Project Report Phase 3
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Project Group 27
CS166 Database Management System
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Intro:
In phase 3, we extend and complete different functionalities for the online Cafe application using Java/JDBC console application and corresponding SQL query languages. We make sure the database works fine for Customers, Employees, and Managers for performing different interactions with the database according to their different roles. Our project contains itemStatus.csv, menu.csv, orders.csv, and users.csv as our data. The other files are create_indexes.sql, create_tables.sql, load_data.sql, and trigger.sql are the main functions to run the database.

Group 27 goal is to create User Interface that allows the user to Create an account onto our Cafe database. Once created the User is able login into his account to place an order, update profile, and check the menu. In the database we have 3 types of users Customers, Employees, and Managers where the employees and the manager will have more features to use on the interface. Employees and Managers will be able to edit order while Manager can promote Customer to an Employee or Manager.

Description of files:
Create_tables.sql file mainly works for creating different entities and the relationship between them so that we know what attributes are in each entity. Create_indexes.sql file creates indexes on the attributes for each table which allow us to better retrieve and manipulate the data with checking condition. Load_data.sql works to import the data from the CSV files to the table using the corresponding path to the files. We also added a trigger.sql file to generate the sequence number as the orderid which is the primary key of table Orders. It ensures that the attribute orderids are in order which means every data entry in orderid is unique.

Contribute:
Giovanni and Zhounan worked mostly everything together since we encounter a lot of errors. Gio was more focused on implementing the updateProfile void function that came with other functions to allow it to run. Zhuonan was more focused on implementing the Menu void function with other functions that allows user to browse the menu and the manager to updateMenu. For the other two static void function, placeOrder and updateOrder, we both contributed to them.

Problems we Encounter:

The problems that we encounter were syntax errors. Another difficult problem was how to get the java formate SQL price from the table item using the execute query to create a new order in the placeOrder void function. Since we are not familiar with how to manipulate the List<List<>> data type that the query returns, we compromise and chose to let customers enter it.