Summer Internship Report (PC649)

A report submitted in fulfillment of the requirements for the Award of Degree of MASTER OF SCIENCE

IN

INFORMATION TECHNOLOGY

By

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Under the Subject of

E-Commerce Website

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Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, Gujarat, 382007.

Batch :- 2021-2023

Internship Completion Certificate

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Introduction

E-Commerce is one of the most common word that we listen everyday in today's life. It is one of the most buzzing word in today' era. From small kirana shop top big business house everyone wants to sell there products online . Everyone wants to be part of online selling of goods. E — commerce give business to grow next level that is not possible to grow at local market. E — commerce is the future of the business it decide the business leadership . The company who is not in online business will not be able to survive in the business. From small products to large lakh rupees car everything on sell in e — commerce platform. Every company want there presence online specially in India . In India e-commerce growth rate is around 10% increase every year .so it is opportunity to us to be part and get familiar with this new generation business in summer internship.

Scope

This Document Lays out a project plan for the development of the "E— Commerce Website". The aim of this project is to provide the complete platform to the user to able start their business online .It enables user to list particular their products for their individual business and start their journey as the individual seller.

Functional and Non-Functional Requirements

A Functional Requirements defines a system or its component. It describes the functions a software must perform. A function is nothing but inputs, its behaviour, and outputs. It can be a calculation, data manipulation, business process, user interaction, or any other specific functionality which defines what function a system is likely to perform.

Functional Requirements of E-Commerce Website

Customer:-

- **Register new user:** Customer should be able to register as new Customer so that Customer can be able to purchase product.
- **Login as existing user:** Customer should be able to login as existing user if Customer registered in past so that Customer can resume and continue shopping.
- Add Products to cart:- Customer should able to add products on the cart.
- **Remove Products from cart:-** Customer should able to remove products form the cart.
- Admin:-
- Add Product Category:- Admin can be able to Add new products category to the website.

- Manage Product Category:- Admin can be able to update and delete Product Category from the website.
- Add Products:- Admin can be able to add products to the website.
- Manage Products:- Admin can be able to update and delete products from the website.

Non-Functional Requirements

A non-Functional Requirements defines the quality attribute of a software system. They represent a set of standards used to judge the specific operation of a system. Example, how fast does the website load?

A non-functional requirement is essential to ensure the usability and effectiveness of the entire software system. Failing to meet nonfunctional requirements can result in systems that fail to satisfy user needs. Non-Functional requirements ensure the reliability, availability, and performance of the software system.

Non- Functional Requirements of E-Commerce Website

• Availability:- Our Website support for 24/7 time so that customer able access the website whenever customer want and complete the shopping without any issue.

- Reliability: Technology that is highly reliable functions with the same or similar efficiency after extensive use. This quality attribute specifies how likely the system or its element would run without a failure for a given period of time under predefined conditions.
- Percentage of the probability of failure: -You can check the
 percentage of the probability of failure, or failure rate, to determine the
 reliability of a system. If the percentage is higher, the system is likely to
 function normally after substantial use.
- Number of critical features:- Consider recording the amount of critical failures a system experiences during testing to check its reliability. If the number of failures is low, it means that the system operates properly.
- Time between critical features:- Tracking the time between critical failures can help you understand the reliability of a system. When critical failures occur rarely, it means that a system functions normally most of the time.

• Maintainability:-

Maintainability defines the time required for a solution or its component to be fixed, changed to increase performance or other qualities, or adapted to a changing environment. Like reliability, it can be expressed as a probability of repair during some time.

We are able to solve 75% maintainability in 48 hours, this means that there's a 75 percent chance the component can be fixed in 48 hours.

• Security:-

To protect sensitive data, consider to develop Nonfunctional security features is very important. For example, professionals at healthcare facilities use secure databases to store patients' medical records. The security on their databases may include firewalls to prevent unauthorized access. Here are examples of typical security measures on E-Commerce :

- Account creation:- Systems may require users to create accounts to access applications first time that store information and display profiles.
 A security system typically grants access to accounts when users enter the correct username and password whenever user write to login again.
- **Password generation :-** An application may not grant access until the user creates a strong password. For example, a strong password might contain a certain number of characters and a capital letter.

• Data Integrity:-

Integrity Constraints are the protocols that a table's data columns must follow. These are used to restrict the types of information that can be entered into a table. This means that the data in the Database is accurate and reliable. Data integrity Constraints apply at the column or table level.

The following are some types of constraints that we are applied in our database of online eBook Maker project:

- When no value is defined for a column, the DEFAULT Constraint provides a default value.
- A UNIQUE Constraint ensures that any value in a column is unique.
- Each row/record in a database table is uniquely identified by the PRIMARY Key.

• A FOREIGN KEY recognizes a row/record in any database table uniquely.

• Usability:-

Usability refers to the ability to use a particular product, including elements such as:

- Purpose of Features:- With high usability, Customer can easily determine what a feature is and what it can do.
- Navigation:- Customer can easily navigate for one feature to the other feature.

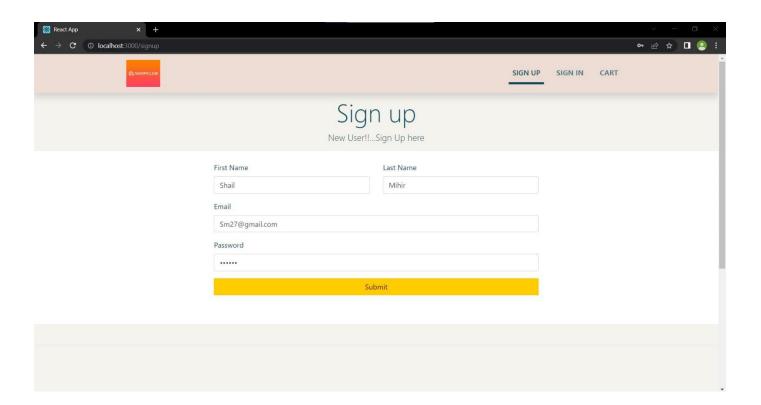
Technology/Coding

Frontend /Backend Technology Stack: HTML, CSS, JavaScript, MongoDB, Nodejs, ReactJs.

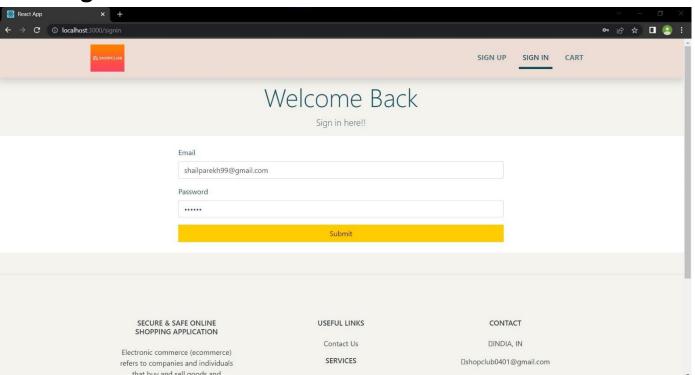
- In Frontend we have separated both admin and customer profile individual. In admin we have give functionality like add category, add product, manage product, update category, manage category, update product. we have also used API call like get, post, update, put and delete to do different operations.
- We have also used authentication of admin if it role is 1 than it is admin other than that is customer to separate admin and customer profile.
- We have also used react hook like use state and use effect functionality .
- We have also used catch to handle error . we have also used fetch, set values , div , class , onclick event handler, match , Preload .

ScreenShots of Important Functionality

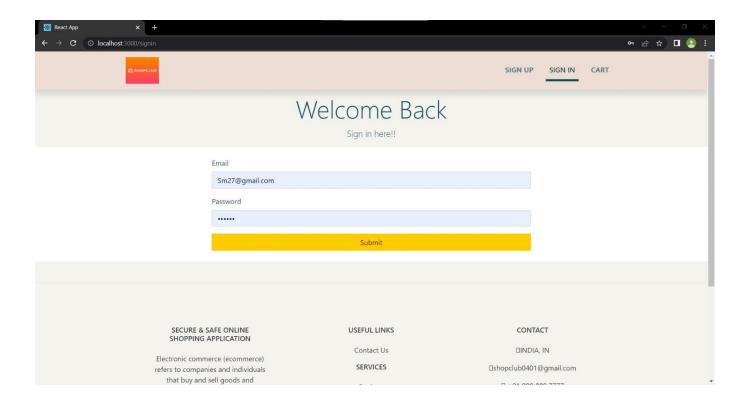
User Registration Form:-



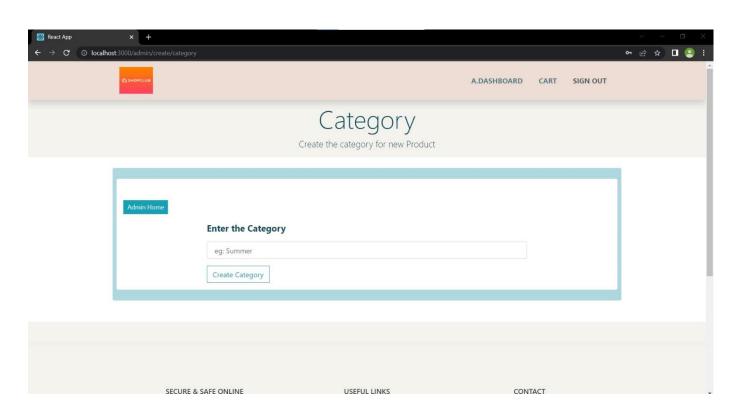
User Login Form:-



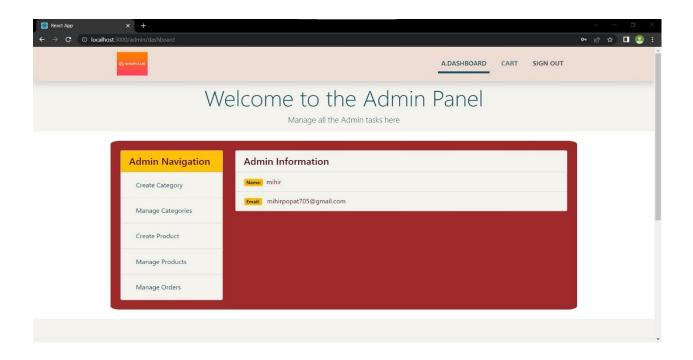
User Login Form:



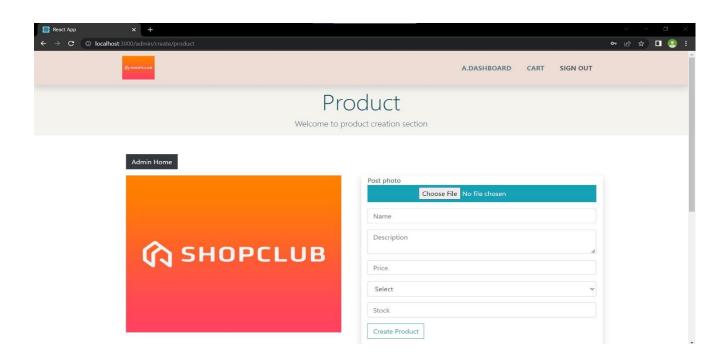
Admin Create Category:-



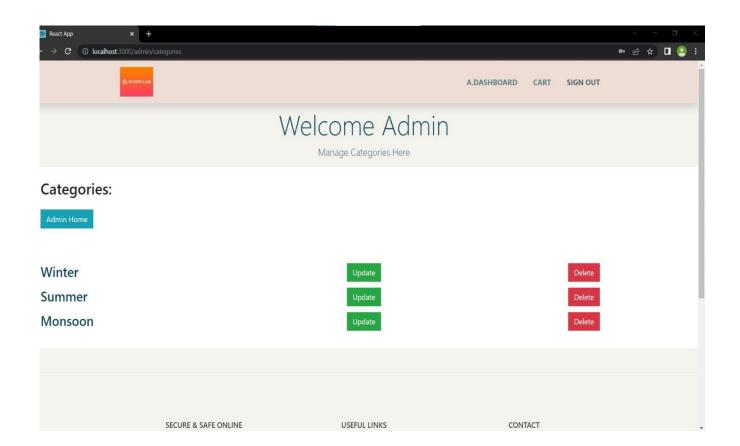
Admin Panel Home:-



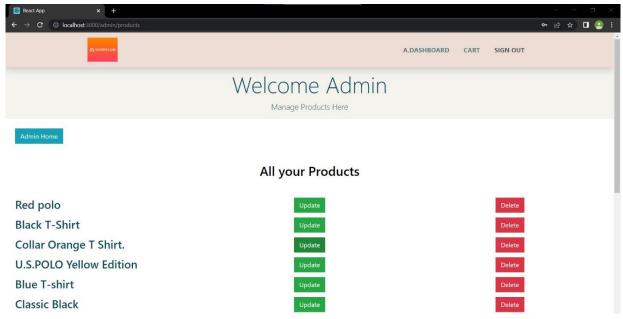
Admin Create Product:-



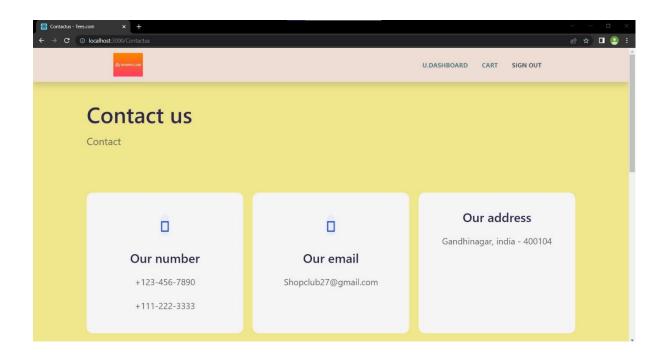
Admin Manage Category:-



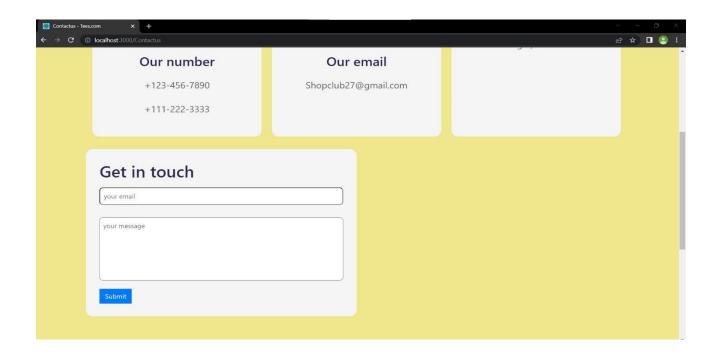
Admin Manage Product:-



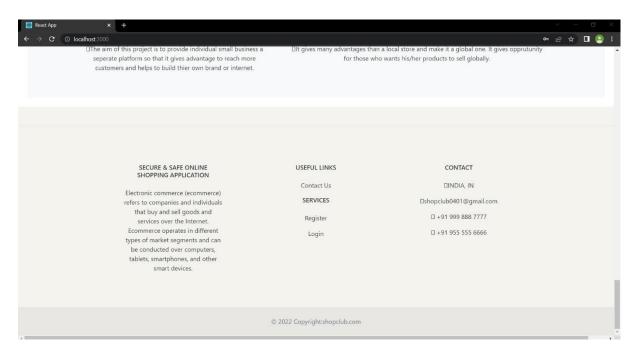
Contact us page



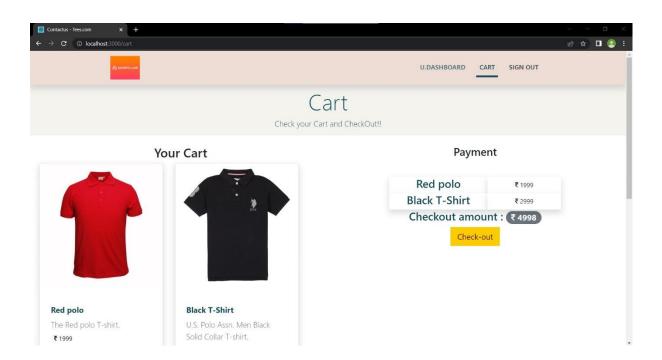
Contact us page 2



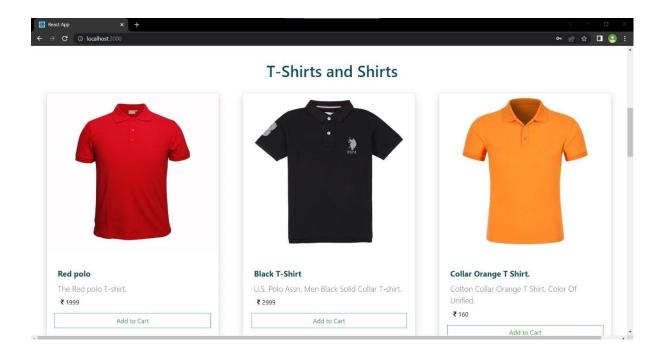
Footer:-



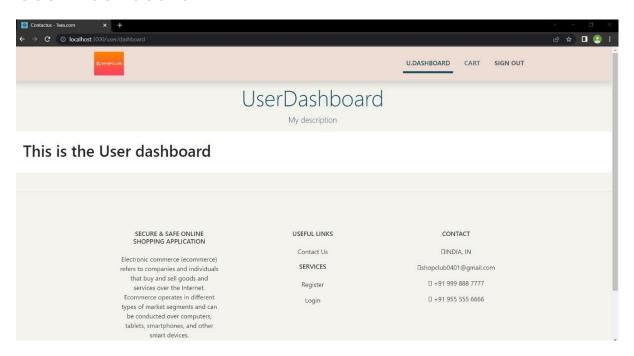
Product cart:-



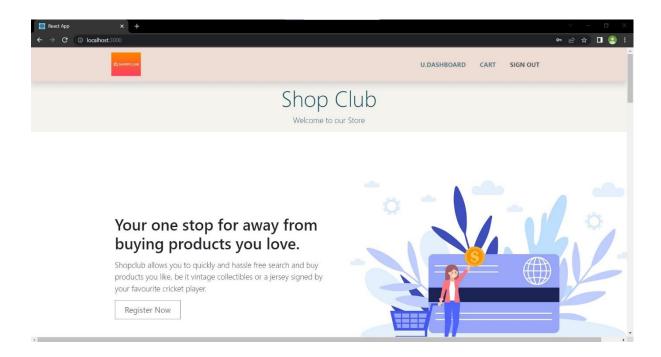
Product Page:-



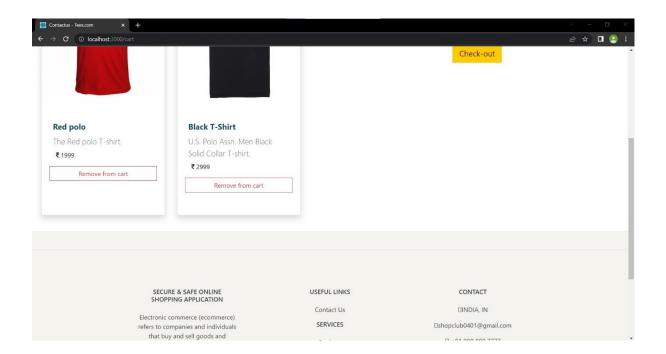
User Dashboard:-



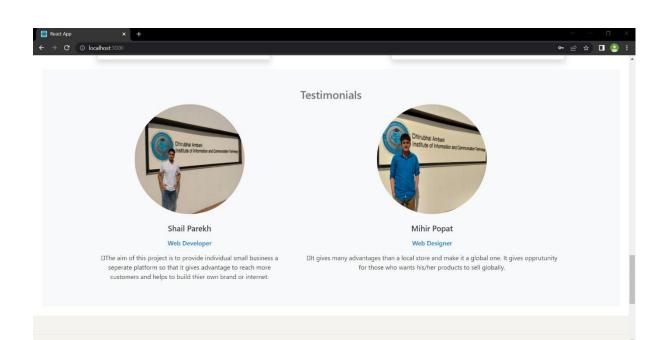
User Home page:-



Remove items from cart



Testimonials:-



Conclusion

The final goal of our overall work is to provide an end-to-end platform for individual small business so that it gives their business presence on the internet and gives advantages to reach more customers and helps to build their own brand on the internet.

Google Drive Link

 https://drive.google.com/drive/folders/1noiSr4KzoKD_VdweekOkkJPa7ITI6MAb? usp=sharing