

A project report on
“SHOP FOR HOME”

Submitted in partial fulfillment of the requirements for the
internship of Wipro

JAVA & AWS IP C4 GROUP-1

Under the guidance of

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Great Learning

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ACKNOWLEDGEMENT

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We are highly indebted to **Mr. Neeraj Kumar** for their guidance and supervision. We would like to thank him for providing the necessary information and resources for this project. We would like to express our gratitude towards our parents & our friends for their kind cooperation and encouragement which helped us a lot in completing this project.

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ABSTRACT

E-commerce is fast gaining ground as an accepted and used business paradigm. More and more business houses are implementing websites providing functionality for performing commercial transactions over the web. It is reasonable to say that the process of shopping on the web is becoming common place.

The objective of this project is to develop an e-commerce store where products like key chains, shoes, perfumes, mouse pads etc can be bought from the comfort of home through the internet. However, for implementation purposes, this paper will deal with online shopping.

An online store is a virtual store on the Internet where customers can browse the catalog and select products of interest. The selected items may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order.

Chapter 1

Introduction

Online shopping is a form of e-commerce that allows consumers to purchase goods and services directly from sellers over the Internet using a web browser or mobile app. Consumers are interested in products by visiting the retailer's website directly or by browsing alternative suppliers using a shopping search engine that displays the availability and price of the same product at different e- retailers.

As of 2020, customers will be able to shop online using a variety of products like shoes, mouse pads, perfumes, key chains. Online stores are reminiscent of the physical analogy of buying a product or service at a regular retail store or mall.

This process is known as B2C (Business-to-Consumer) online shopping. If an online store is set up so that a company can make purchases from other companies, the process is called business-to-business (B2B) online shopping. In a typical online store, customers can browse the company's various products and services, and view product photos and images along with information about product specifications, features, and prices.

Online stores usually allow buyers to use the "search feature" to find a particular model, brand, or item. Online customers must have internet access and a valid payment method to complete the transaction. Services such as credit cards, Interact-enabled debit cards, or PayPal.

For physical items (such as paperbacks and clothing), the retailer ships the item to the customer. For digital products such as digital audio files for songs and software, retailers typically send the files to customers over the Internet.

Chapter 2

Project Objective

Shop For Home is a popular Store in the market for shopping different types of stuff. Due to Covid 19, all offline shopping stopped. So, the store wants to move to the cloud platforms and wants its own web application.

System is to manage the details of Shopping, Internet, Payment, Bills, and Customer. It manages all the information about Shopping, Products, Customer, Shopping. The project is totally built at the administrative end and thus only the administrator is guaranteed the access.

Chapter 3

Study of the System

The major objective of this ShopForHome application was to provide a platform for users to buy home décor products from the website. The application consists of two types of users –

- **ADMIN**: An admin can log in to the application using a username and password. On successful login, the user will be redirected to the admin dashboard where the user will see an overall view of the application which includes all products and a list of products to shop for. Admin is able to log in, Logout, and Register into the application. Admin is able to perform CRUD on Users. Admin is able to perform CRUD on the products. Admin is able to get a bulk upload option to upload a csv for product details. Admin is able to get the stocks. Admin is able to mail if any stock is less than 10. Admin is able to get the sales report of a specific duration. Admin is able to set the discount coupons for a specific set of users.
- **USER**: Users can register themselves on the platform by signup from the registration page. For registration, the user will need to provide the username, email address, password, phone number, and address. The user is able to log in, Logout, and Register into the application. Users are able to see the products in different categories. The user is able to sort the products. The user is able to add the products to the shopping cart. The user is able to increase or decrease the quantity added to the cart. The user is able to add “n” number of products in the cart. The user is able to get the Wishlist option where I can add those products which I want but don’t want to order now.

Chapter 4

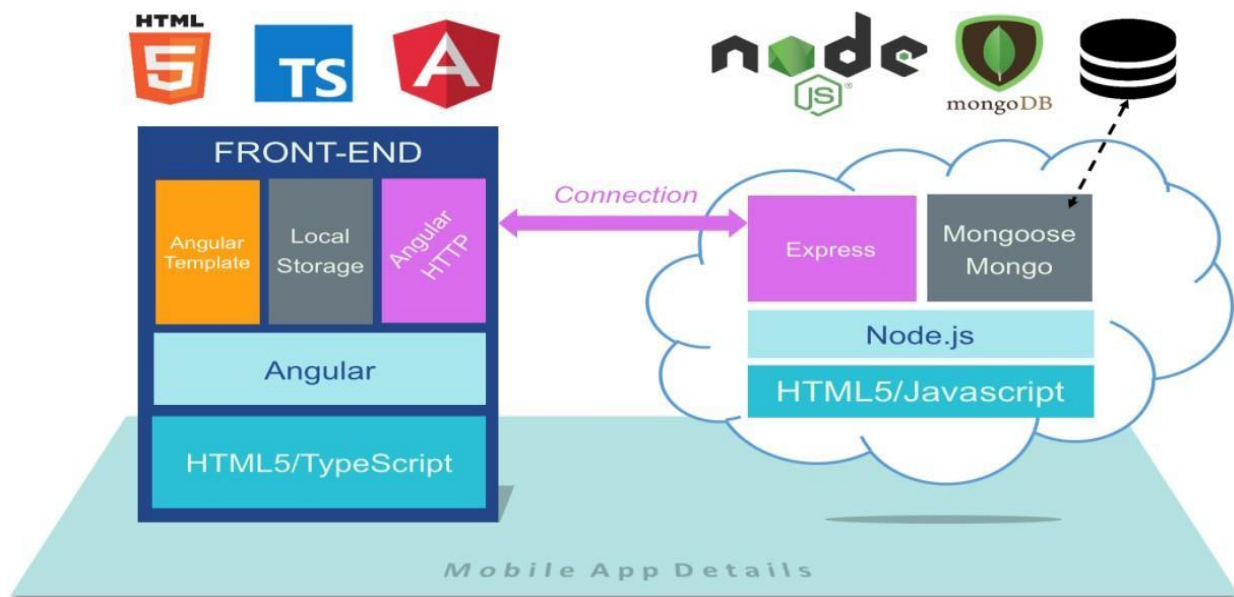
Design and Development Environment

4.1 Frontend

The frontend of a website describes the part that the visitor can see. It includes all displayed content that is visible to public or logged-in users.

The layer above the back end is the front end and it includes all software or hardware that is part of a user interface. Human or digital users interact directly with various aspects of the front end of a program, including user-entered data, buttons, programs, websites and other features.

The frontend is often called the GUI (Graphical User Interface) because it is the interface that the visitors can see and use. The frontend is mainly used to display various types of content and make the user's input available to the backend. The displayed content includes the basic structure of the website, such as the navigation. The frontend includes texts, graphics, videos, and other media.





4.2 HTML

The Hypertext Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages.

HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page.

HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by tags, written using angle brackets.

Browsers do not display the HTML tags but use them to interpret the content of the page.

4.3 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, MathML or XHTML).

CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility; provide more flexibility and control in the specification of presentation characteristics; enable multiple web pages to share formatting by specifying the relevant CSS in a separate .

CSS file, which reduces complexity and repetition in the structural content; and enables the CSS file to be cached to improve the page load speed between the pages that share the file and its formatting.

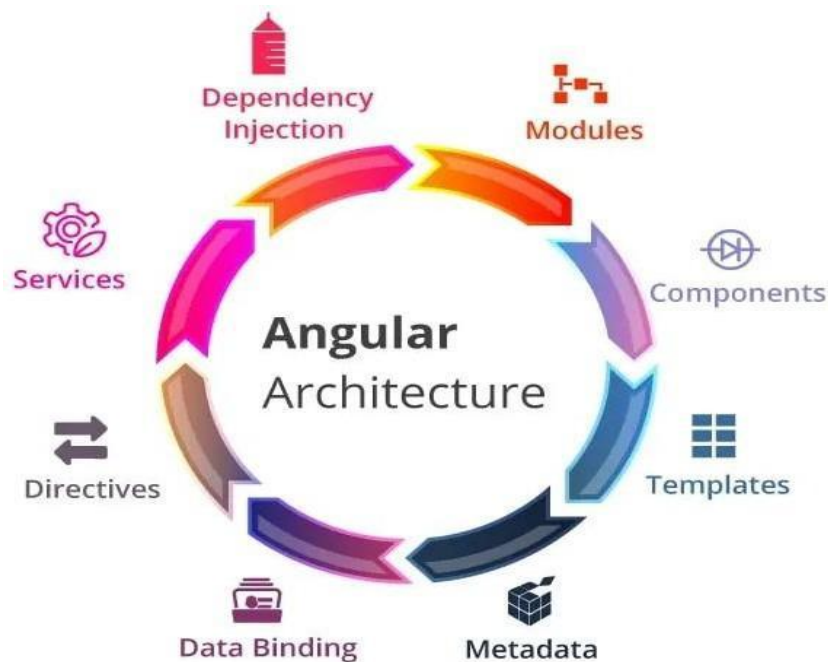


4.4 Angular

Angular was a Typescript based open-source front-end web framework for developing single- page applications.

It was maintained mainly by Google and a community of individuals and corporations. It aimed to simplify both the development and the testing of such applications by providing a framework for client-side model–view–controller (MVC) and model–view–view model (MVVM) architectures, along with components commonly used in web applications and progressive web applications.

Angular was used as the frontend of the MEAN stack, that consisted of MongoDB database, Express.js web application server framework, Angular itself (or Angular), and Node.js server runtime environment.

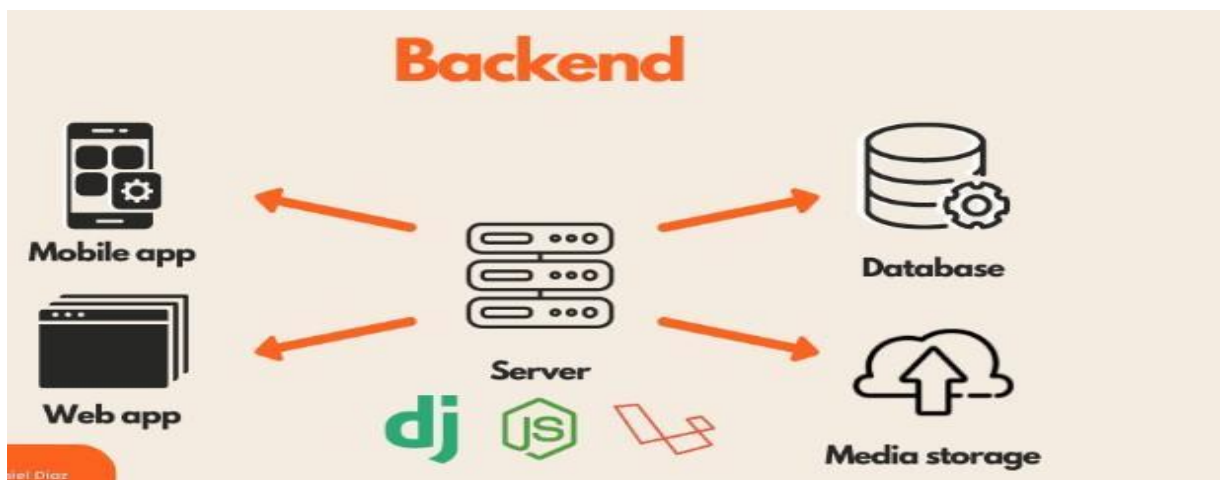


4.5 Backend

The backend to a website is pretty much everything the user can't see. Generally, this means the programming that generates pages that the user views, creating the "server-side" content of the site.

This could be scripts, directives, databases, and other automated functions the server performs. Back-end development includes the server implementation and it more on the logical interaction of data, how it is stored, and transmitted.

"Backend" refers to any part of a website or software program that users do not see. It contrasts with the frontend, which refers to a program's or website's user interface. In programming terminology, the backend is the "data access layer," while the frontend is the "presentation layer."



4.6 Database

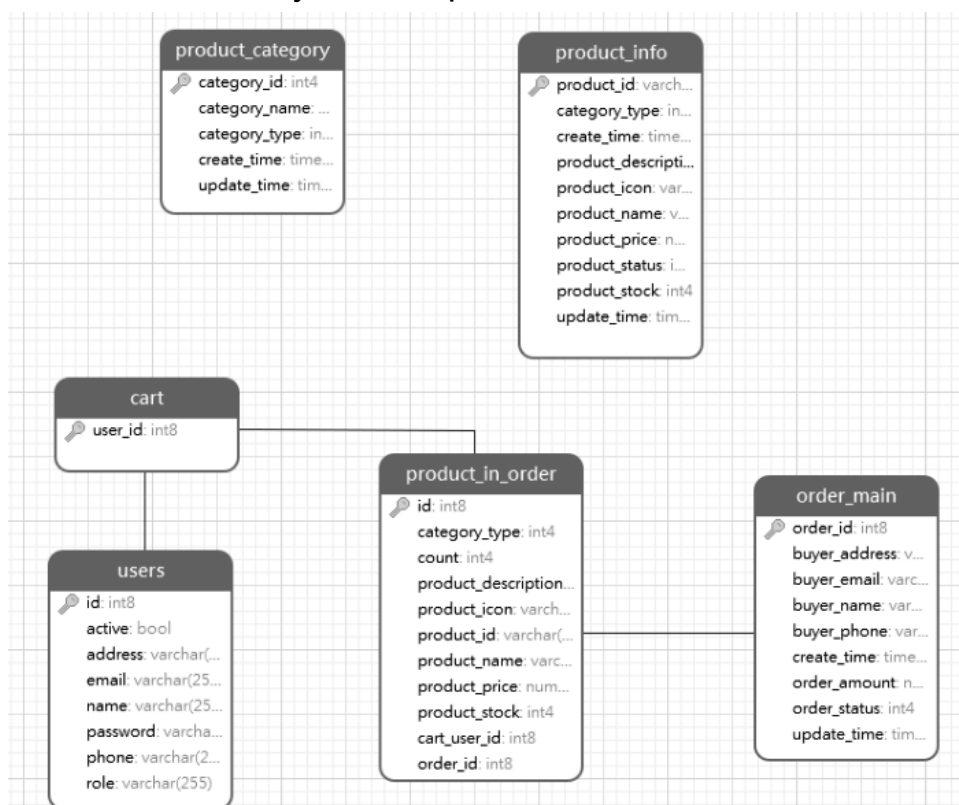
In computing, a database is an organized collection of data stored and accessed electronically. Small databases can be stored on a file system, while large databases are hosted on computer clusters or cloud storage.

The design of databases spans formal techniques and practical considerations including data modeling, efficient data representation and storage, query languages, security and privacy of sensitive data, and distributed computing issues including supporting concurrent access and

fault tolerance. A database management system (DBMS) is the software that interacts with end users, applications, and the database itself to capture and analyze the data.

The DBMS software additionally encompasses the core facilities provided to administer the database. The sum total of the database, the DBMS and the associated applications can be referred to as a database system. Often the term "database" is also used loosely to refer to any of the DBMS, the database system or an application associated with the database.

Mainframe databases are an essential element of your infrastructure. How you store, manage, and leverage your Mainframe data directly impacts your organization's success. Broadcom solutions for mainframe databases and database management use an open-first approach to ensure efficient management and reliability of enterprise data.



Database Schema of the ShopForHome project

4.7 MySQL

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Michael Widenius's daughter, and "SQL", the abbreviation for Structured Query Language.

A relational database organizes data into one or more data tables in which data may be related to each other; these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database.

In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manages users, allows for network access and facilitates testing database integrity and creation of backups.

Chapter 5

Details

5.1 Project Detail

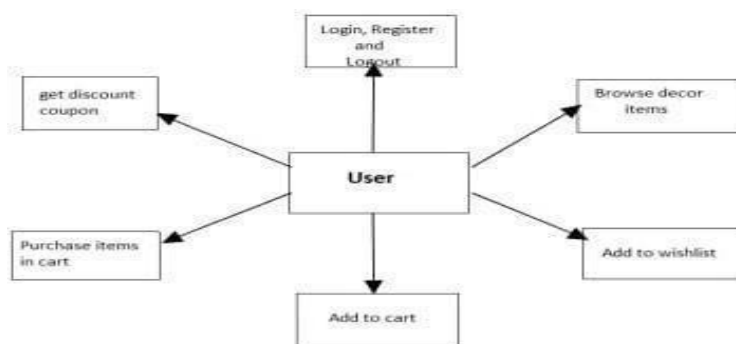
Project Name: ShopForHome

Problem Statement: ShopForHome is a popular Store in the market for shopping the home décor stuff . Due to Covid 19 all the offline shopping stopped. So, the store wants to move to the cloud platforms and wants their own web application. There are 2 users on the application:

1. User
2. AdminUser

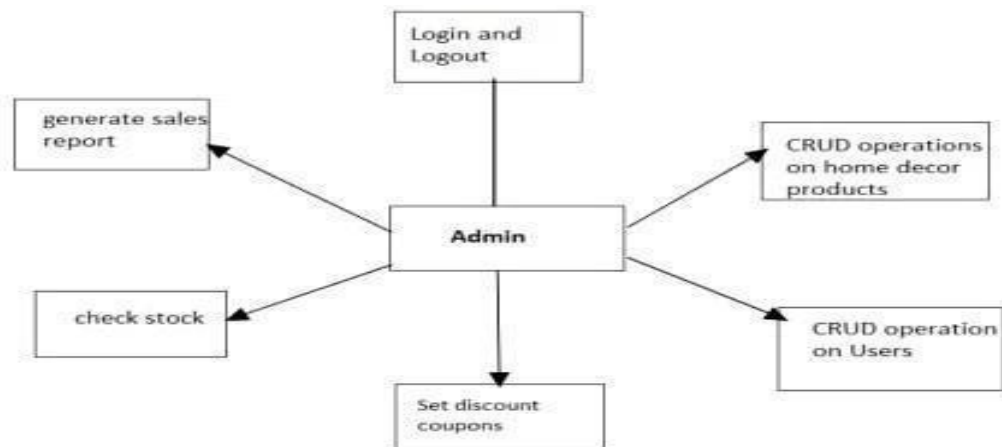
User Stories:

1. As a user I should be able to login, Logout and Register into the application.
2. As a user I should be able to see the products in different categories.
3. As a user I should be able to sort the products.
4. As a user I should be able to add the products into the shopping cart.
5. As a user I should be able to increase or decrease the quantity added in the cart
6. As a user I should be able to add “n” number of products in the cart.
7. As a user I should be able to get the Wishlist option where I can add those products which I want but don't want to order now.
8. As a user I should get different discount coupons.



Admin Stories:

1. As an Admin I should be able to login, Logout and Register into the application.
2. As an Admin I should be able to perform CRUD on Users.
3. As an Admin I should be able to Perform CRUD on the products.
4. As an Admin I should be able to get a bulk upload option to upload a csv for product details.
5. As an Admin I should be able to get the stocks.
6. As an Admin I should be able to mail if any stock is less than 10.
7. As an Admin I should be able to get the sales report of a specific duration.
8. As an Admin I should be able to set the discount coupons for the specific set of users.

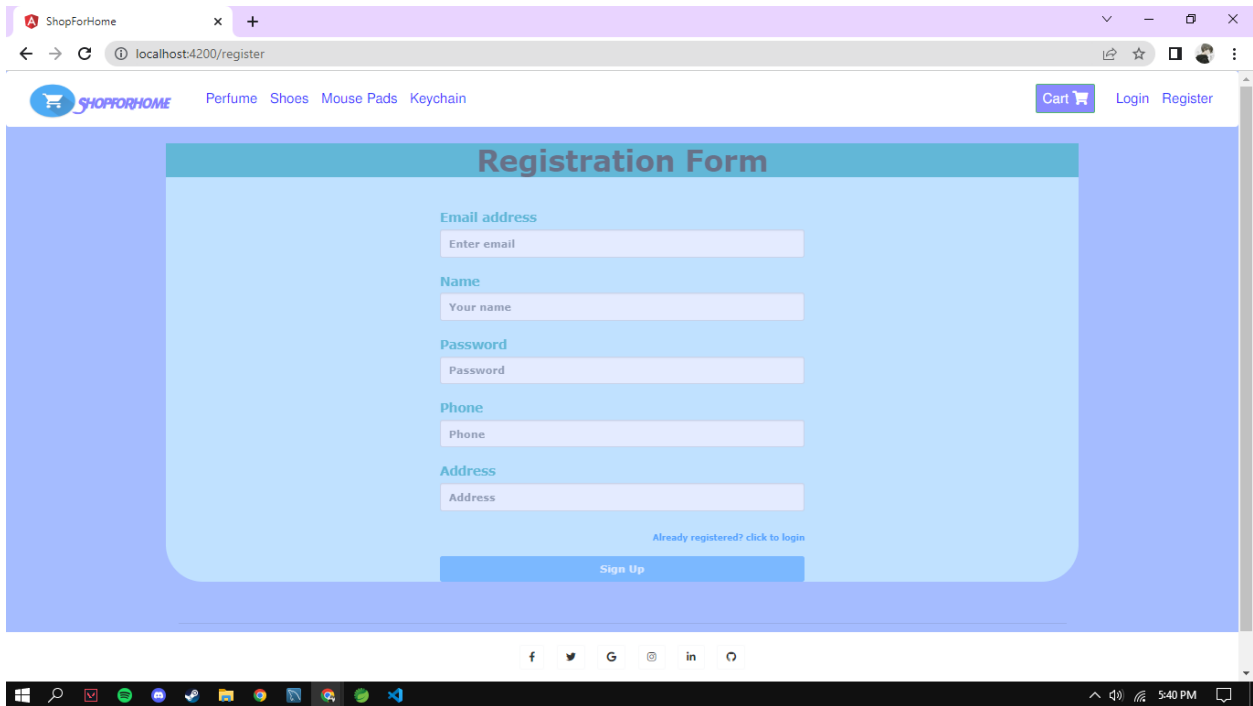


Chapter 6

Outputs

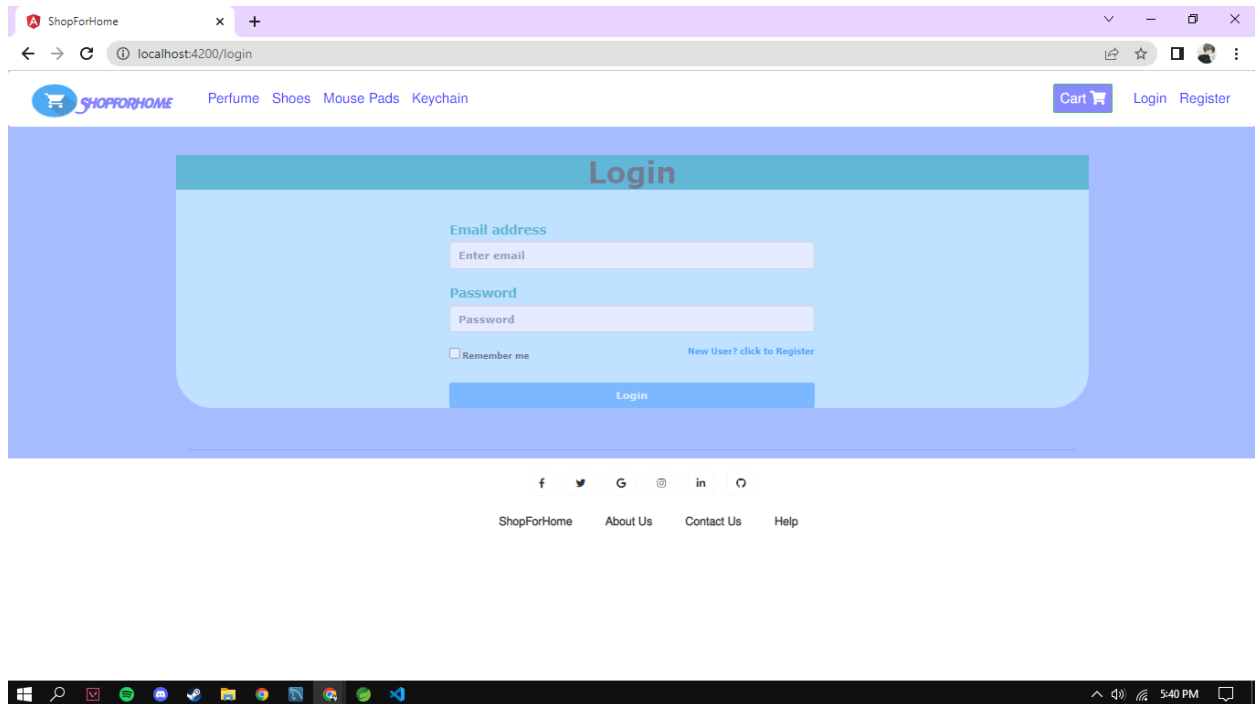
6.1 User Functionalities

- **User Login:** This feature helps the user to login to the system. A user must login with his username and password to the system after registration. If they are invalid, the user is not allowed to enter the system.
- **Product List:** This feature helps the user to see the products in different categories.
- **Cart:** This feature helps the user to add the products into the shopping cart and users can increase or decrease the quantity added in the cart. Users are able to add “n” number of products in the cart.
- **Wish-list:** This feature helps the user add the products to the wishlist which the user doesn't want to order at that particular time.
- **Discount Coupon:** User can get different discount coupons.

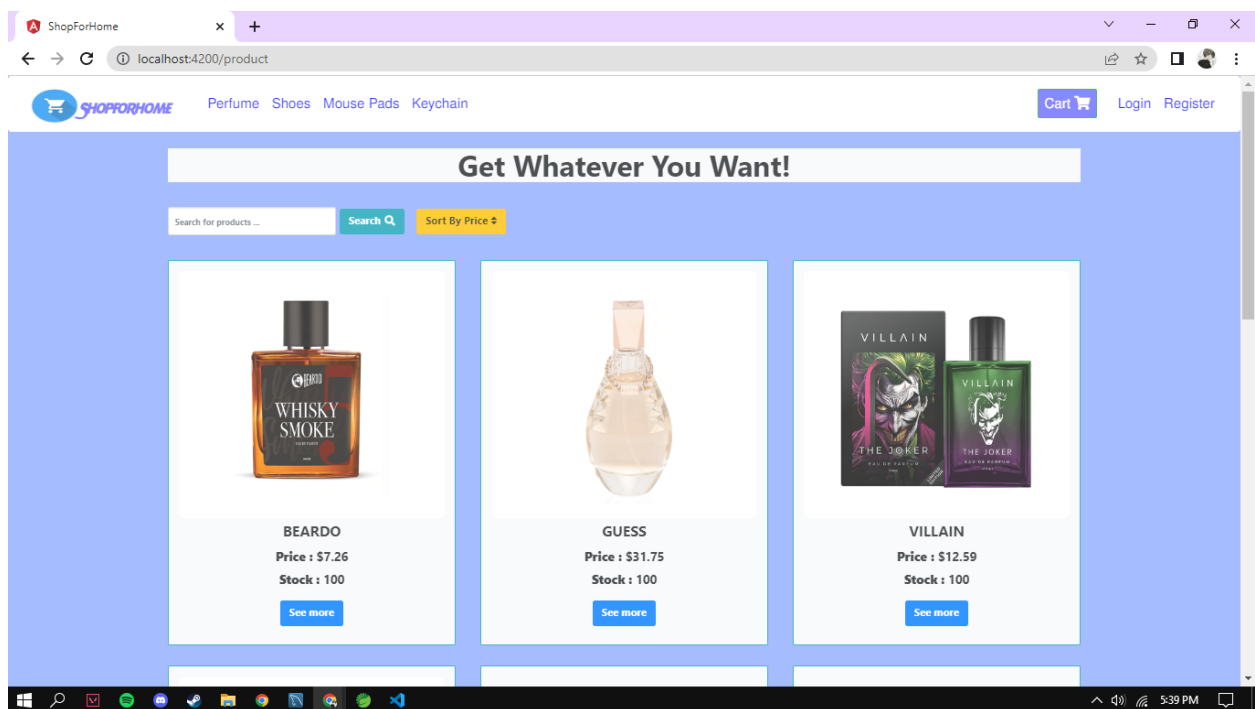


The screenshot displays a web browser window with the address bar showing 'localhost:4200/register'. The page features a navigation bar with the 'ShopForHome' logo, category links (Perfume, Shoes, Mouse Pads, Keychain), and buttons for 'Cart', 'Login', and 'Register'. The main content area is titled 'Registration Form' and contains a light blue box with the following fields: 'Email address' (with placeholder 'Enter email'), 'Name' (with placeholder 'Your name'), 'Password' (with placeholder 'Password'), 'Phone' (with placeholder 'Phone'), and 'Address' (with placeholder 'Address'). A link 'Already registered? click to login' is positioned above a blue 'Sign Up' button. The browser's taskbar at the bottom shows various application icons and the system clock indicating 5:40 PM.

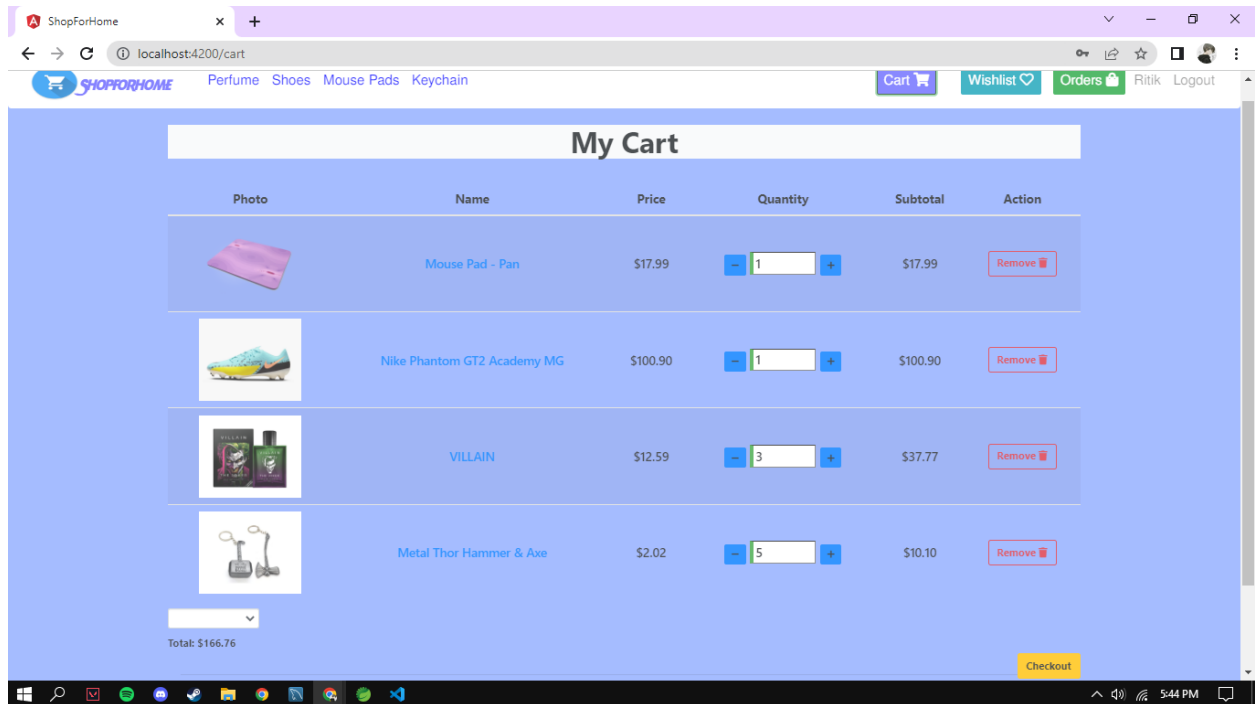
User Registration



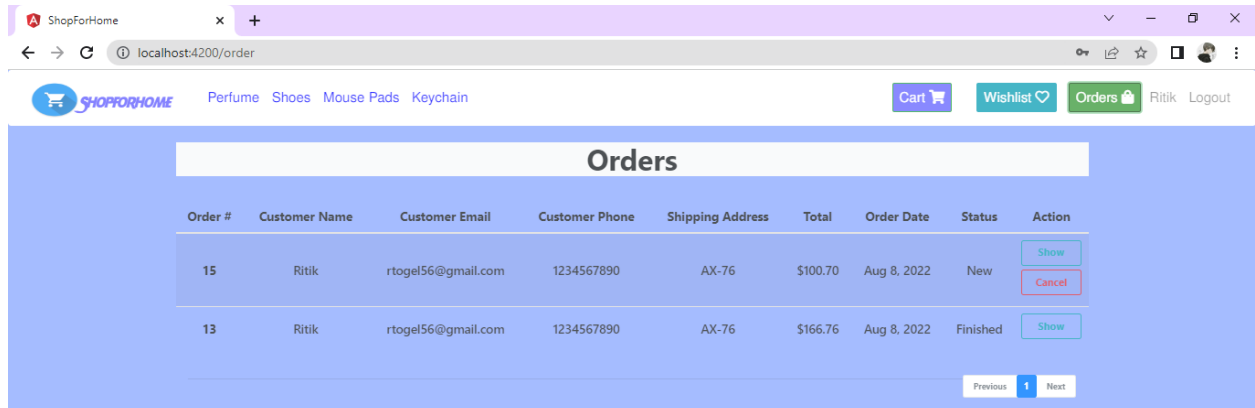
User Login



User Home Page



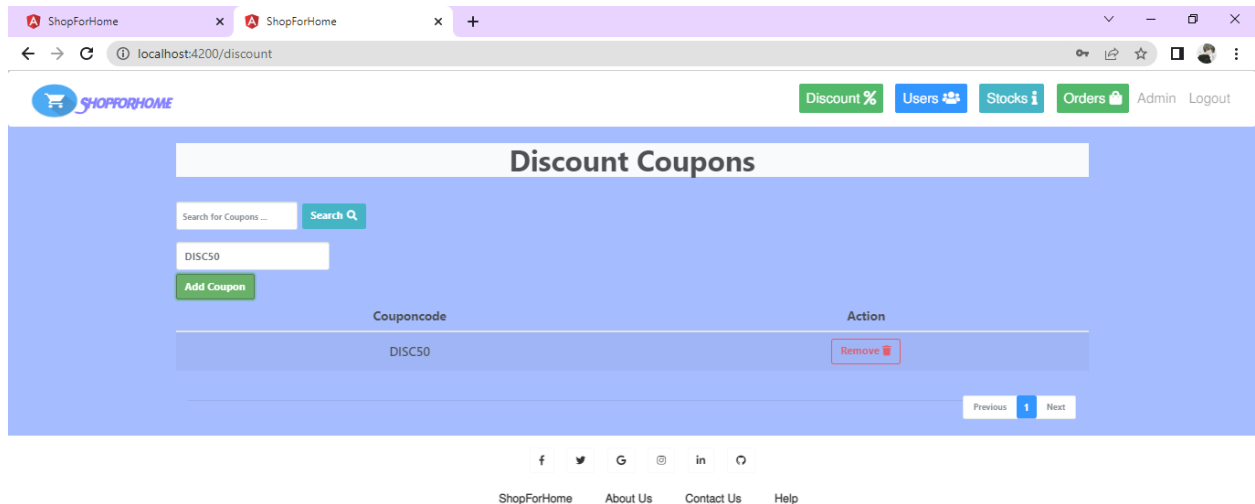
Adding Product to Cart



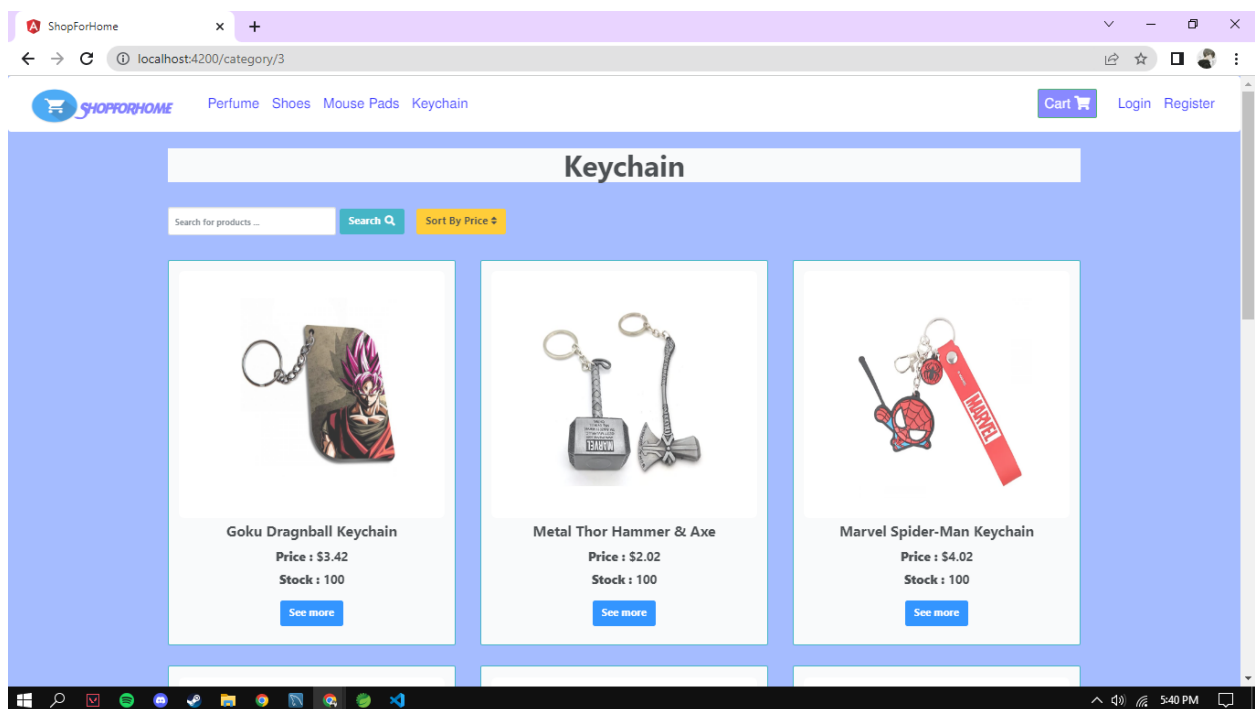
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[in](#)
[O](#)

[ShopForHome](#)
[About Us](#)
[Contact Us](#)
[Help](#)

Order Details



Discount Coupons



User Categories

6.2 Admin Functionalities

- **Admin Login:** This feature helps the admin to login to the system. An admin must login with his username and password to the system after registration. If they are invalid, the user is not allowed to enter the system.
- **Crud Operations:** Admin is able to perform different Crud operations on User and Products.
- **Bulk Upload:** This feature helps admin to upload the products in the bulk amount.
- **Stocks:** Admin gets the products in the stock and mail if any stock is less than 10.
- **Sales and reports:** Admin gets the sales report of particular duration.
- **Discount coupons:** Admin sets the discount coupons for the specific set of users.

The screenshot shows a web browser window with the address bar displaying 'localhost:4200/login'. The page features a navigation bar with the 'ShopForHome' logo, product categories (Perfume, Shoes, Mouse Pads, Keychain), and links for 'Cart', 'Login', and 'Register'. The main content area is a light blue box titled 'Login' containing a form with the following elements:

- Email address:** A text input field containing 'admin@gmail.com'.
- Password:** A password input field with masked characters '*****'.
- Remember me:** An unchecked checkbox.
- Registration link:** A blue link that says 'New User? click to Register'.
- Login button:** A blue button labeled 'Login'.

Below the login form, there are social media icons for Facebook, Twitter, Google+, Instagram, LinkedIn, and YouTube. At the bottom of the page, there are links for 'ShopForHome', 'About Us', 'Contact Us', and 'Help'. The Windows taskbar at the bottom shows the time as 2:06 PM.

Admin Login

New Product

Code
Product Code

Photo Link
Photo

Name
Product Name

Category
Perfume

Description
Product Description

Price
20

Stock
100

Status
Available

Submit

Adding New Products

Save As

This PC > Downloads

Organize New folder

This PC

3D Objects

Desktop

Documents

Downloads

Music

Pictures

Videos

Local Disk (C:)

Local Disk (D:)

Last month (3)

Admission

DL

Fox

Earlier this year (2)

Major Project

Minor Project

File name: Report-exported.xlsx

Save as type: XLSX File (*.xlsx)

Save Cancel

ShopForHome

Discount % Users Stocks Orders Admin Logout

Choose File No file chosen

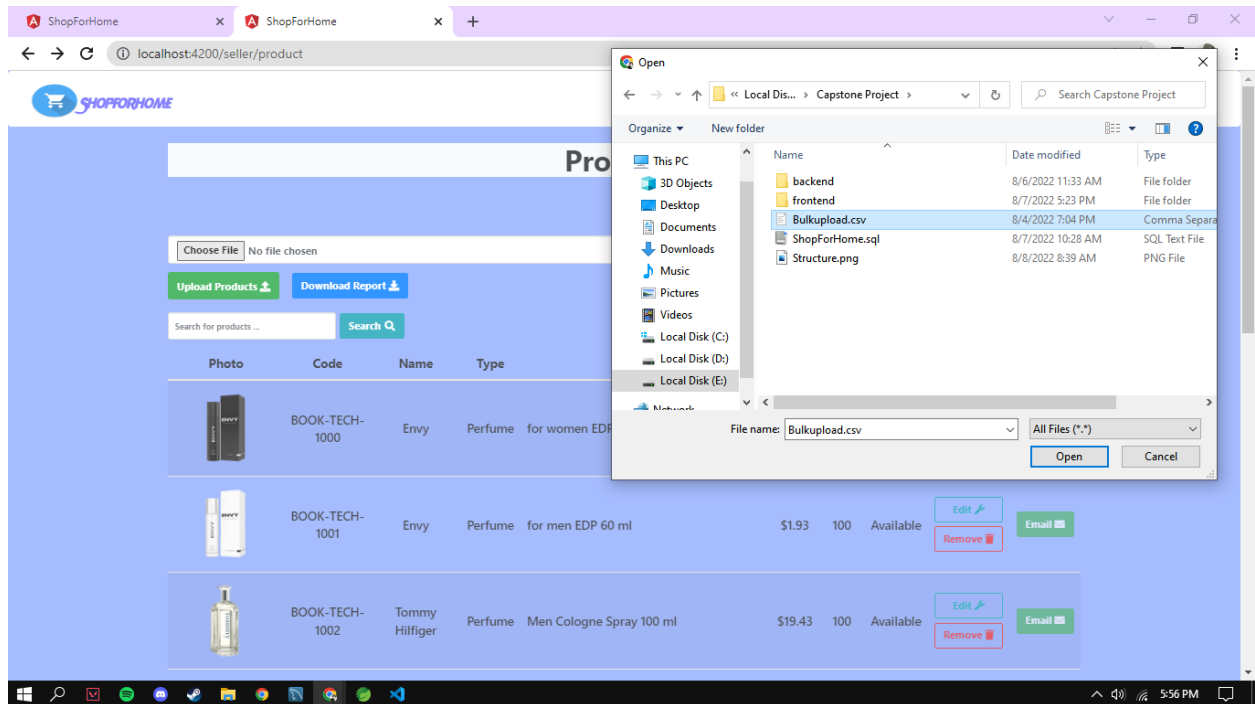
Upload Products Download Report

Search for products ... Search

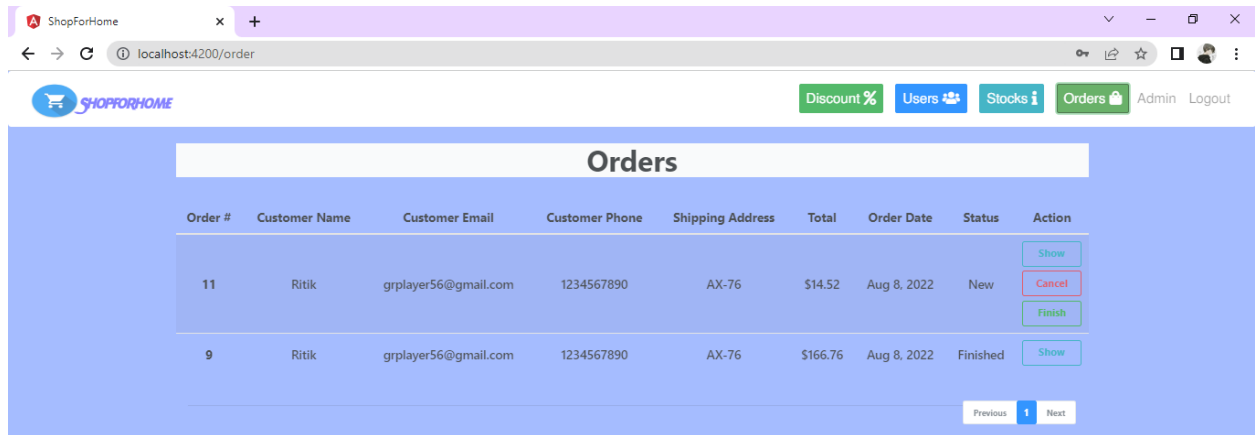
Photo	Code	Name	Type
	BOOK-TECH-1000	Envy	Perfume
	BOOK-TECH-1001	Envy	Perfume
	BOOK-TECH-1002	Tommy Hilfiger	Perfume

Men Cologne Spray 100 ml \$19.43 100 Available Edit Remove Email

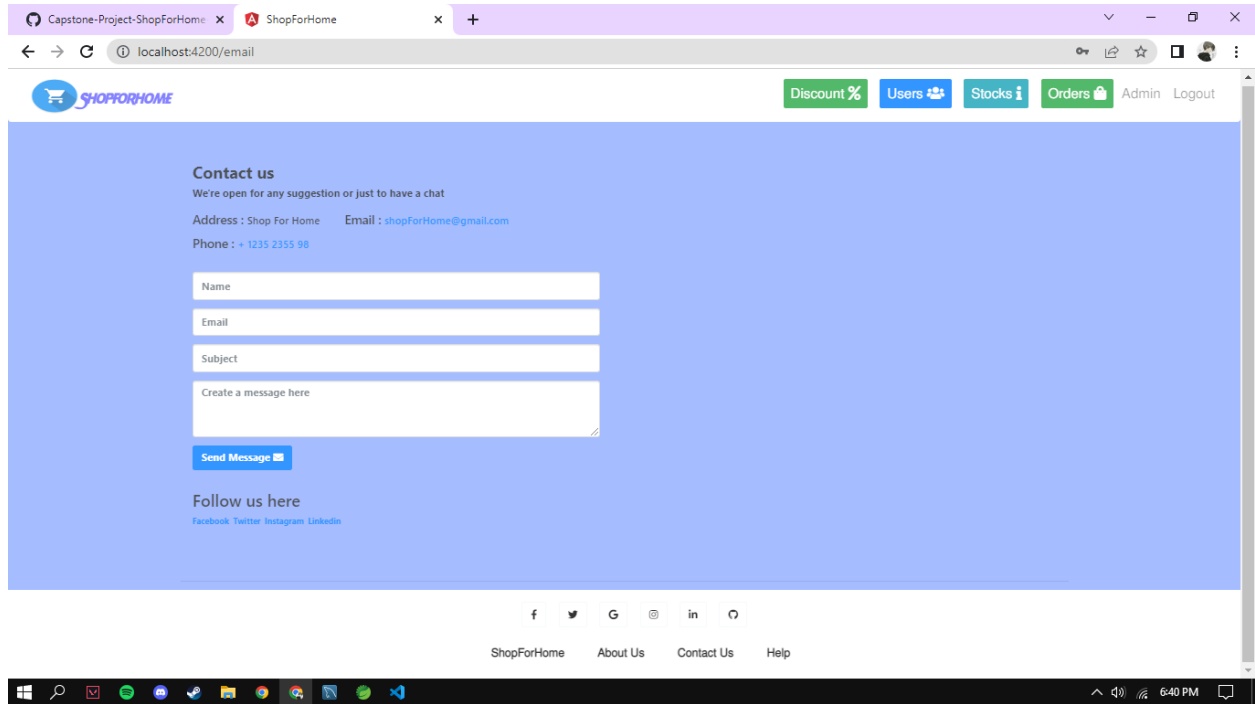
Stock and Sales Report



Bulk Upload



Order Details



Feedback Form when Stocks<10

Chapter 7

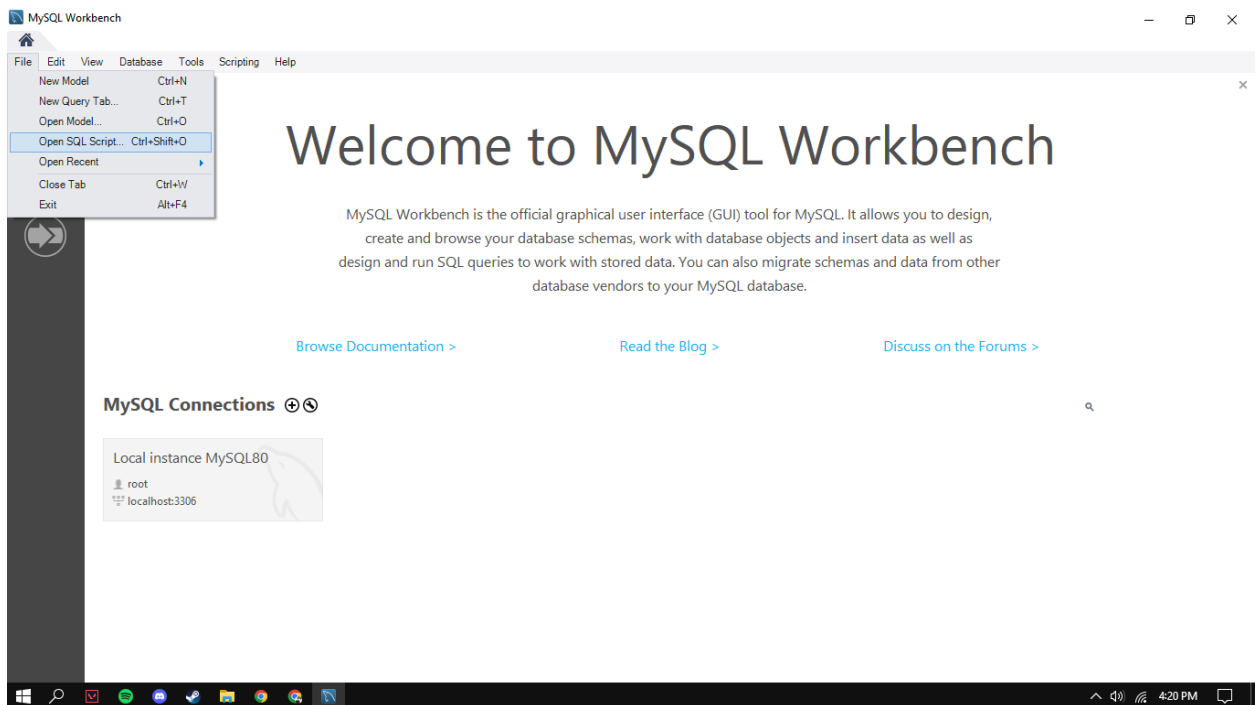
Installation Steps

Software Required:

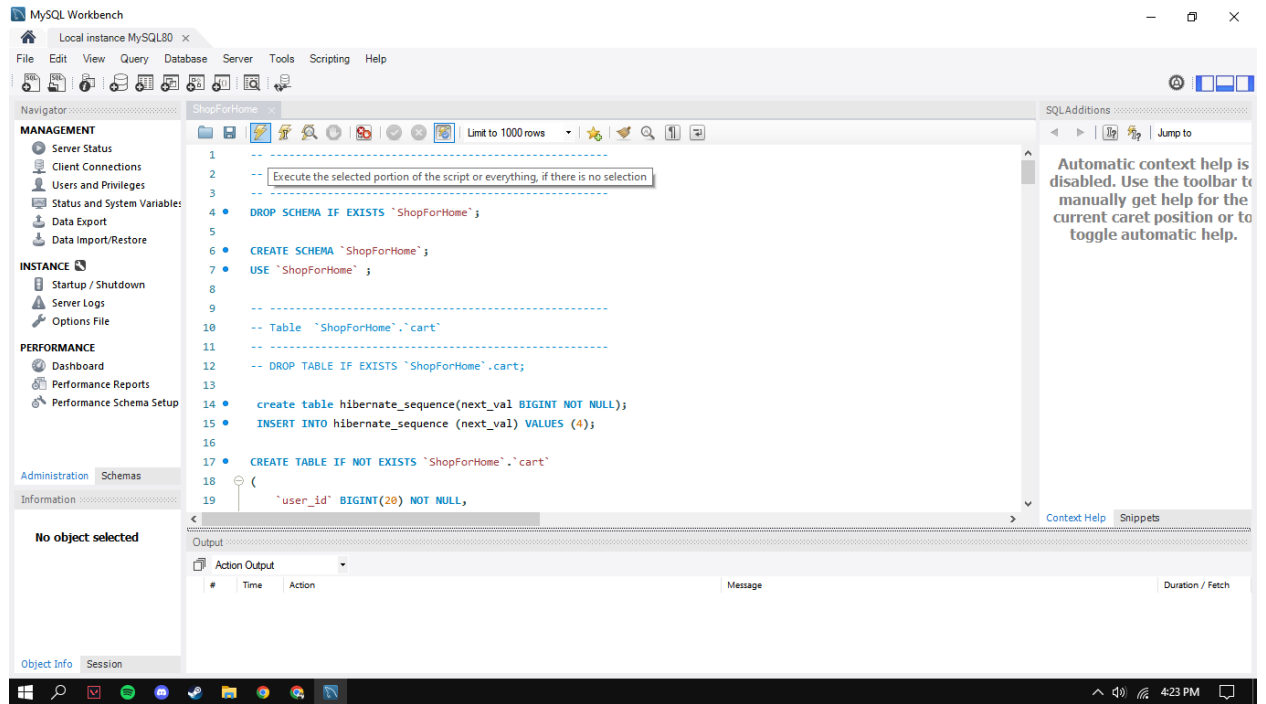
1. Spring Tool Suite
2. Visual Studio Code
3. MySQL Workbench

For creating Database in MySQL Workbench:

1. Open MySQL Workbench.
2. Click on Open SQL script.



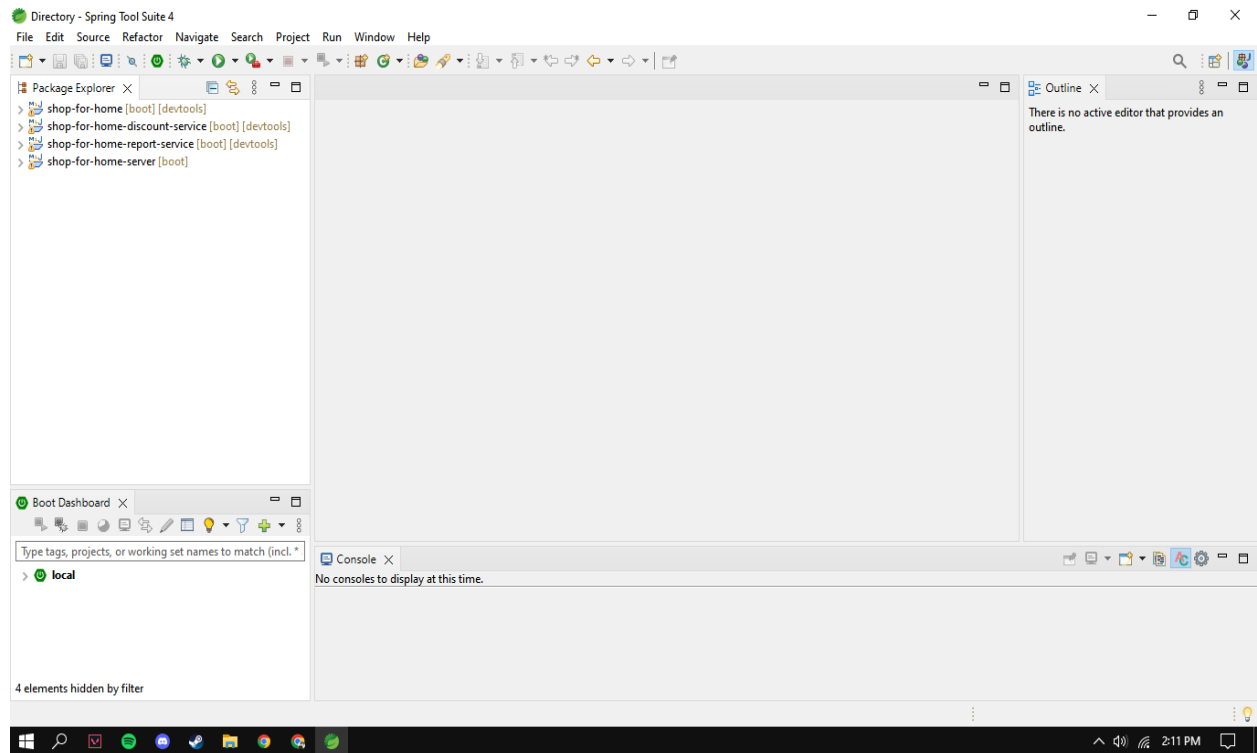
3. Select ShopForHome.sql file in project folder.
4. Click on Execute to run MySQL file.



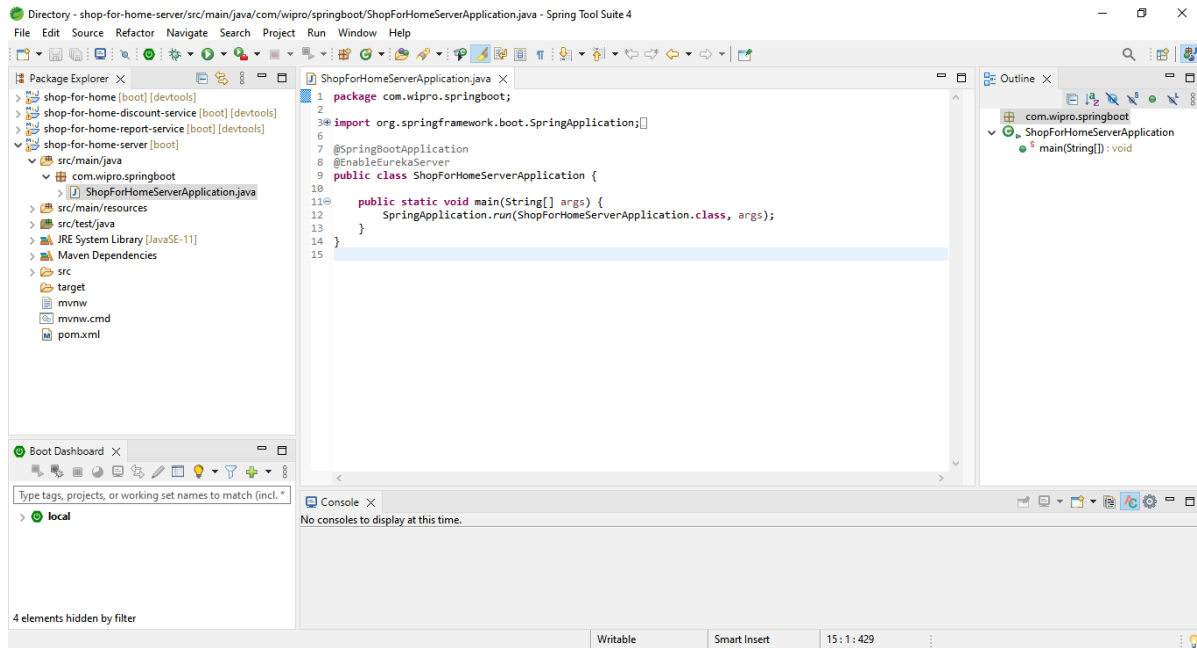
5. Now Database is successfully created.

For opening Backend project in Spring Tool Suite:

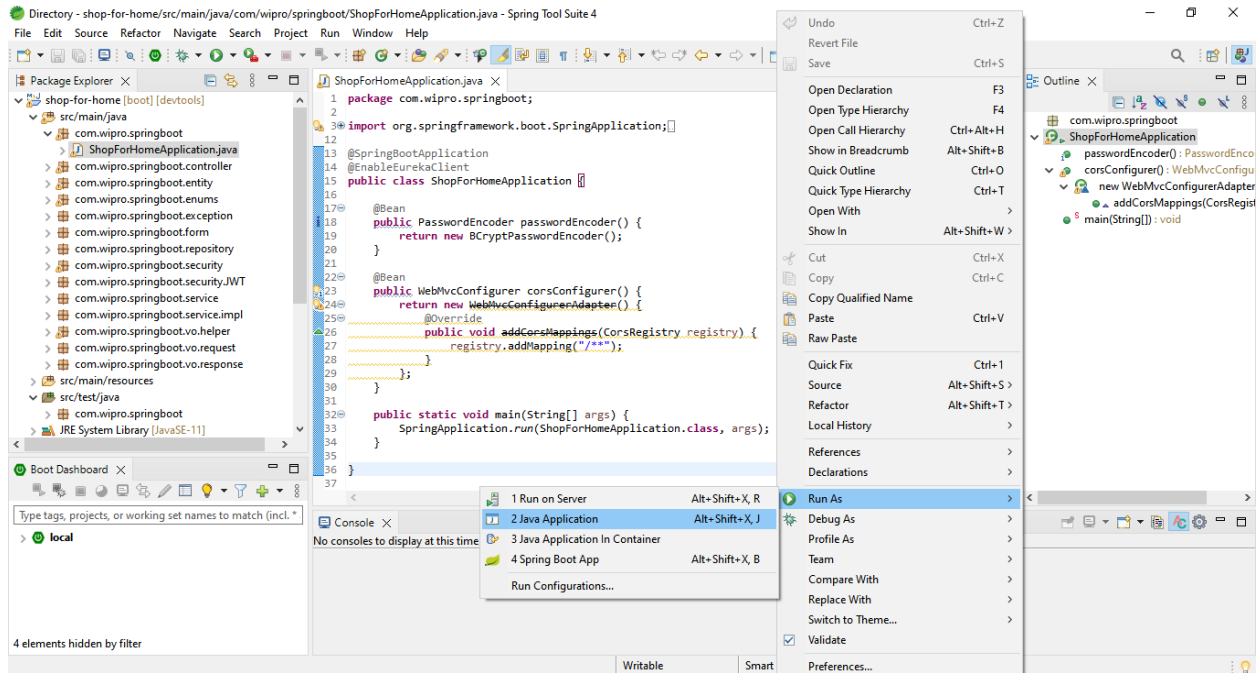
1. Open Spring Tool Suite.
2. Import all four projects in the workspace in the backend folder.



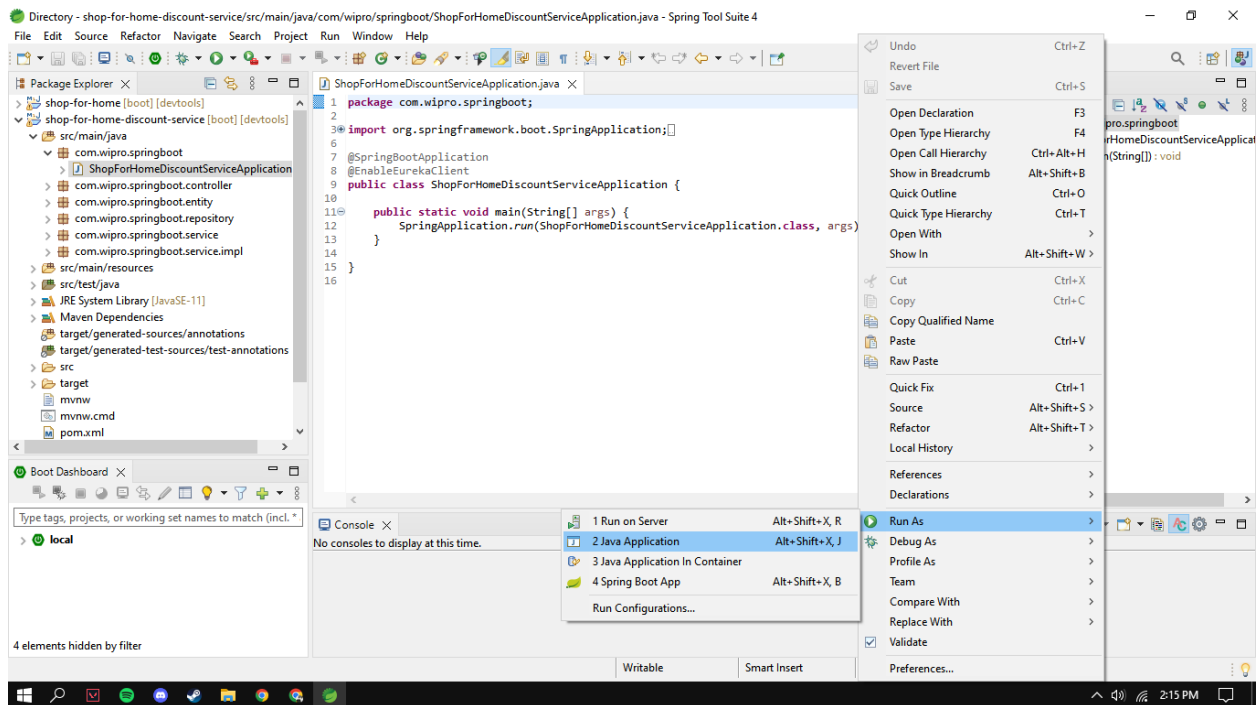
3. First open shop-for-home server project and run it as a java application.



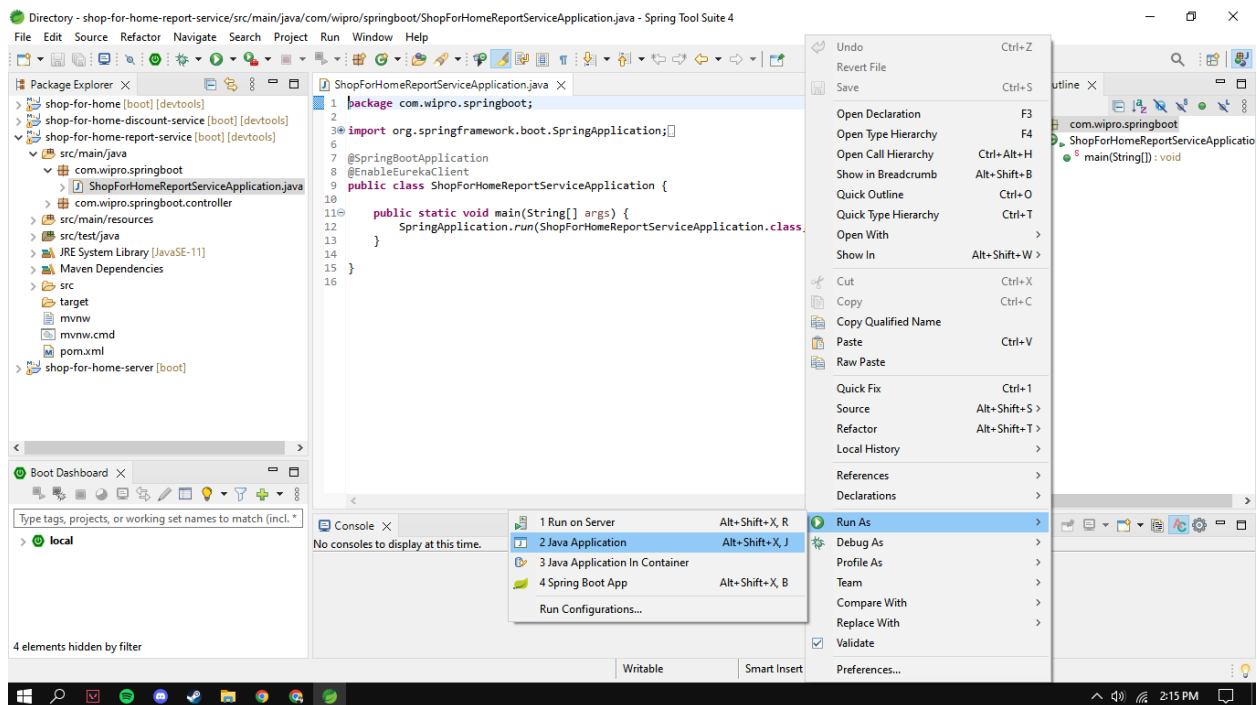
4. Then open a shop-for-home project and run it as a java application.



5. Then open a shop-for-home-discount-service project and run it as a java application.

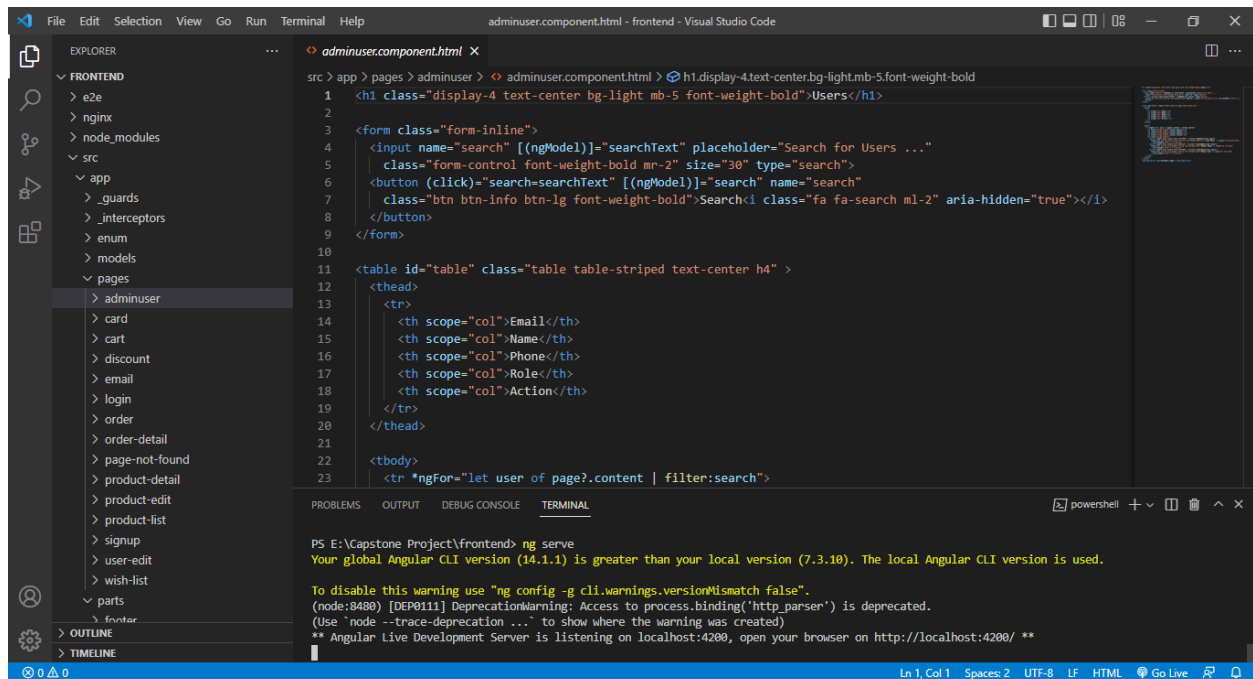


6. At last open a shop-for-home-report-service project and run it as a java application.



For opening Frontend in Visual Studio Code:

1. Open Visual Studio Code.
2. Click on Open Folder.
3. Select the frontend in the Capstone Project folder.
4. Open the new Terminal and type ng serve or ng s command.



NOTE: Before running this project make sure that you have installed Node js in your system and have configured Angular.

CONCLUSION

Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick-and-mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time. In exchange, online shopping has opened up doors to many small retailers that would never be in business if they laid to incur the high cost of owning a brick-and-mortar store. In the end, it has been a win-win situation for both consumers and sellers.