ONLINE SHOPING PROJECT IN JAVA

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GITHUB LINK: <https://github.com/romil45/java-final->

VIDIO Link:

https://drive.google.com/file/d/17C\_OtQyJ7Jz6PGxh4dkRIRbWLmUuie-L/view?usp=drive\_link

INTRODUCTION

This project represents a basic e-commerce platform to using spring boot for building a simple backend application,login,item management with CRUD function and connecting with MySQL database for storing data the system is designed to handle basic e commerce function such as managing users and product allowing customers to interact with catalog of items

The application is built with RESTful API that interact with a database allowing clints to user can update data and delete and create a new log in to using this project

**FEATURES**

USERS REGISTRATION : Users can register with their name ,email phone ,and address.

USERS LOGIN : Registered users can log in using their username

Item management : owner of the product can add ,update , delete , and view items

**TO HANDLE ITEM MANAGEMENT**

POST: to use add item : allows an admin to add new product to the catalog by providing product details such as name ,description, price , and stock.

POST : to use update item : it allows an admin to update the details of the product when it required

DELETE: delete item by using item name : allow an admin to delete a product from the catalog by specifying the item name

GET : to use get item by using name : to get name and details of specific item based on its name

GET: to use get all item : feat a list of all available items in the product catalog

**Technologies Used**

Spring boot : for building the backend restful Api with minimal setup and configuration

JDBC[ JAVA DATABASE CONNECTIVITY] : to interect with the MySQL DATASBE for storing user and item data

MySQL : relational database use to store customer and product data

**CHALLANEGS DURING THE MAKING PROJECT**

1. database integration

* challenge: setting up and connecting the application to a mysql database posed some initial challenges, especially ensuring that the database schema (tables for users, items) was correctly structured and connected.
* solution: by leveraging spring boot's built-in database connectivity support, the project integrated jdbc (java database connectivity) to interact with the MySQL database. proper sql queries were written to handle crud operations, which made database operations efficient.

2. api security and user authentication

* challenge: at the beginning of the project, user authentication was not implemented. this posed a challenge as the application allowed unauthenticated users to perform actions like registering, logging in, and managing items.