■■ Restaurant Billing System – Project Report

■ Objective

A Python-based Restaurant Billing System to simplify order management and billing. Supports Dine-in & Takeaway, applies GST & Discounts, and generates PDF Bills & Sales Reports.

■■ Tools & Technologies

- Pvthon
- SQLite3
- Tkinter / Streamlit
- Pandas
- ReportLab

■ Key Features

- Menu Upload (CSV → Database)
- Order Entry (Dine-in / Takeaway)
- Bill Calculation (Subtotal, GST, Discounts, Total)
- PDF Bill Generation
- Unique Order ID / Item ID handling
- Sales & Top Items Reports
- Interactive UI (Tkinter / Streamlit)

■ Project Structure

- app.py → Main Application
- utils/db_utils.py → Database Operations
- utils/pdf_utils.py → PDF Bill Generation
- utils/report_utils.py → Sales Reports
- utils/calculator.py → Billing Calculations
- menu.csv → Sample Menu
- db/restaurant.db → SQLite Database
- $\bullet \quad \text{reports/} \to \text{Generated Reports}$
- bills/ → Generated Bills

■ Workflow

1 Upload Menu \to 2 Take Orders \to 3 Calculate Bill \to 4 Generate PDF \to 5 View Reports

■ Outcome

- 100% Completed
- Backend + Frontend + Reporting Integrated
- Ready for Final Presentation

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