**“A massive industry relevant skill enhancement initiative for the youth of Tamil Nadu.”**





**GOVERNMENT COLLEGE OF ENGINEERING SALEM-011**

A Full Stack project report on

**ONLINE SHOPPING APPLICATION**

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# CHAPTER-1 INTRODUCTION

* 1. **INTRODUCTION:**

“ **Online shopping** ” is the process whereby consumers directly buy goods, services etc. from a seller interactively in real-time without an intermediary service over the internet. Online shopping is the process of buying goods and services from merchants who sell on the Internet. Since the emergence of the World Wide Web, merchants have sought to sell their products to people who surf the Internet. Shoppers can visit web stores from the comfort of their homes and shop as they sit in front of the computer. Consumers buy a variety of items from online stores.

* 1. **OBJECTIVE**:
* To shop wile in the comfort of your own home ,without having to step out of the door.

• Sell at lower rate due to less over head.

• Provide home delivery free of cost.

• Secured Transaction.

* 1. **SCOPE:**

This product has great future scope. Online shopping Internet software developed on and for the Windows and later versions environments and Linux OS. This project also provides security with the use of Login-id and Password, so that any unauthorized users can not use your account. The only Authorized that will have proper access authority can access the software

# CHAPTER-2 FEASIBILITY REPORT

**2.1. Economic Feasibility:**

It refers to the benefits or outcomes we are deriving from the product as compared to the total cost we are spending for developing the benefits are more or less the same as the older system then it is not feasible to develop the product.

**2.2. Operational Feasibility:**

This product is operationally feasible as it is designed specifically for E-Governance. This provides consistent and integrated data management. It also provides information at all levels of people.

**2.3. Technical Feasibility:**

The system is self-explanting and does not need any entire sophisticated training. A system has been built by concentrating on the graphical uses interface concepts, the application can also be handled very easily with a novice uses. The overall time that a user needs to get trained is less than 15 minutes. The system has been added with features of menu device and button interaction methods, which makes him the master as he starts working through the environment. As the software that were used as developing this application are very economical and are readily available is the market the only time that is lost by the customer is just installation time.

# CHAPTER-3

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# SOFTWARE REQUIREMENT SPECIFICATION

**REQUIREMENT SPECIFICATION:**

A major element in building a system is the section of compatible software since the software in the market is experiencing in geometric progression. Selected software should be acceptable by the firm and one user as well as it should be feasible for the system. This document gives a detailed description of the software requirement specification.

The study of requirement specification is focused specially on the functioning of the system. It allows the developer or analyst to understand the system, function to be carried out the performance level to be obtained and corresponding interfaces to be established.

**Developers Responsibilities Overview:**

The developer is responsible for:

* Developing the system, which meets the SRS and solving all the requirements of the systems?
* Submitting the required user manual describing the system interfaces to work on it and also the documents of the system.
* Conducting any user training that might be needed for using the system.
* Maintain the system for a period of one year after installation.

**Functional Requirements:**

# OUTPUT DESIGN

Outputs from computer systems are required primarily to communicate the results of processing to users. They are also used to provide a permanent copy of the results for later consultation. The various types of outputs in general are:

* External Outputs, whose destination is outside the organization.
* Internal Outputs whose destination is within the organization and they are the user’s main interface with the computer.
* Operational outputs whose use is purely within the computer department.

# OUTPUT DEFINATION

The outputs should be defined in terms of the following points:

* Type of the output
* Content of the output
* Format of the output
* Location of the output
* Frequency of the output
* Volume of the output
* Sequence of the output

It is not always desirable to print or display data as it is held on a computer. It should be decided as which form of the output is the most suitable.

For Example

* The decimal points need to be inserted.
* It should lead zeros be suppressed.

**Outputs Media:**

In the next stage it is to be decided that which medium is the most appropriate for the output. The main considerations when deciding about the output media are:

* The suitability for the device to the particular application.
* The need for a hard copy.
* The response time required.
* The location of the users.
* The software and hardware available.

Keeping in view the above description the project is to have outputs mainly coming under the category of internal outputs. The main outputs desired according to the requirements specification are:

The outputs were needed to be generated as a hot copy and as well as quires to be viewed on the screen. Keeping in view these outputs, the format for the output is taken from the outputs, which are currently being obtained after manual processing. The standard printer is to be used as output media for hard copies.

# INPUT DESIGN

Input design is a part of overall system design. The main objective during the input design is as given below:

* To produce a cost-effective method of input.
* To archive the highest possible level of accuracy.
* To ensure that the input is acceptable and understood by the user.

# INPUT STAGES

The main input stages can be listed as below

* Data Recording
* Data transcription
* Data conversion
* Data verification
* Data control
* Data transmission
* Data validation
* Data correction

**PERFORMANCE REQUIREMENTS:**

Performance is measured in terms of the output provided by the application. Requirement specification plays an important part in the analysis of a system. Only when the requirement specifications are properly given, it is possible to design a system, which will fit into required environment. It rests largely in the part of the users of the existing system to give the requirement specifications because they are the people who finally use the system. This is because the requirements have to be known during the initial stages so that the system can be designed according to those requirements

The requirement specification for any system can be broadly stated as given below

* The system should be able to interface with the existing system
* The system should be accurate
* The system should be better than the existing system

The existing system is completely dependent on the user to perform all the duties.

**CHAPTER-4**

**SELECTED SOFTWARE:**

## 4.1. VISUAL STUDIO CODE

Visual Studio Code is a code editor in layman’s terms. Visual Studio Code is “a free-editor that helps the programmer write code, helps in debugging and corrects the code using the intelli-sense method”. In normal terms, it facilitates users to write the code in an easy manner. Many people say that it is half of an IDE and an editor, but the decision is up to the coders. Any program/software that we see or use works on the code that runs in the background. Traditionally coding was used to do in the traditional editors or even in the basic editors like notepad! These editors used to provide basic support to the coders.

With advancements in technology day-by-day, Visual Studio Code is going to play a pivotal role in the development of software. With its ever-evolving features and soon-to-beaded new settings, which will enable users to work with it from anywhere, it is certainly “THE THING” to keep one ahead of everyone in this ever-increasing IT market.

## 4.2 NODE JS

Node.js is a server-side platform built on Google Chrome's

JavaScript Engine (V8 Engine). Node.js was developed by Ryan Dahl in 2009 and its latest version is v0.16.36. The definition of Node.js as supplied by its official documentation is as follows –

Node.js is a platform built on Chrome's JavaScript runtime for easily building fast and scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

Node.js is an open source, cross-platform runtime environment for developing server-side and networking applications. Node.js applications are written in JavaScript, and can be run within the Node.js runtime on OS X, Microsoft Windows, and Linux.

Node.js also provides a rich library of various JavaScript modules which simplifies the development of web applications using Node.js to a great extent.

# 4.3 ANGULAR

Angular is a development platform, built on TypeScript. As a platform, Angular includes:

A component-based framework for building scalable web applications. A collection of well-integrated libraries that cover a wide variety of features, including routing, forms management, client-server communication, and more a suite of developer tools to help you develop, build, test, and update your code.

With Angular, you're taking advantage of a platform that can scale from single-developer projects to enterprise-level applications. Angular is designed to make updating as straightforward as possible, so take advantage of the latest developments with minimal effort. Best of all, the Angular ecosystem consists of a diverse group of over 1.7 million developers, library authors, and content creators.

**CHAPTER-5**  **PROJECT DESIGN**

# SOFTWARE ENGINEERING PARADIGM APPLIED

# Reliable System

There are two levels of reliability. The first is meeting the right requirement. A carefully and through systems study is needed to satisfy this aspect of reliability. The second level of systems reliability involves the actual working delivered to the user. At this level, the systems reliability is interwoven with software engineering and development. There are three approaches to reliability.

1. Error avoidance: Prevents errors from occurring in software.
2. Error detection and correction: In this approach errors are recognized whenever they are encountered and correcting the error by effect of error of the system does not fail.
3. Error tolerance: In this approach errors are recognized whenever they occur, but enables the system to keep running through degraded perform or Appling values that instruct the system to continue process.

**Maintenance:**

The key to reducing need for maintenance, while working, if possible, to do essential tasks.

1. More accurately defining user requirement during system development.
2. Assembling better systems documents.
3. Using some effective methods for designing, processing, login and communicating information with project team members.
4. Making better use of existing tools and techniques.
5. Managing system engineering process effectively.

# Types of output

Whether the output is formatted report or a simple listing of the contents of a file, a computer process will produce the output.

* A Document
* A Message
* Retrieval from a data store
* JSON file in mongo DB

**CHAPTER-6 STEPS TO START THE APPLICATION:**

create .env file in \*onlineshopping\* folder

NODE\_ENV = development

PORT = 4050

MONGODB\_URI = mongodb://localhost/hostel

MONGOOSE\_DEBUG = true

JWT\_SECRET = 29fe02c1-7de9-493a-b3c5-d33e56555a98

👉 Run this command

npm install

👉 Run this command for Start Project

npm run start

👉 Run this command for Start Server

npm run server

## Download Node JS :

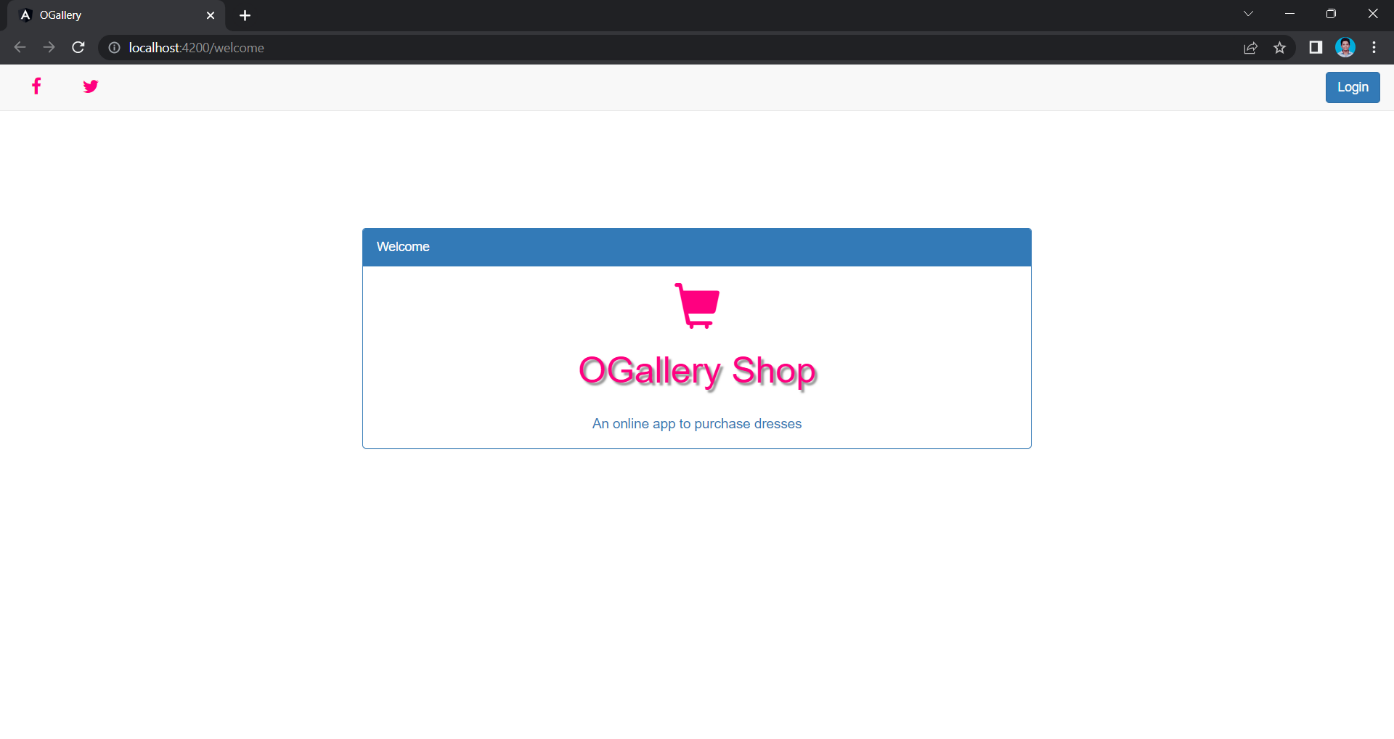
\*\*https://nodejs.org/en/download/\*\*

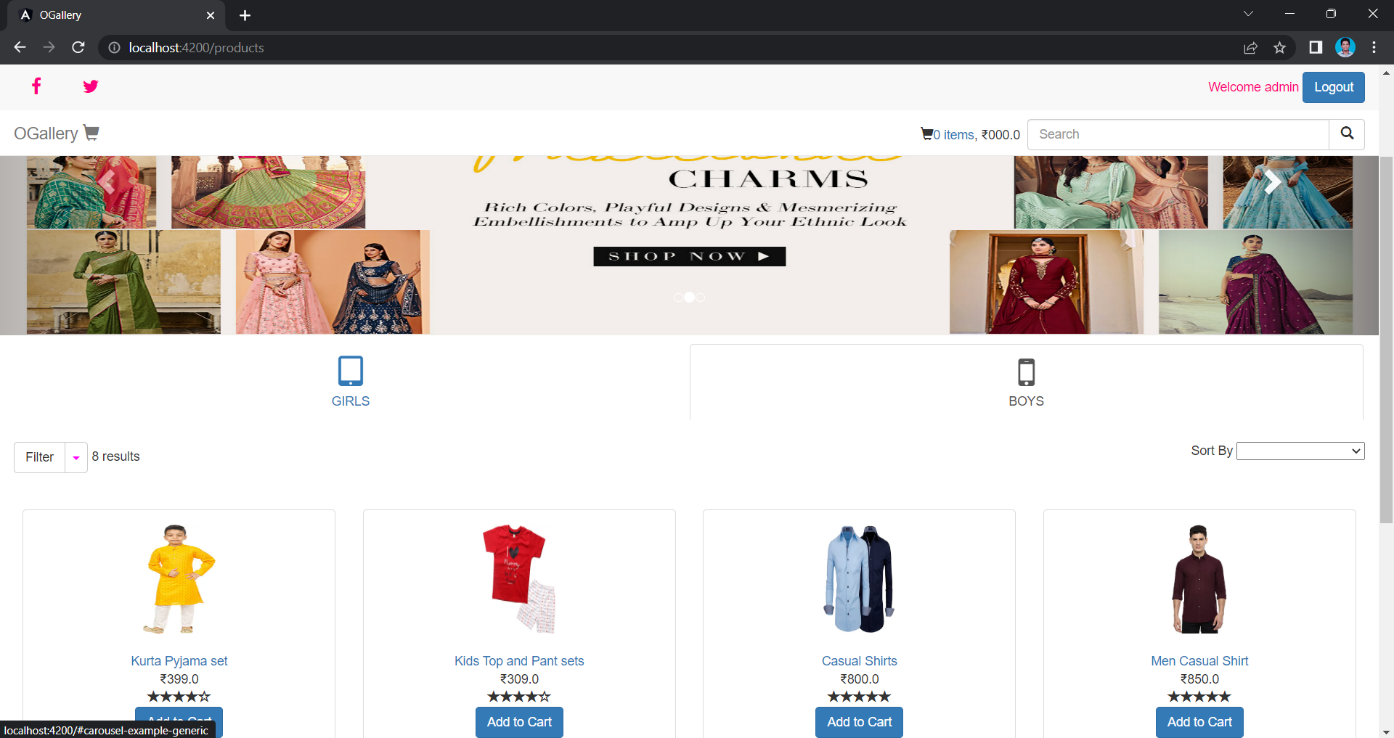
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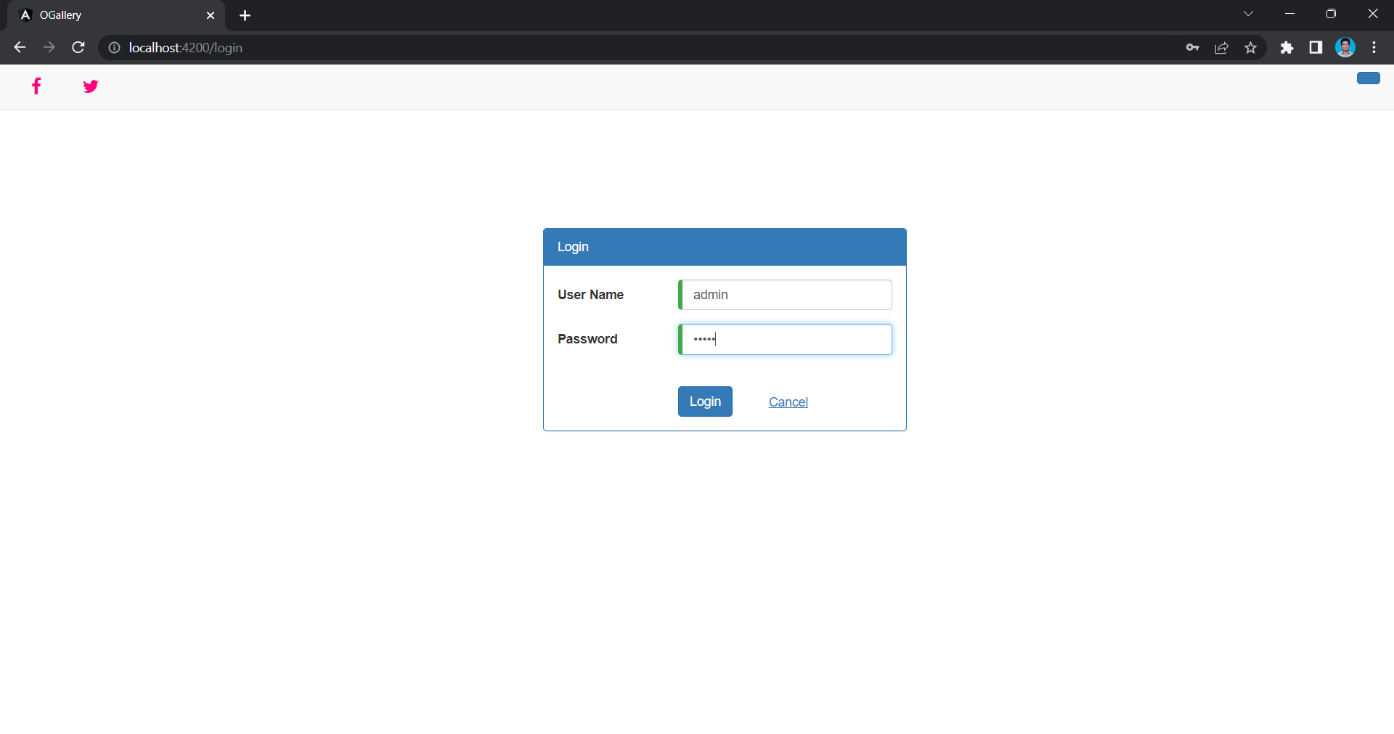
\*\*https://www.mongodb.com/try/download/compass\*\*

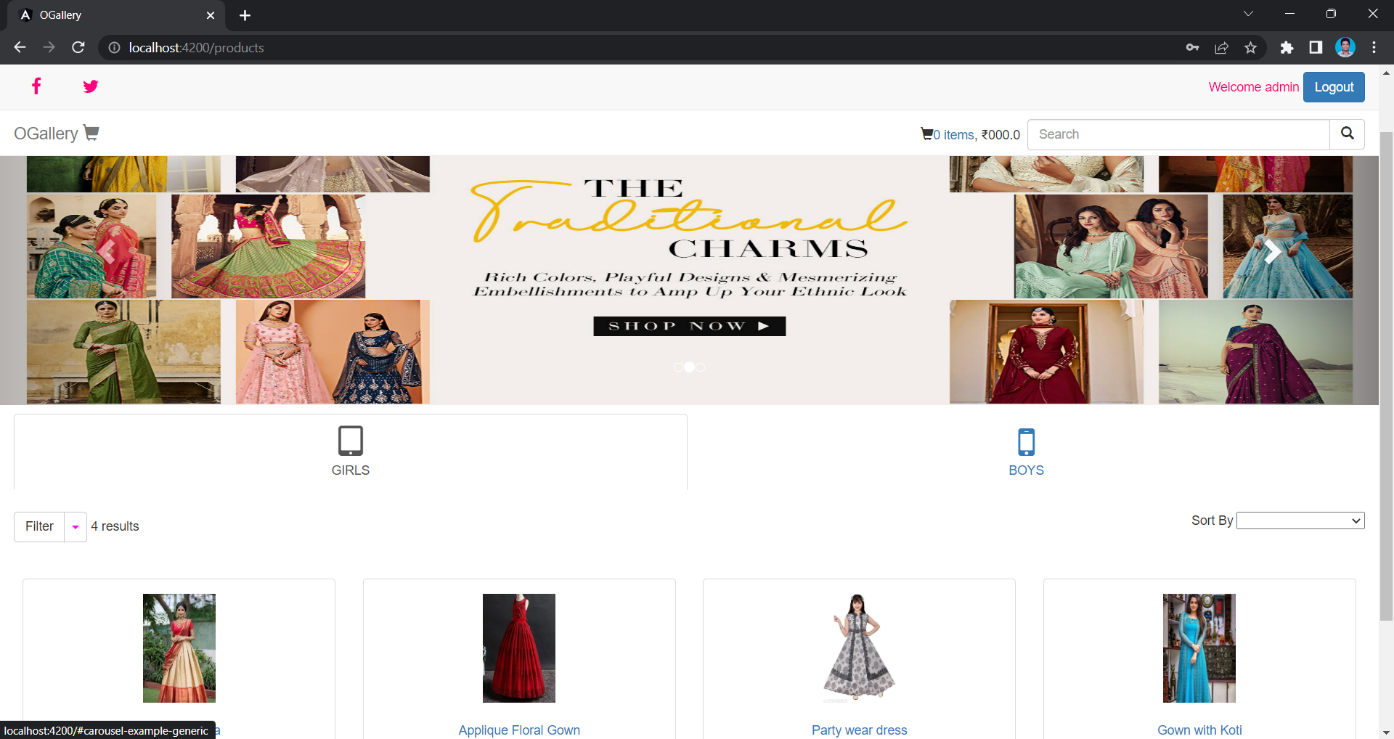
## CHAPTER-7

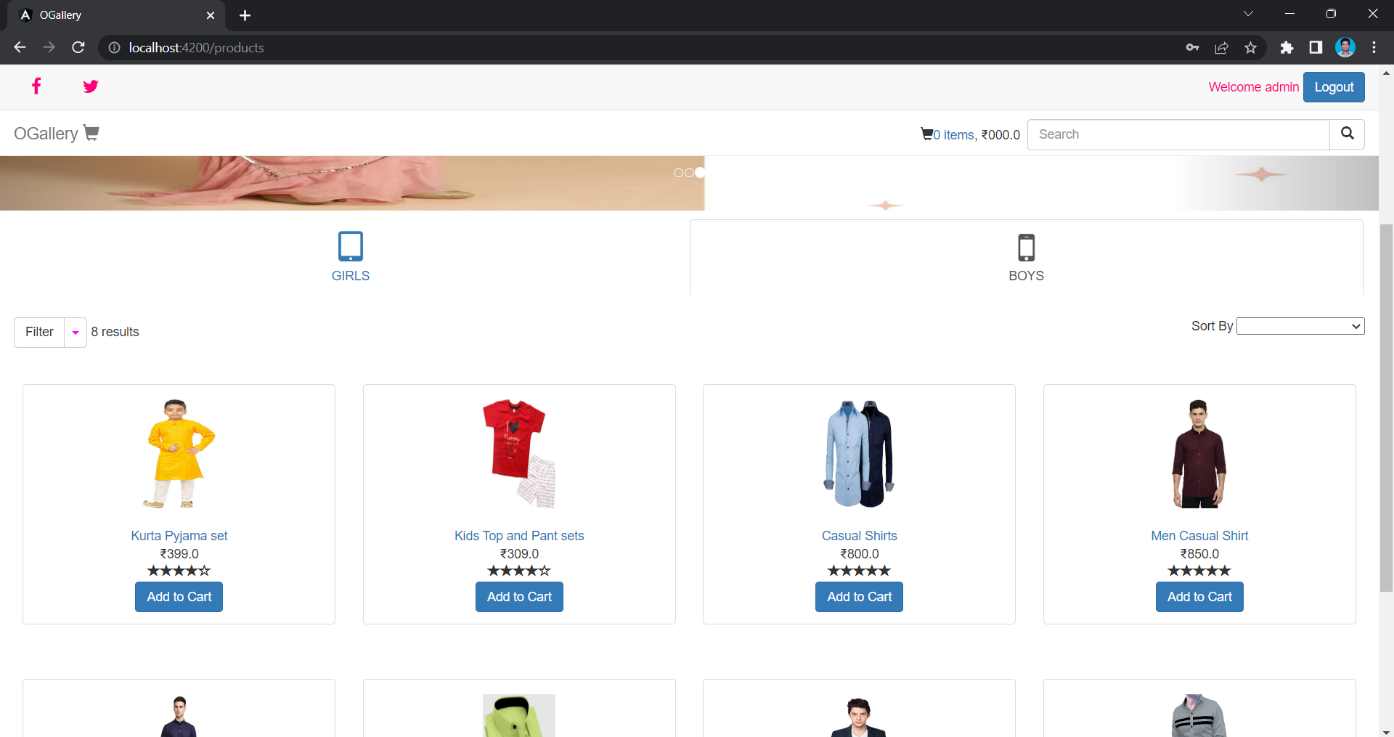
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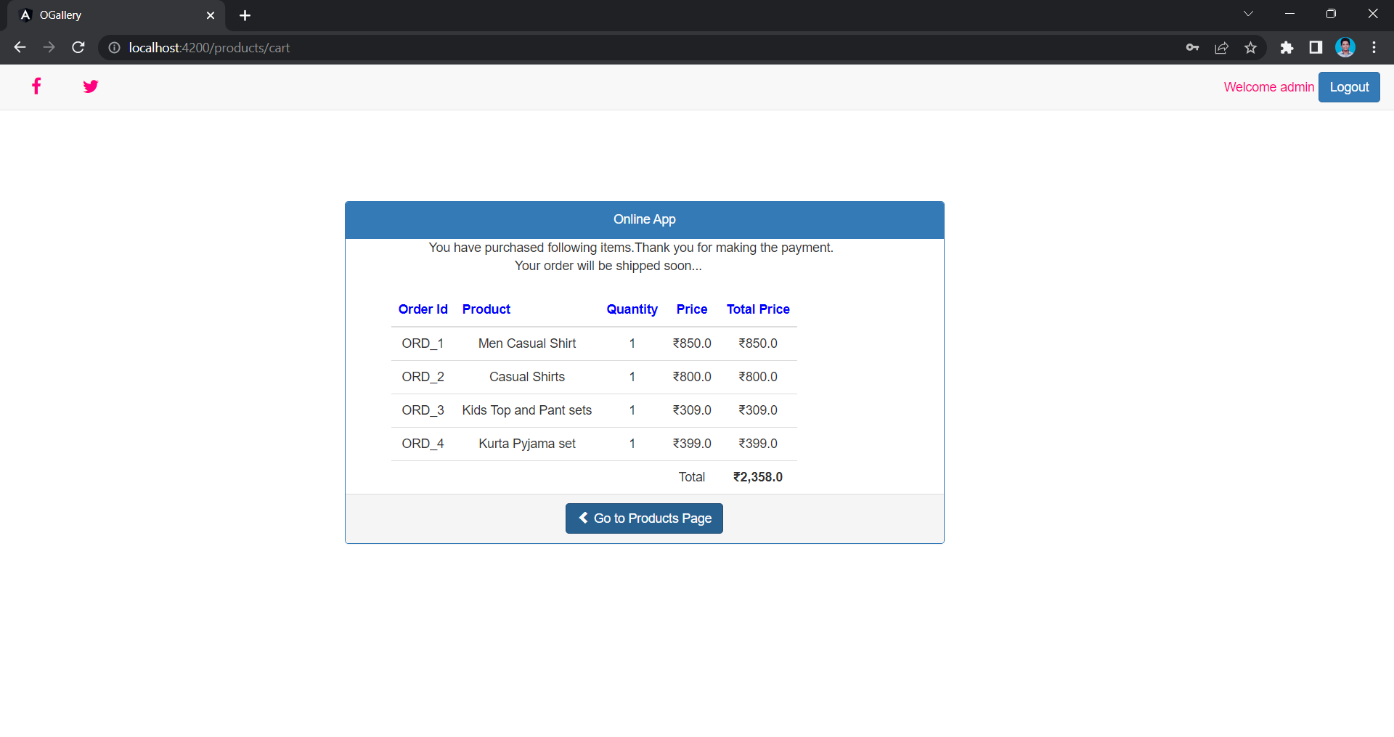


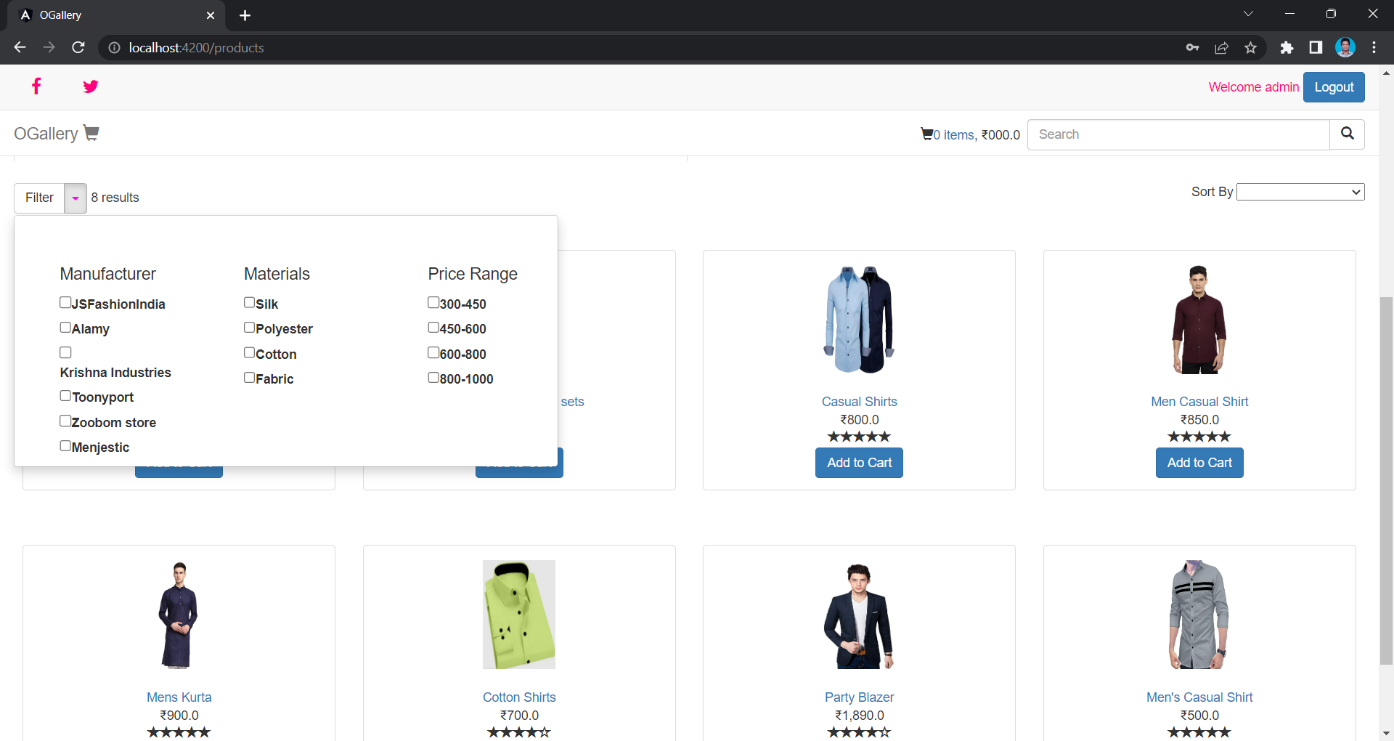


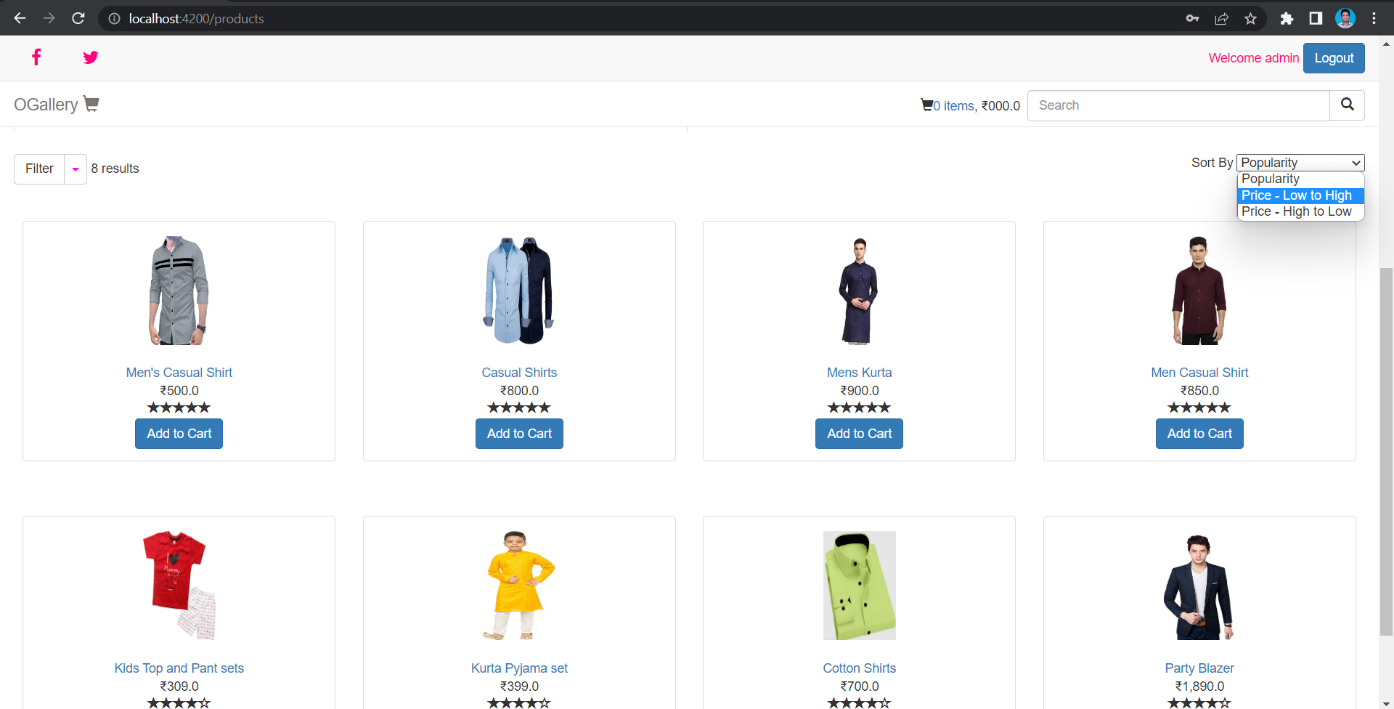


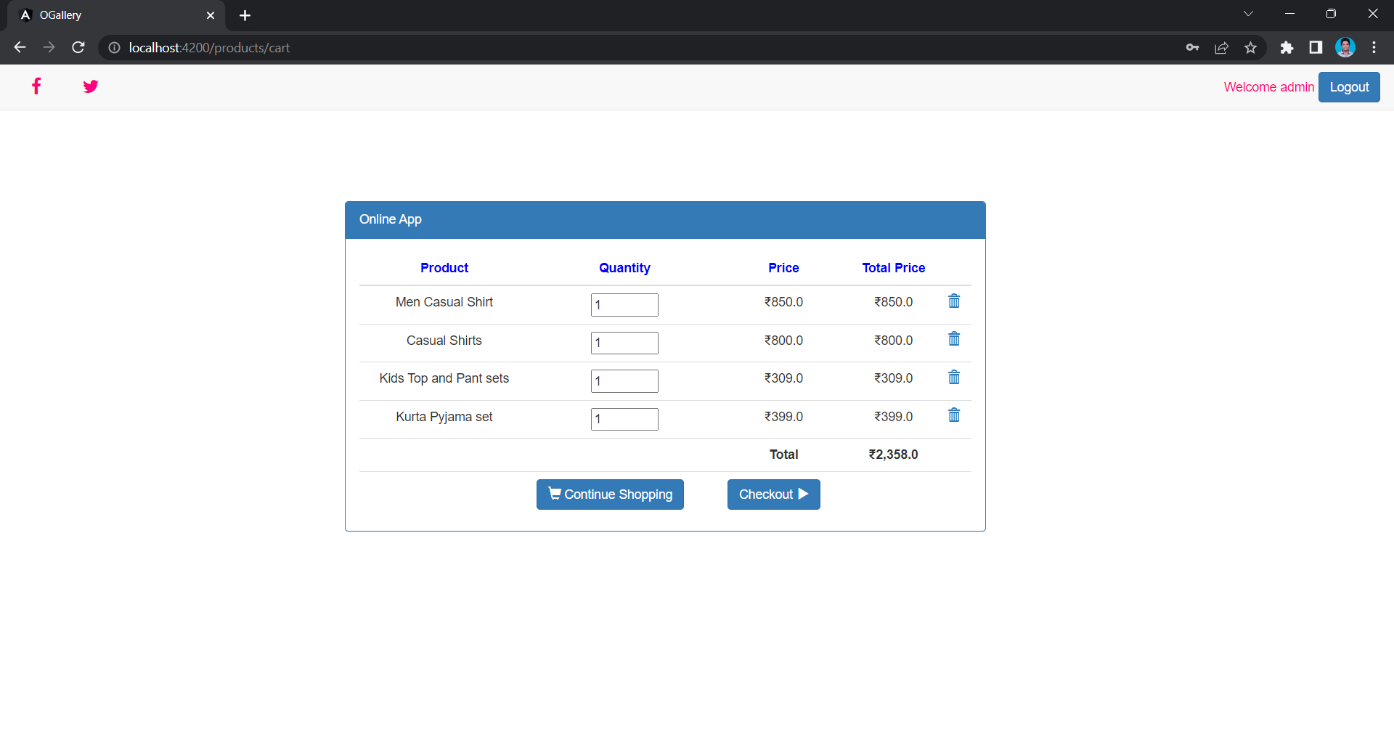












## CHAPTER-8

## CONCLUSION:

As technology advances, new platforms are being developed that enable greater flexibility and scalability. Angular process, on the other hand, is adding more capabilities that are beneficial to front-end website development. As a result, individuals choose AngularJS due to its simplicity. Furthermore, the aforementioned benefits highlight the value of Angular framework for front-end development. The appeal of AngularJS was that it allowed programmers to convert static HTML documents into dynamic content. It uses the TypeScript programming language, which is based on JavaScript, to reduce unnecessary code and make apps lighter and faster. Angular technology became a favorite choice for online projects, especially single-page applications, thanks to its comprehensive tools and MVC architecture. Also, it eliminates the requirement for third-party libraries when creating dynamic applications. Angular language and Angular web app development is also a front-end technology typically used to create single-page web application operations (SPAs).