DBMS PROJECT DESCRIPTION

Mohammad Kaif – 2021067 Navvrat Rao – 2021072

Group Number: 106 Tutorial Group Number: 5

Project Name:

ShimaShima Shopping

Aim:

To design an online retail store where users can browse through available products, add products to their cart and checkout. Employees can add, delete, update information about products, keep track of sales and also manage customer profiles.

Apart from developing a front-end and back-end for the web application, this project involves **building a database** to manage information about products, customers, employees, inventory and sales.

Tech Stack:

Front-End: We plan on using HTML, CSS, javascript along with the javascript library React to design the front-end of our web application. We also plan on using figma to control constraints for making the design responsive and to create and export vector assets for use in the web app.

Database: We plan on using MySQL for storing and managing the data.

Back-End: We plan on using FastAPI (a python based web framework for building APIs based on standard Python type hints) to design the back-end of our web application.

In case FastAPI does not satisfy our requirements, we plan on using Django to design the backend of our wep application.

Function Requirements:

• **Product Management:** Functionality to add, delete and edit products in the database as well as access details about products.

- **Inventory Management:** Functionality to track inventory levels, track the movement of inventory and set points at which products are to be re-ordered.
- Sales Management: Functionality to track sales by product, customer and employee. Functionality to generate sales reports.
- **Customer Management:** Functionality to store customer information, track their purchases and generate reports about the same.
- Employee Management: Functionality to store employee information, track various details about employees (personal details and things like hours worked, sales made etc.) and generate reports about the same.