



PES UNIVERSITY
(Established under Karnataka Act No. 16 of 2013)

**OBJECT ORIENTED ANALYSIS AND DESIGN
WITH JAVA
(UE19CS353)**

MINI PROJECT - SYNOPSIS

**TITLE:
RESTAURANT BILLING SYSTEM**

Team Members	SRN
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Problem Statement:

The "Restaurant Billing System" is a desktop-based java project and has been deployed to override the problems prevailing in the practicing manual system of generating the bills in restaurant.

Description:

Restaurant Billing System is a computer-based billing system with user friendly interface which automatically manages the billing process of the customer very easily taking only a short period of time. This System would benefit for restaurant Staff for easy and automated generation of bills. The billing staff can update the order for a particular table and thus it eliminates the calculation errors. So we have decided to work on this project and below are the features we would be implementing.

Features:

1. Menu management

- Create, Manage and Delete Menu items

This system will have the predefined list of dishes with respective rates and restaurant staff with login credentials will have the authority to make changes to the menu.

2. Order management

- GUI
- Table / order status
- Table / order logs
- Filtering functionalities
- File-handling using Serialization

- Invoice generation

This System will have a User Interface which would be a form with input fields such as Table No. followed by list of items giving it a look of shopping cart and the logs will be maintained in the form of byte code stream. Bill will be calculated and the invoice will be generated.

3. Account management

- Login system

This System will provide the login Credentials to the billing staffs and can't be access by random/stranger person.

Technologies/Methodologies:

- ✓ Java
- ✓ MySQL
- ✓ Serialization
- ✓ Deserialization
- ✓ File Handling

Use Cases:

- ❖ Easy and automated generation of bills
- ❖ Management of menu items
- ❖ Accurate calculation
- ❖ Maintaining the order logs
- ❖ Safety from the unauthorised modification

Task Distribution:

Team Members	Tasks
Rahul S Bhat	Menu management: Create, Manage, Delete Order Management: Invoice generation
Phani Kumar Vedurumudi	Order Management: GUI, order status, order logs, filtering functionalities
Pawan Prasad P	Order Management: GUI, File-handling using Serialization and Deserialization Account Management: Login System