from the DBMS.
  - Finalize and submit all deliverables to Canvas.

8. Risk Analysis and Contingency Plans

- **Constraint:** Delays in plan.
- **Contingency**: Ensure regular team meetings and clear task distribution.
- **Constraint:** Technical difficulties
- **Contingency**: Go to lab sessions and communicate with team member.