

Metalholic E-commerce Store

A PROJECT REPORT

Submitted to



ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY

by

Dhritiman Nath(Roll No. 203110014004)

In partial fulfilment for the award of the degree

of

Bachelors's in Computer Application(BCA)

Under the supervision of

YUMNAM MOMOJIT SINGH, Technical Assistant

NIELIT, Guwahati



**NATIONAL INSTITUTE OF ELECTRONICS AND
INFORMATION TECHNOLOGY, GUWAHATI**

PALTANBAZAR, GUWAHATI 781 008,

ASSAM , INDIA.

BATCH (2020- 2023)



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(An Autonomous Scientific Society of Ministry of Electronics and Information Technology (MeitY), Govt. of India)

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CERTIFICATE

This is to certify that the project report entitled “**MetalHolic E-commerce Store**” has been submitted by **Dhritiman Nath** bearing Roll Number: **203110014004** of Assam Science And Technology University. This bonafide project work is completed under my supervision and guidance in partial fulfilment for the award of the degree of **Bachelors's in Computer Application(BCA)** of National Institute of Electronics and Information Technology, Guwahati as his 5th semester project work for the academic year 2020-23.

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राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी संस्था (रा.इ.सू.प्रौ.सं)
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Dr.Yumnam Jayanta Singh
Head of the Department,
Executive Director NIELIT,
Guwahati Assam

DECLARATION

I declare that this project report entitled “MetalHolic E-commerce Store” submitted to Assam Science And Technology University in partial fulfilment of the degree of **Bachelors's in Computer Application(BCA)** of National Institute of Electronics and Information Technology, Guwahati is a record of original work carried out by me in Fifth semester in the academic year 2022-23 under the supervision of **YUMNAM MOMOJIT SINGH** , and has not formed the basis for the award of any other degree or diploma, in this university or any other Institution or University. In keeping with the ethical practice in reporting scientific information, due acknowledgements have been made wherever the findings of others have been cited.

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राष्ट्रीय इलेक्ट्रॉनिकी एवं सूचना प्रौद्योगिकी संस्थान (रा.इ.सू.प्रौ.सं)
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CERTIFICATE

This is to certify that the project report entitled “**MetalHolic E-commerce Store**” submitted by **Dhritiman Nath** bearing Roll Number: **20311014004** of fifth semester in the academic year 2021-22 is examined and has been found satisfactory, and is hereby approved as a project work carried out and presented in a manner required for its acceptance in partial fulfilment for the award of the degree of **Bachelors's in Computer Application(BCA)** of National Institute of Electronics and Information Technology

Examiners:

01. External Examiner:

02. Internal Examiner:

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Finally, I would like to express my sincere gratitude and love to my parents and my friends. Their support and confidence during all my life have made me as I am, and their effort has allowed me to be here completing my degree with the execution of this project work.

ABSTRACT

E-commerce or Electronic Commerce is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products. Unlike traditional commerce that is carried out physically with effort of a person to go & get products, ecommerce has made it easier for human to reduce physical work and to save time. E-Commerce which was started in early 1990's has taken a great leap in the world of computers, but the fact that has hindered the growth of e-commerce is security. Security is the challenge facing e-commerce today & there is still a lot of advancement made in the field of security. The main advantage of e-commerce over traditional commerce is the user can browse online shops, compare prices and order merchandise sitting at home on their PC. For increasing the use of e-commerce in developing countries the B2B e-commerce is implemented for improving access to global markets for firms in developing countries. For a developing country advancement in the field of e-commerce is essential. The research strategy shows the importance of the e-commerce in developing countries for business applications.

Defination of E-commerce

Electronic commerce or E-commerce is a term for any type of business, or commercial transaction, that involves the transfer of information across the Internet. It covers a range of different types of businesses, from consumer based retail sites, through auction or music sites, to business exchanges trading goods and services between corporations. It is currently one of the most important aspects of the Internet to emerge.

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Chapter I: Introduction

1.1 Introduction

Computer plays an important role in our daily life. Anything we want we can get only in one mouse click. Speed, reliability and accuracy of the computer make it a powerful tool for different purposes. A very important and basic need of today's modern business world is the quick availability and processing of information using computer. One can easily get the type of required information within a fraction of a second. The project that I have taken is also in this category which is used in our daily life whenever we want to purchase some items we can easily get them at our home.

MetalHolic E-commerce Store is a website of buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur business-to-consumer (B2C) and consumer-to-business. The terms e-commerce and e-business are often used interchangeably. The term e-tail is also sometimes used in reference to the transactional processes for online shopping.

1.2 Objective

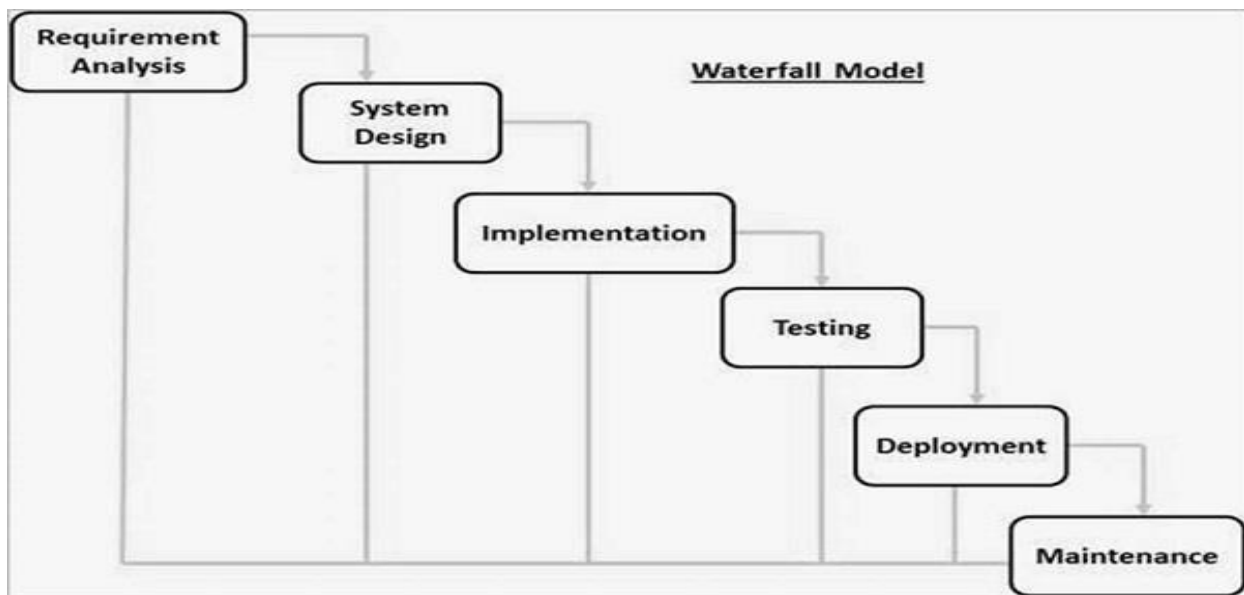
Developing a GUI based automated system, which will cover all the information Related to the all products which is used in our daily life. For example – Mobiles Phones, Laptops, Clothes, Books, Electronic Items and many more. So by this GUI based automated system a user want to purchase something then it only a mouse click away to purchase these products.

The e-commerce is mainly useful for ho haven't time to go shopping or for comfortably to the customers. Those are just entered into this website and bought they want at any time they can visit the web-site. Customer will choose different items like mobile, laptops, etc. This website is based on this formal. After chosen items they pay bill thorough pay pal process. Customer will get their items just sitting at home.

1.3 Needs of the Project

The “MetalHolic E-commerce Store” is developed according to the current need in different fields. This is an E-commerce Website which provides a facility for purchasing sports products and lifestyle products. So by using this system, users who want to purchase some products will first register an account on this portal, then login through their Username and Password, and then select items which they want to purchase and add them to cart and finally checkout by giving payment details. So by using this portal, users can easily purchase products from their home.

1.4 Methodology Development Model



The sequential phases in Waterfall model are –

- **Requirement Gathering and analysis** – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
- **System Design** – The requirement specifications from the first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.

- **Implementation** – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- **Integration and Testing** – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment of system** – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- **Maintenance** – There are some issues which come up in the client environment. To fix those issues, patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

1.5 Hardware and Software Requirement

1.5.1 Hardware Required

- ☛ Processor : Pentium IV or Above
- ☛ RAM : 2GB or above
- ☛ Hard Disk : 50GB or above
- ☛ Input Devices : Keyboard, Mouse
- ☛ Output Devices : Monitor

1.5.2 Software Required

- 🌐 Operating System : Linux, Ubuntu, Mac, Windows XP, 7, 8, 8.1, 10
- 🌐 Frontend: HTML,CSS, JavaScript
- 🌐 Local host : Github

a. **HTML :**

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With Cascading Style Sheets (CSS) and JavaScript, it forms a triad of cornerstone technologies for the World Wide Web.[4]

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.

b. CSS :

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. 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, and reduce complexity and repetition in the structural content.

c. JavaScript :

JavaScript often abbreviated as JS, is a high-level, interpreted programming language. It is a language which is also characterized as dynamic, weakly typed, prototype-based and multi-paradigm.

Alongside HTML and CSS, JavaScript is one of the three core technologies of the World Wide Web. JavaScript enables interactive web pages and thus is an essential part of web applications. The vast majority of websites use it, and all major web browsers have a dedicated JavaScript engine to execute it.

d. Github :

GitHub is a web-based hosting service for version control using Git. It is mostly used for computer code. It offers all of the distributed version control and source code management (SCM) functionality of Git as well as adding its own features. It provides access control and several collaboration features such as bug tracking, feature requests, task management, and wikis for every project.

GitHub offers plans for both private repositories and free accounts which are commonly used to host open- source software projects.

1.6 Specification Requirement

1.6.1 External Interfaces

This interface will be actual interface through which the user will communication with the application and perform the desired tasks.

Admin login

I.D:

Role: Admin wishes to login to the system

Precondition: Username and Password

Success end Condition: Main option of screen display

Failed end Condition: User has entered incorrect Username and password or both.

The image displays two wireframe diagrams of a user interface for login and registration. The left diagram shows the 'Register' tab selected, with input fields for Username, Email, and Password, and a 'Register' button. The right diagram shows the 'Login' tab selected, with input fields for Username and password, a 'Login' button, and a 'Forgot Password' link. An arrow points to the left diagram.

Edit

ID:

Precondition: User has successfully navigated to the search result.

Success end Condition: User has successfully made the changes

Diagrams :

Level 0

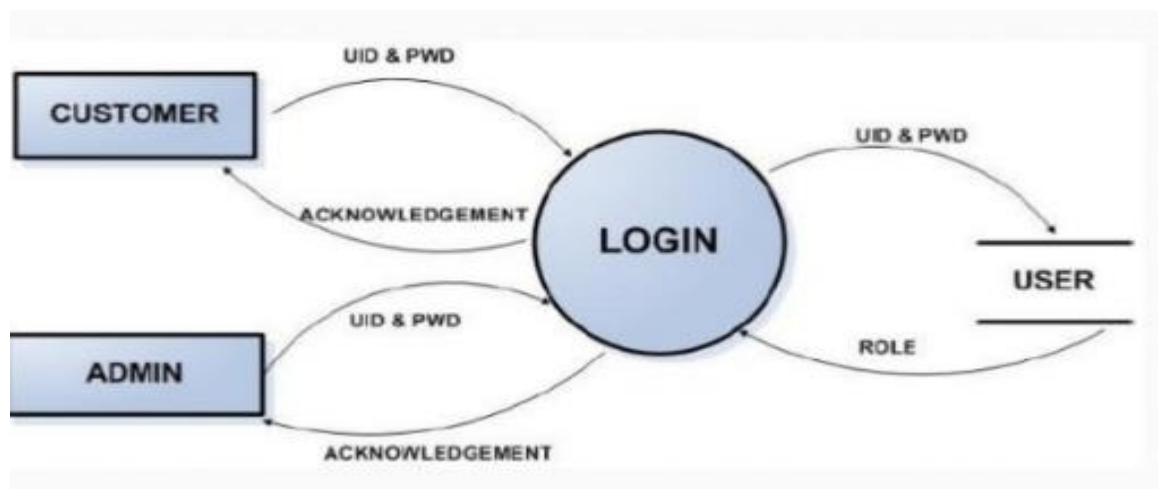


Figure: Data flow

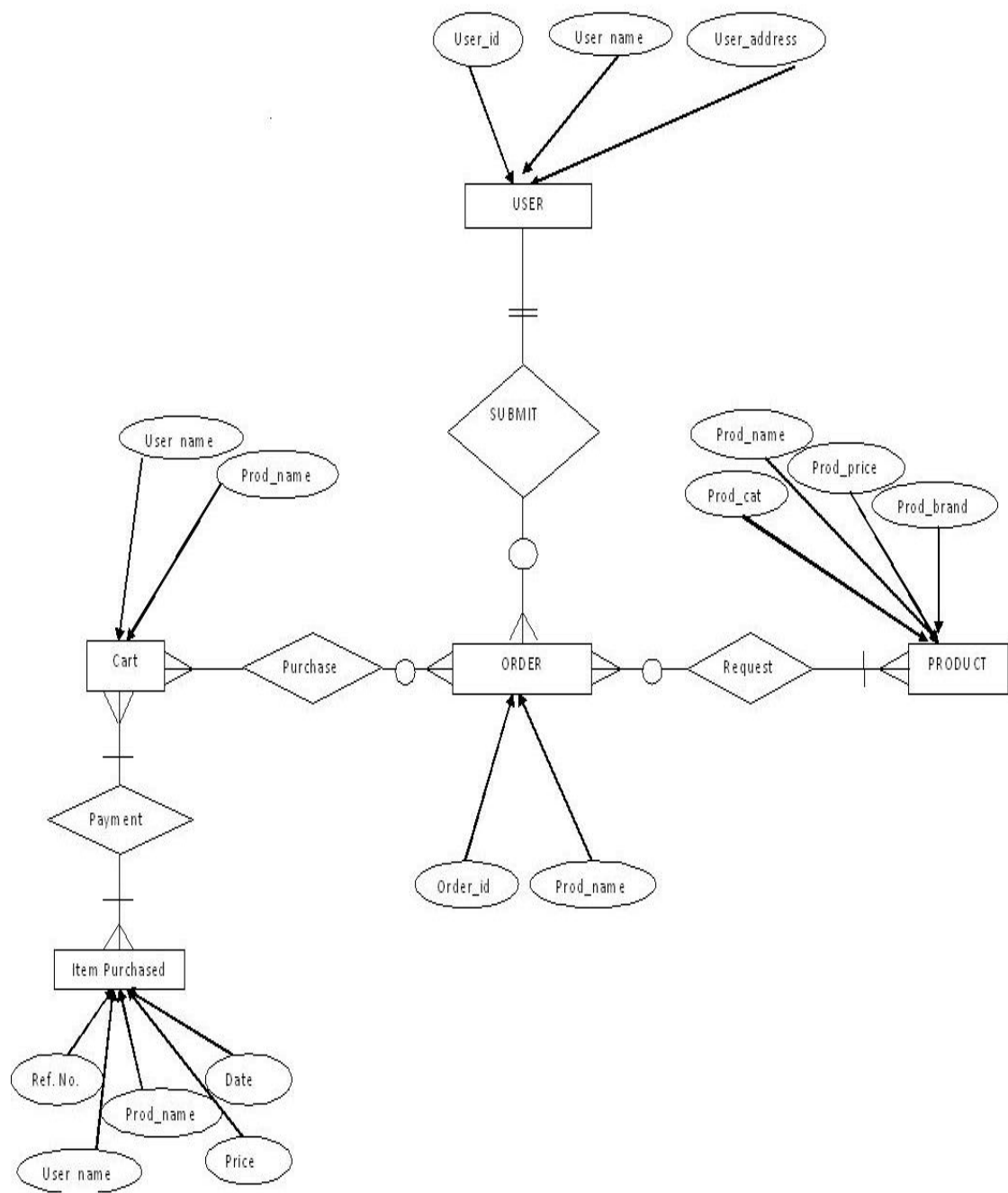


Figure:ER diagram

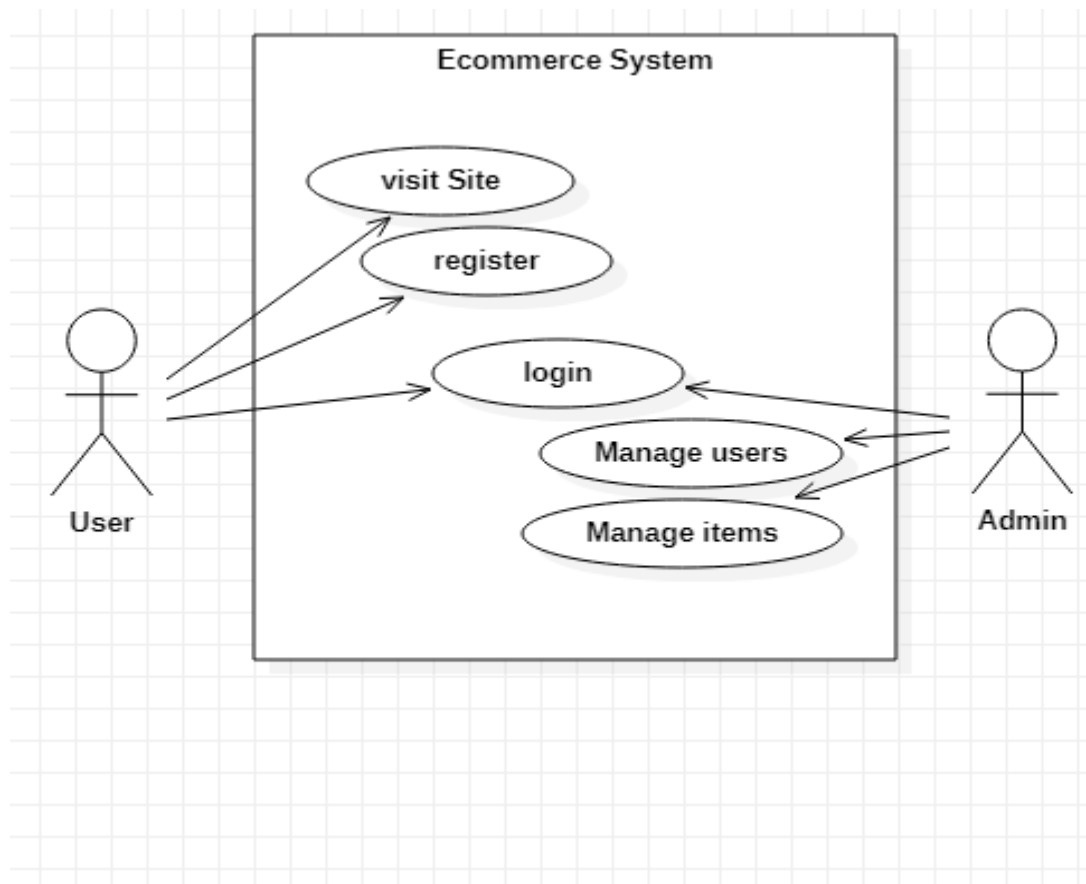


Figure: Use case Diagram of Ecommerce

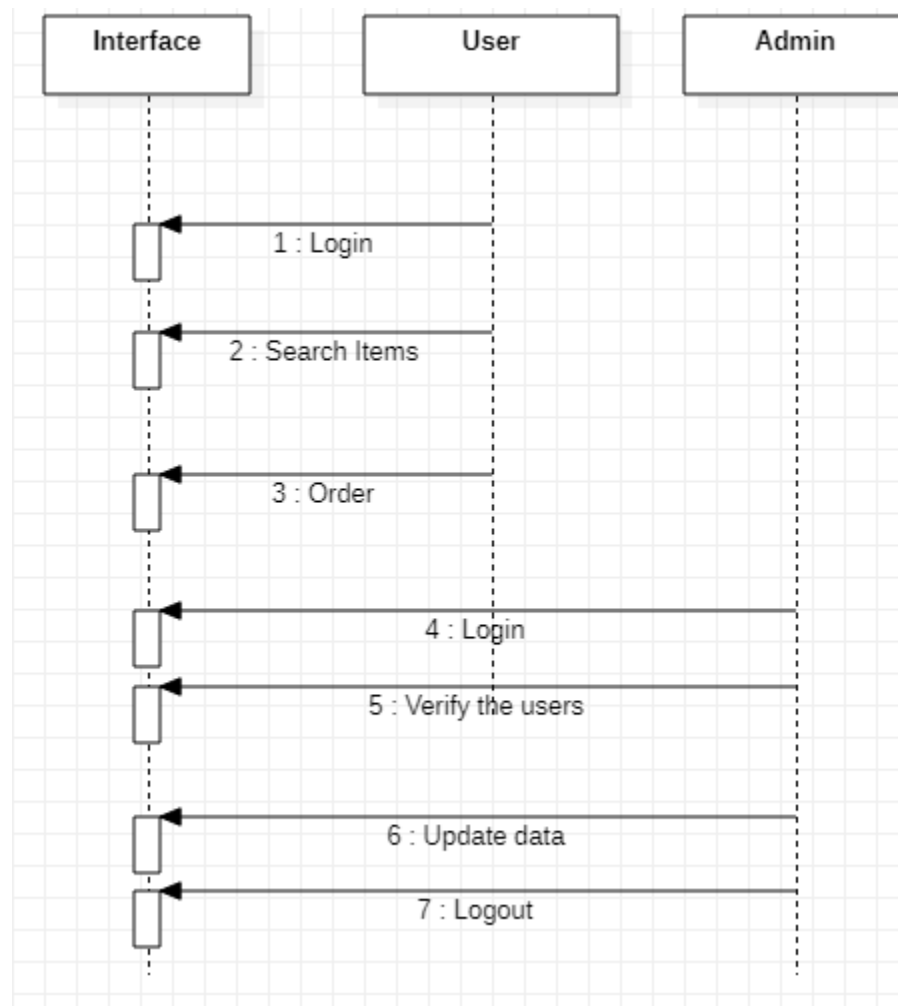


Figure: Sequence Diagram

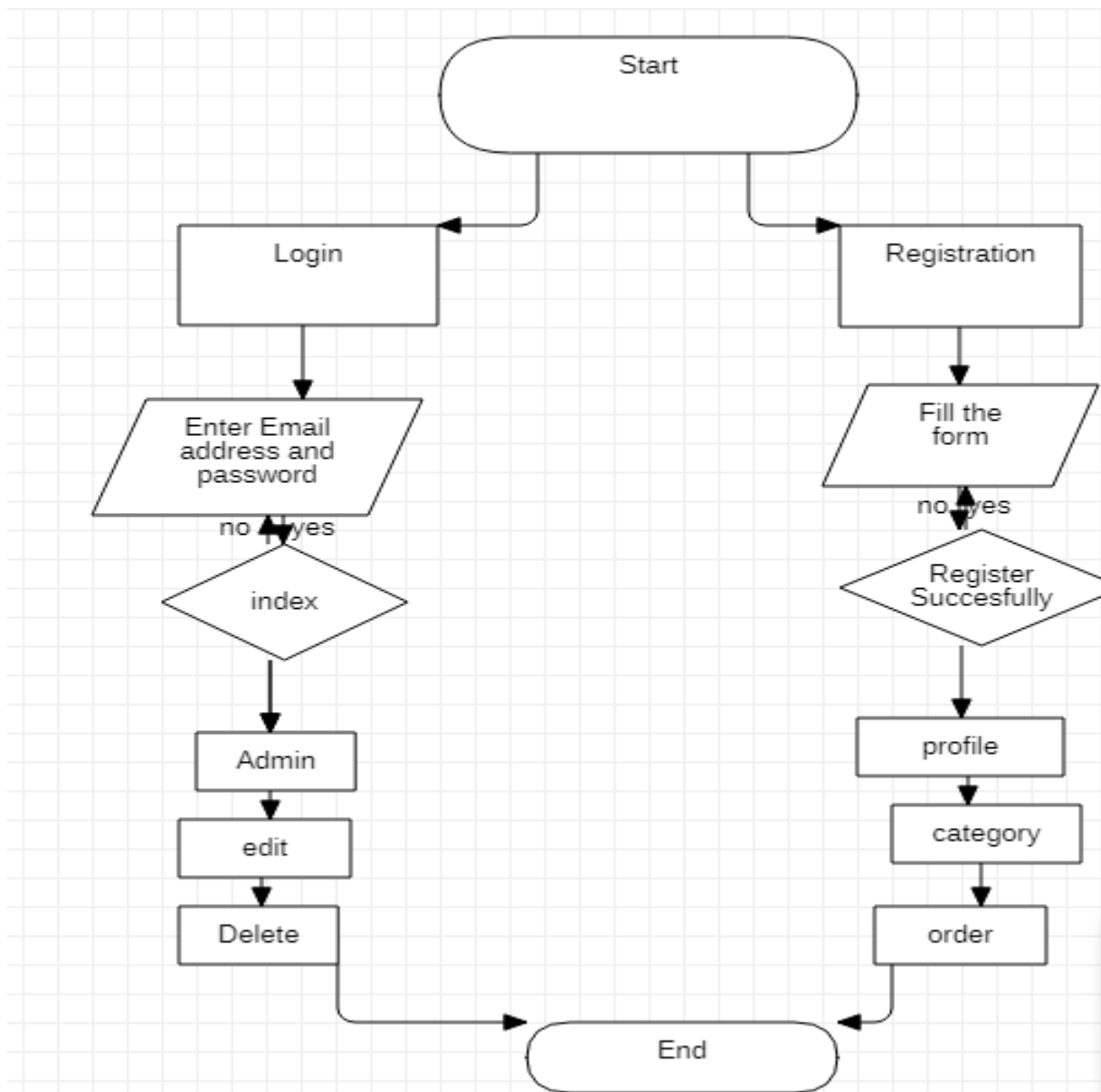


Figure: Flowchart of Ecommerce

Chapter II: Task and Activities Performed

2.1 Profile of Problems

One must know what the problem is before it can be solved. The basis for ecommerce is to buy products online and save the timing.

A Ecommerce, who want to buy any product of their need, has to contact different Shoppers, before deciding upon a particular Product that best suit his needs, requirements and satisfaction. Moreover, most of the work involved in this development process has to be done manually which is very time consuming and cumbersome and also, it reduces the efficiency, accuracy.

To know the facts and understanding of the problem in detail, System Analysis is carried out. It is the process of studying the business processes and procedures, generally referred to as business systems, to see how they can operate and whether improvement is needed.

2.2 Scope and Feasibility

This activity is also known as the feasibility study. It begins with a request from the user for a new system.

It involves the following:

- Identify the responsible user for a new system
- Clarify the user request
- Identify deficiencies in the current system
- Establish goals and objectives for the new system
- Determine the feasibility for the new system
- Prepare a project charter that will be used to guide the remainder of the Project

2.3 System Analysis

The objective of the system analysis activity is to develop structured system specification for the proposed system. The structured system specification should describe what the proposed system would do; independent of the technology, which will be used to implement these requirements. The structured system specification will be used to implement these requirements. The structured system specification will be called the essential model (also known as logical model). The essential model may itself consist of multiple models, modeling different aspects of the system. The data flow diagrams may model the data and their relationships and the state transition diagram may model time dependent behavior of the system.

The essential model thus consists of the following.

- Context diagram
- Leveled data flow diagrams
- Process specification for elementary bubbles
- Data dictionary for the flow and stores on the DFDs.

2.4 System Design

System design involves transformation of the user implementation model into software design.

The design specification of the proposed system consists of the following:

- Structure charts
- Pseudo codes for the modules in structure charts

2.5 Implementation

This activity includes programming, testing and integration of modules into a progressively more complete system. Implementation is the process of collect all the required parts and assembles them into a major product

2.6 Test Generation

This activity generates a set of test data, which can be used to test the new system before accepting it. In the test generation phase all the parts are come which are to be tested to ensure that system does not produce any error. If there are some errors then we remove them and further it goes for accepting.

2.7 Problem Analysis

MetalHolic E-commerce Store system is a computerized, online solution to the various problems faced by the Product buyer and seller wishing to outsource their software development work to a Provider at an economical cost, thus achieving high performance, accuracy, reliability and high speed of data retrieval.

In this system, there is a registration process each for the Product buyer and seller. The Administrator of the site verifies the Provider after his registration and if satisfied, assigns him a user name and password.

Our site can be used by anyone who is searching for Products whether he/she is first time visiting our site. Our site also provides some discounted Products as same u get on any shop.

The software covers the following point while keeping in mind user's requirement-:

- Fast online access of information about various Products.
- Search Products by keywords like functional area, experience and also by initials of the Product's name.

There are 2 categories of users-

1. General User
2. Registered Users

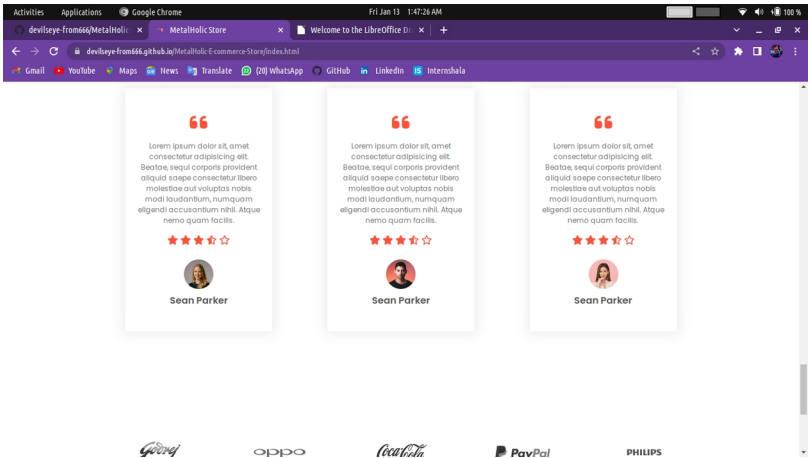
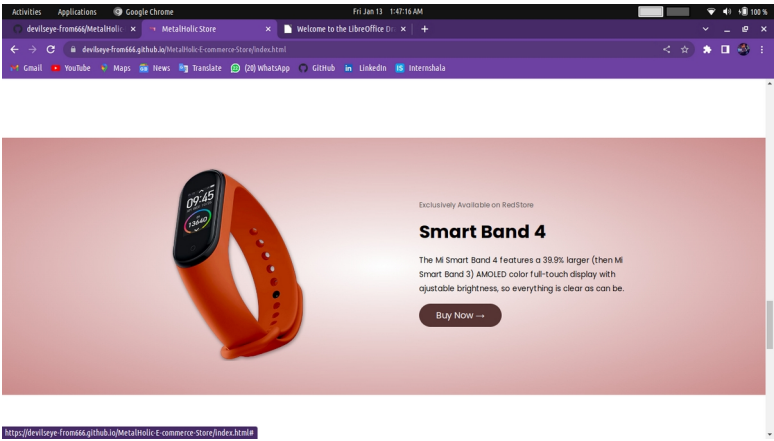
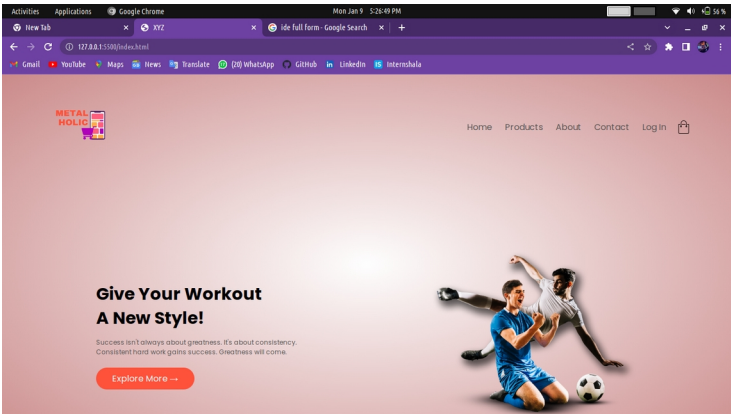
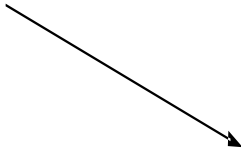
Chapter III: Discussion and Conclusion

3.1 Conclusion

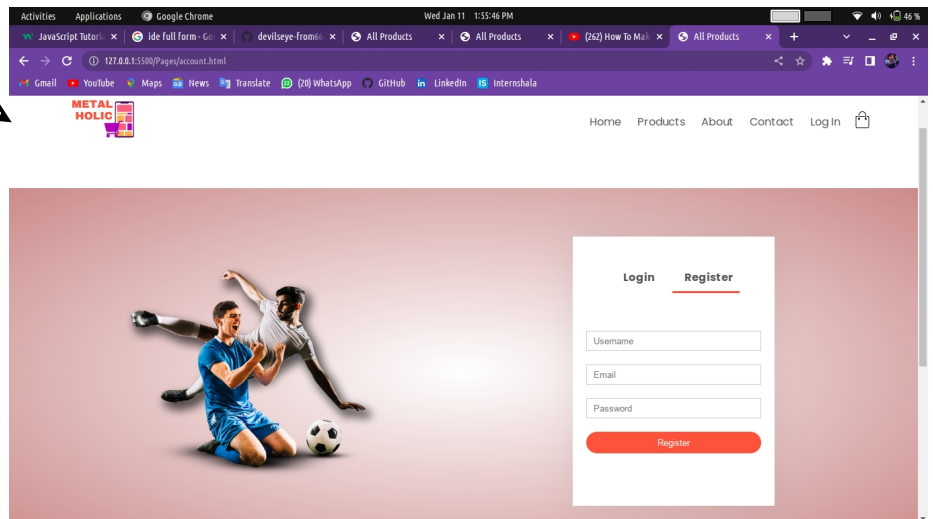
To conclude the description about the project : The project, developed using HTML, CSS and JavaScript (JS) is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement. The expanded functionality of today's software requires an appropriate approach towards software development. This ecommerce software is designed E-commerce site project is developed using HTML, CSS and JavaScript. Talking about the project, it has all the required essential features. This project has a user side where he/she can view product category and add products to cart and proceed for checkout. The user can also leave comments on each product if he/she wants. In this project, all the main functions are performed from the Admin side. And this site is User Friendly.

3.2 Screen Shot

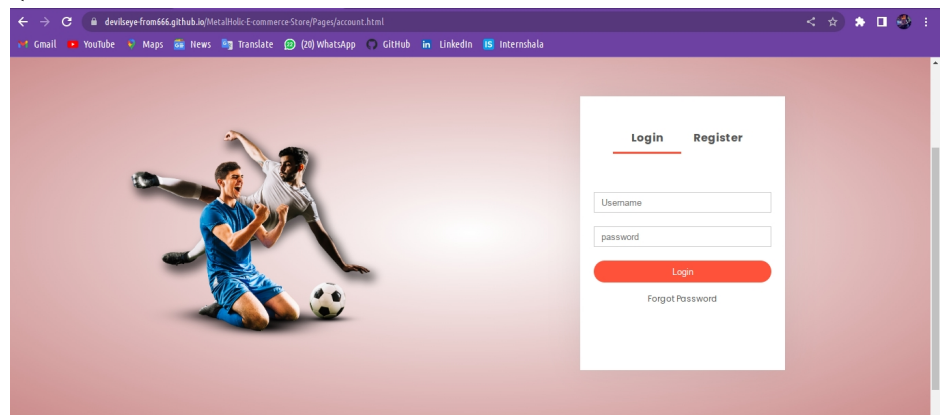
Home Page :



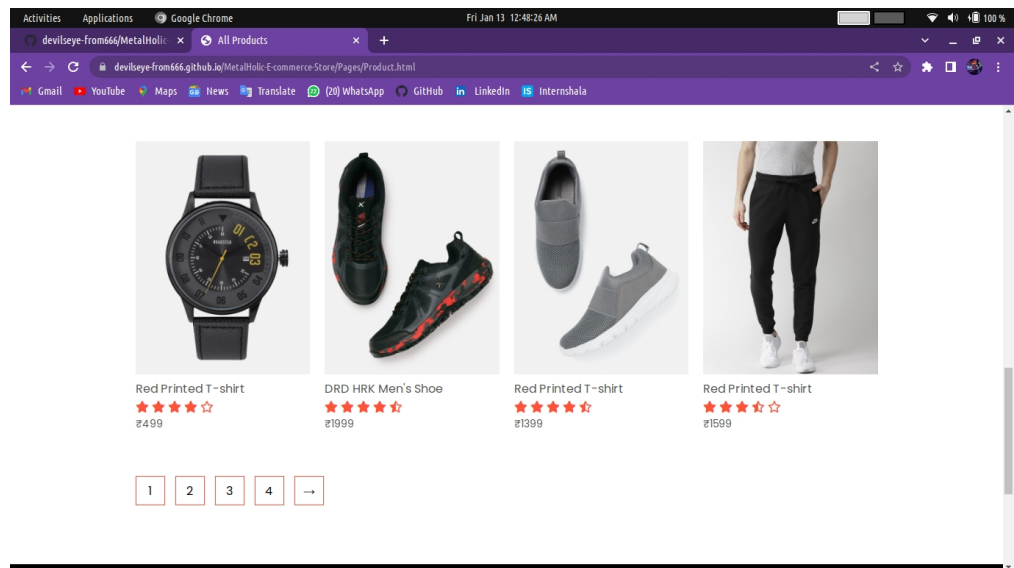
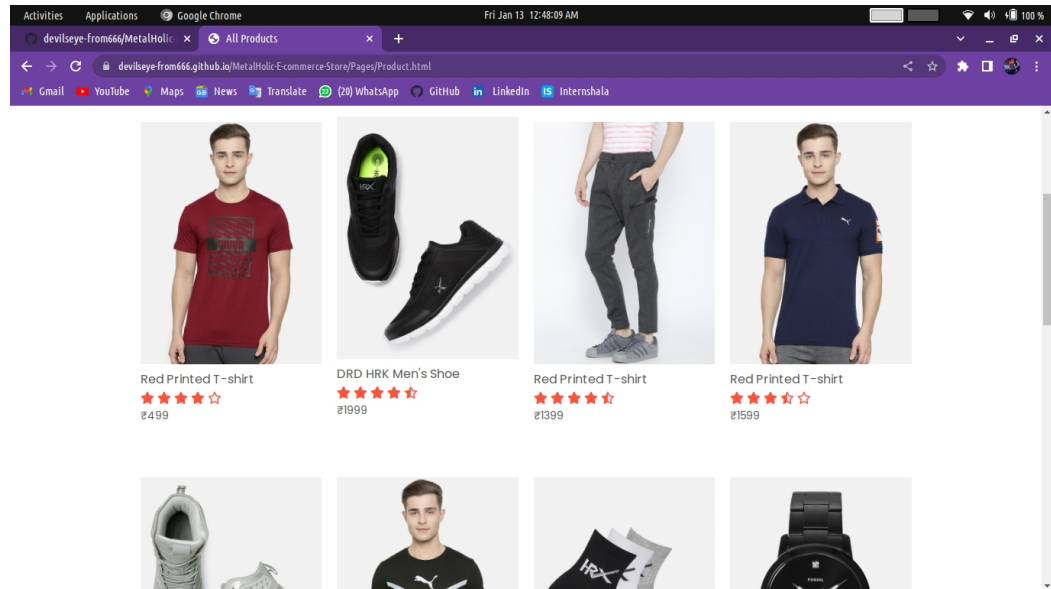
Registration and Login Page :



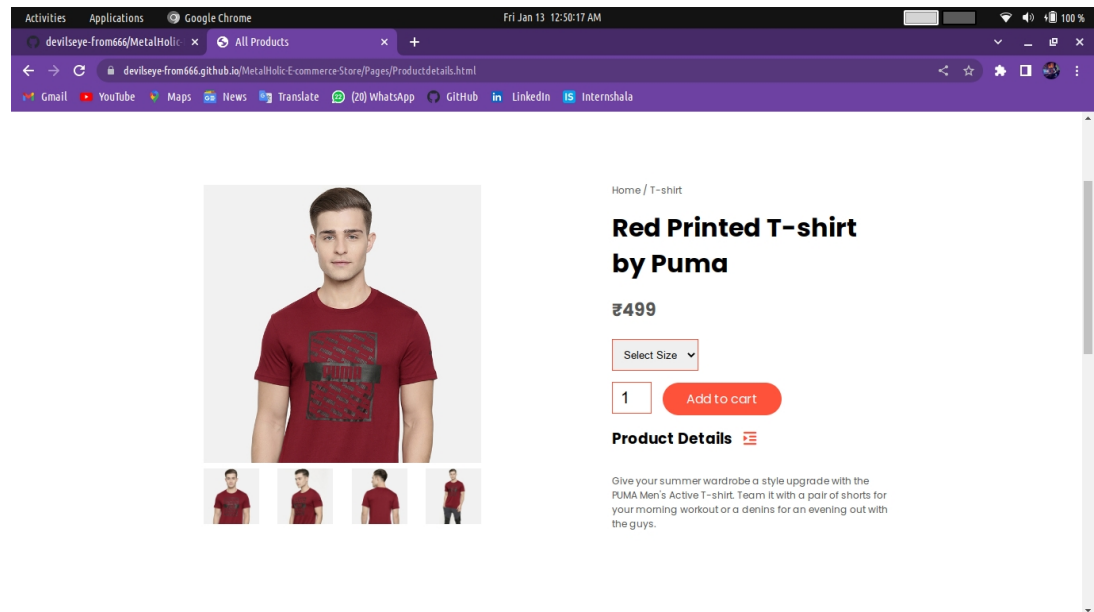
Registration Section



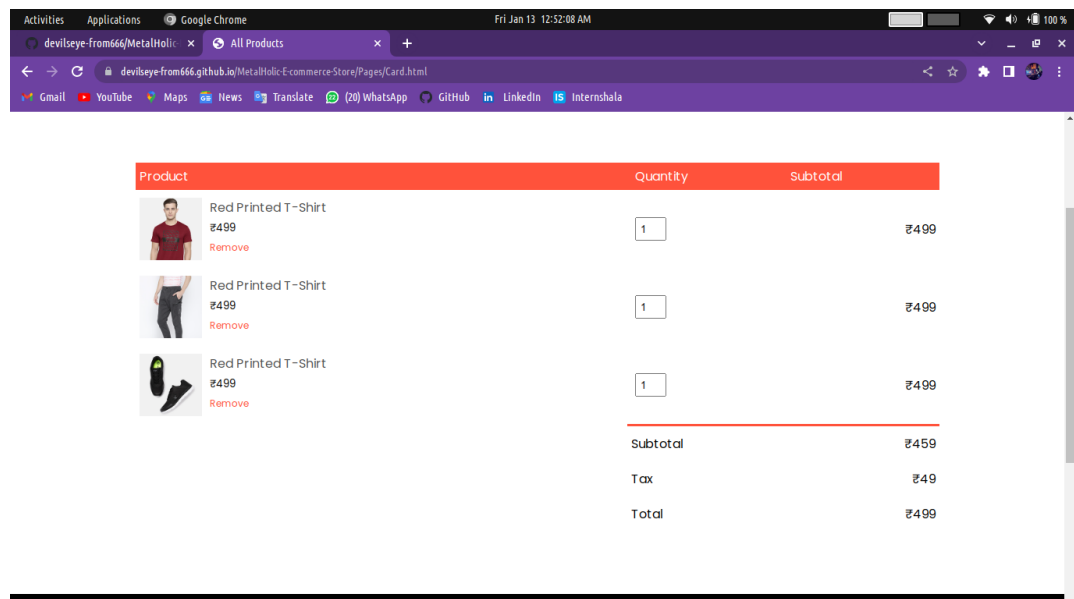
Products Page :



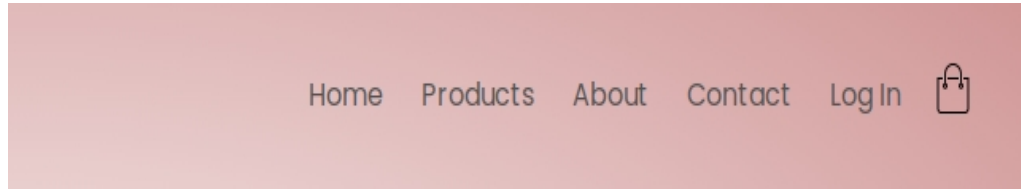
Single Product Page :



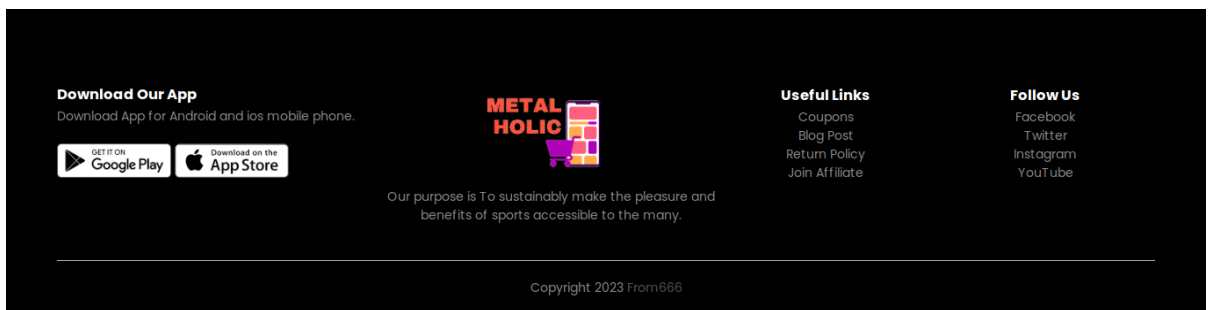
Cart Page :



Navigation Bar :



Footer Section :



Responsiveness :

