FINAL PROJECT REPORT

ON

“E-Commerce Website: CoviTech”

Submitted in partial fulfillment of the requirements for the award of degree of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE & ENGINEERING

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CERTIFICATE FROM THE SUPERVISOR

This is to certify that the work incorporated in the project report entitled **"E-Commerce Website: CoviTech"** is a record of work carried out by **Molina Mukherjee (20BCS5339), Puru (20BCS5344), Rahul Kumar Gupta (20BCS5377) and Shikhar Gupta (20BCS5355).** Under my guidance and supervision for the award of Degree of Bachelor of Engineering in Computer Science in the faculty of Department of Computer Science & Engineering of Chandigarh University, Gharuan , Mohali, India.

To the best of my/our knowledge and belief the project report-

I. Embodies the work of the candidates themselves,

II. Has duly been completed,

III. Fulfils the requirement of the Ordinance relating to the Bachelor degree of the University and

IV. Is up to the desired standard both in respect of contents and language for being referred to the examiners.

The project work as mentioned above is here by being recommended and forwarded for examination and evaluation.

DECLARATION

We, student of Bachelor of Engineering in Computer Science & Engineering, 3rd Semester, session: Aug-Dec 2021, Chandigarh University, hereby declare that the work presented in this Project Report entitled **"E-Commerce Website: CoviTech"** is the outcome of our own work, is Bonafide and correct to the best of our knowledge and this work has been carried out taking care of Engineering Ethics. The work presented does not infringe any patent work and has not been submitted to any other university or anywhere else for the award of any degree or any professional diploma.

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ACKNOWLEDGEMENT

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We owe the completion of our project to our project Mentors for their continuous support and guidance.

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DEFINITIONS, ACRONYMS AND ABBREVIATIONS

- **ER DIAGRAM (ENTITY RELATIONSHIP DIAGRAM)** - An entity–relationship model describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types and specifies relationships that can exist between entities.

- **UML DIAGRAM (UNIFIED MODELLING LANGUAGE)** - A UML diagram is a diagram based on the UML (Unified Modeling Language) with the purpose of visually representing a system along with its main actors, roles, actions, artifacts or classes, in order to better understand, alter, maintain, or document information about the system.

Abstract

This project is a web-based shopping system to purchase Covid essential goods. This project is an attempt to provide the advantages of online shopping to customers. It helps users to buy products anywhere through the internet. Thus, the customer will get the service of online shopping and home delivery using our website.

This website has a very user-friendly interface. Thus, the users will feel very easy to work on it. It also displays information about covid and how one can prevent it. Moreover, the details of customers and products can be retrieved by the admin when required. Thus, information can be captured very quickly and easily.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Online shopping is the process whereby consumers directly buy goods or services from a seller in real-time, without an intermediary service, over the Internet. It is a form of electronic commerce. An online shop, e-store, internet shop, online store, or virtual store evokes the physical analogy of buying products or services at a bricks-and-mortar retailer or in a shopping center.

Benefits of this online shopping website: -

- This online shopping website is fully functional and flexible.
- It saves a lot of time, money and labor.
- It increases the efficiency of the management at offering quality services to the customers.
- It displays necessary information about the Covid virus and its prevention.
- This web-based system offers an advantage to both customers as well as the company to efficiently and effectively manage the user's requests and satisfies customer's need at the click of a button.

1.2 Software and Hardware tools required for Project

Software:

HTML

HTML stands for **Hyper Text Markup Language**. It is the standard markup language for creating Web pages. It describes the structure of a Web page. It consists of a series of elements. HTML elements tell the browser how to display the content. Hypertext Markup Language

(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.

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. 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 as well as enabling the .css file to be cached to improve the page load speed between the pages that share the file and its formatting.

JAVASCRIPT

JavaScript (often shortened to JS) is a lightweight, interpreted, object-oriented language with first-class functions, and is best known as the scripting language for Web pages, but it's used in many non-browser environments as well. It is a prototype-based, multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles.

JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behavior.

BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is a HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents.

PHP

The **PHP Hypertext Preprocessor (PHP)** is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web-based software applications.

PHP can be used for many programming tasks outside of the web context, such as standalone graphical applications and robotic drone control. PHP code can also be directly executed from the command line.

MY SQL

SQL is a standard language for accessing and manipulating databases. SQL stands for Structured Query Language. MySQL is an open-source relational database management system (RDBMS). A relational database organizes data into one or more data tables in which data types 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.

Hardware:

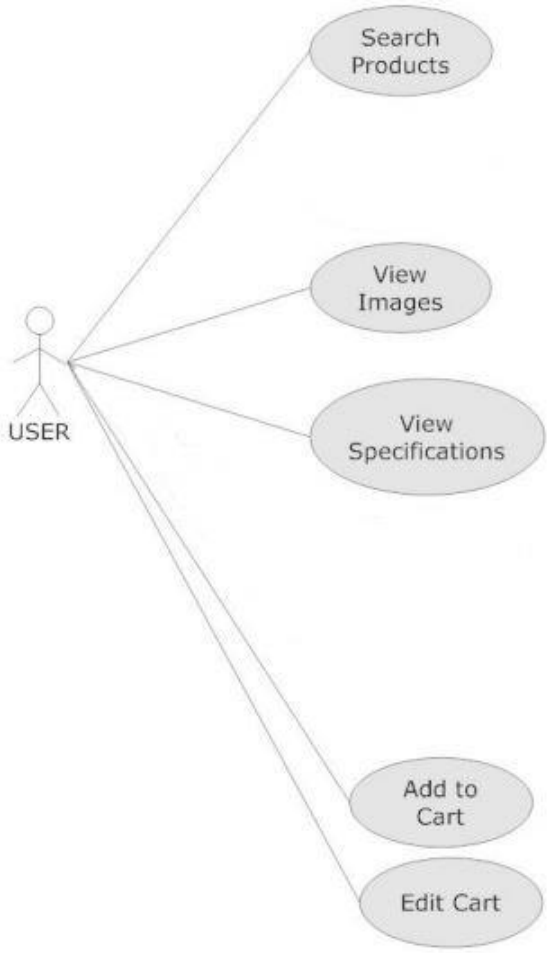
- Processor (CPU) with 2 gigahertz (GHz) frequency or above
- A minimum of 2 GB of RAM
- Monitor Resolution 1024 X 768 or higher
- A minimum of 20 GB of available space on the hard disk.
- Internet Connection Broadband (high-speed) Internet connection with a speed of 4 Mbps.
- Keyboard and a Microsoft Mouse or some other compatible pointing device.

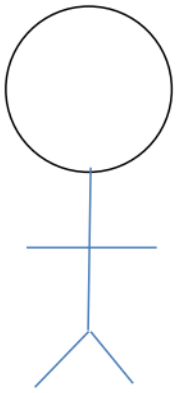
CHAPTER 2

ARCHITECTURE DIAGRAM

2.1 Use Case Diagram

A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of diagrams as well. The use cases are represented by either circles or ellipses.

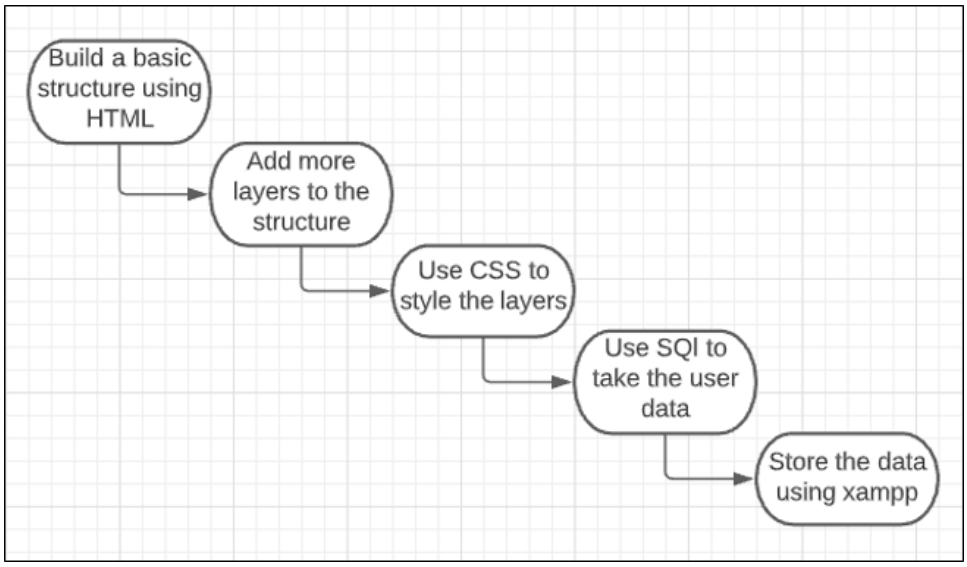


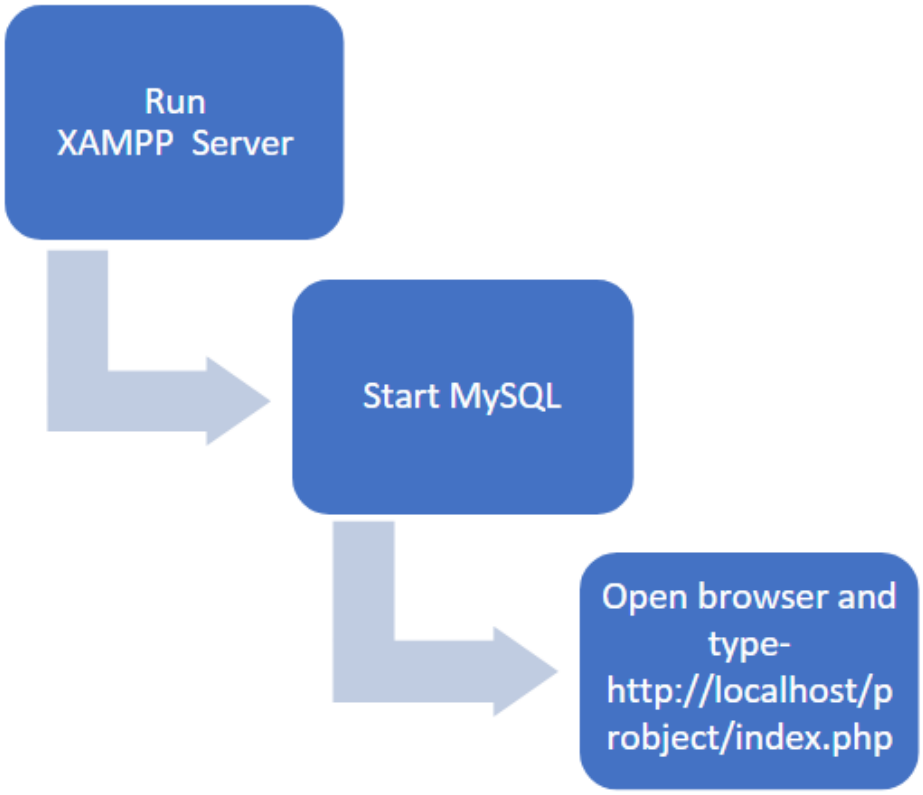


Actor - An Actor models a type of role played by an entity that interacts with the subject (e.g., by exchanging signals and data), but which is external to the subject (i.e., in the sense that an instance of an actor is not a part of the instance of its corresponding subject). Actors may represent roles played by human users, external hardware, or other subjects. Note that an actor does not necessarily represent a specific physical entity but merely a particular facet (i.e., "role") of some entity that is relevant to the specification of its associated use cases. Thus, a single physical instance may play the role of several different actors and, conversely, a given actor may be played by multiple different instances.

Association - An association specifies a semantic relationship that can occur between typed instances. It has at least two ends represented by properties, each of which is connected to the type of the end. More than one end of the association may have the same type.

System - If a subject (or system boundary) is displayed, the use case ellipse is visually located inside the system boundary rectangle. Note that this does not necessarily mean that the subject classifier owns the contained use cases, but merely that the use case applies to that classified.

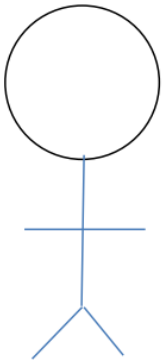



Run
XAMPP Server
Start MySQL
Open browser and
type-
http://localhost/p
robject/index.php

2.2 Sequence Diagram

The Sequence Diagram models the collaboration of objects based on a time sequence. It shows how the objects interact with others in a particular scenario of a use case. With the advanced visual modeling capability, you can create complex sequence diagram in few clicks. Besides, Visual Paradigm can generate sequence diagram from the flow of events which you have defined in the use case description.

Actor

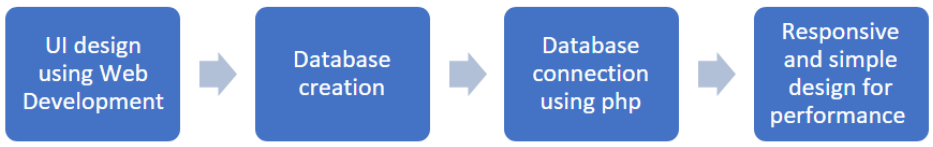


An Actor models a type of role played by an entity that interacts with the subject (e.g., by exchanging signals and data), but which is external to the subject (i.e., in the sense that an instance of an actor is not a part of the instance of its corresponding subject). Actors may represent roles played by human users, external hardware, or other subjects. Note that an actor does not necessarily represent a specific physical entity but merely a particular facet (i.e., "role") of some entity that is relevant to the specification of its associated use cases. Thus, a single physical instance may play the role of several different actors and, conversely, a given actor may be played by multiple different instances. Since an actor is external to the subject, it is typically defined in the same classifier or package that incorporates the subject classifier.

Call Message

A message defines a particular communication between Lifelines of an Interaction. Call message is a kind of message that represents an invocation of operation of target lifeline.

Sequence Diagram



CHAPTER 3

SRS (SOFTWARE REQUIREMENT SPECIFICATION)

A software requirements specification (SRS document) describes how a software system should be developed. Simply put, an SRS provides everyone involved with a roadmap for that project. It offers high-grade definitions for the functional and non-functional specifications of the software, and can also include use cases that illustrate how a user would interact with the system upon completion. An SRS should have enough information for developers to complete the software described. It not only lays out the description of the software under development but also the purpose it will serve: what the software is supposed to do and how it should perform.

CHAPTER 4

4.1 ER DIAGRAM

ER Model is represented by means of an ER diagram. Any object, for example, entities, attributes of an entity, relationship sets, and attributes of relationship sets, can be represented with the help of an ER diagram.

Entity

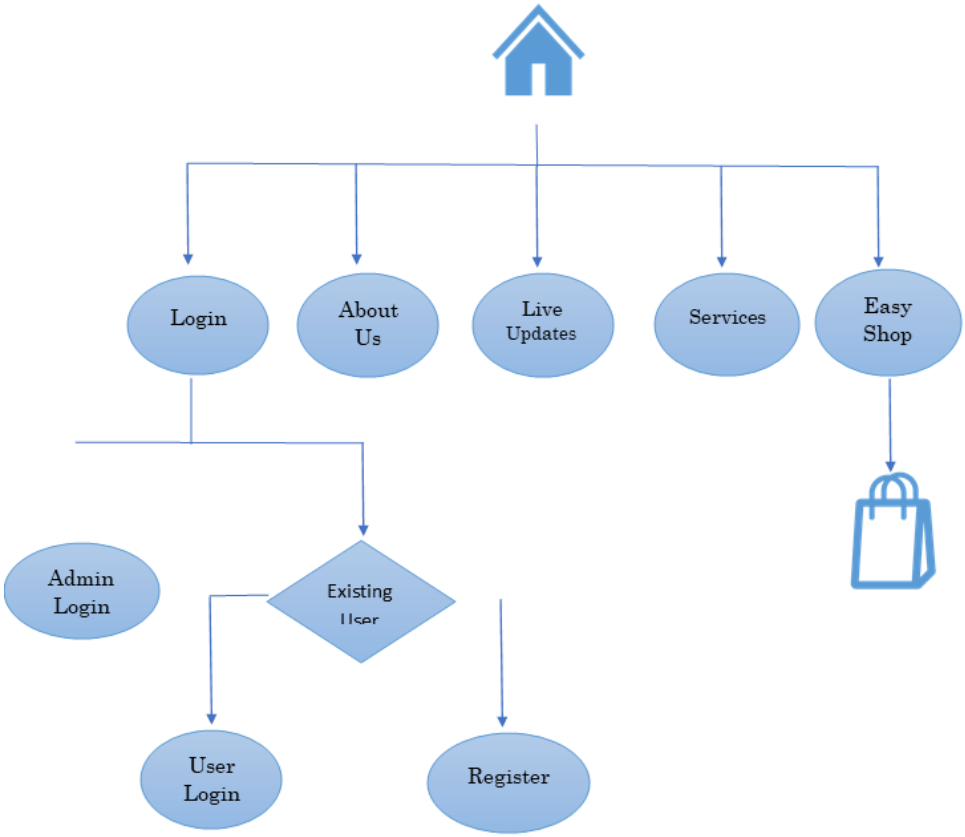
Entities are represented by means of rectangles. Rectangles are named with the entity set they represent.

Attributes

Attributes are the properties of entities. Attributes are represented by means of ellipses. Every ellipse represents one attribute and is directly connected to its entity (rectangle). If the attributes are composite, they are further divided in a tree like structure. Every node is then connected to its attribute. That is, composite attributes are represented by ellipses that are connected with an ellipse. Multivalued attributes are depicted by double ellipse. Derived attributes are depicted by dashed ellipse.

Relationship

Relationships are represented by diamond-shaped box. Name of the relationship is written inside the diamond-box. All the entities (rectangles) participating in a relationship, are connected to it by a line.



CHAPTER 5

MATERIAL AND METHODOLOGY

Several materials are used to build this project. Certain software interfaces are used like window 8/10, 4gb ram/ 255gb hdd .Technologies are also used like HTML, JAVASCRIPT, MY SQL, PHP, for full stack development tools.

- First of all, new users will sign up and old users will log in to the system.
- Then they will be directed to the home-screen where they can see the list of covid essentials.
- Here they can choose for the products they want to buy.

5.1 PROJECT DESIGN

This describes the proposed system, explaining how modules and components integrate and communicate to bring about the working application of the proposed system. The website design is developed to satisfy the requirement of modern system architecture including computational structures and model training algorithms. The website design will also capture the major functional building blocks needed to understand the process of building a system.

1. Users

2. Admin

Users:

Anyone can register through the registration page. After a successful registration user can log in with valid email and password.

After successful login user can do the following things–

- View products
- Can add products to cart
- Place Order
- View Order
- Read information about Covid
- Logout

Admin

Admin is the superuser of the website who can manage everything on the website. Admin can log in through the login page.

Admin Features–

- Manage Products (Edit, Delete)
- Can get the details of registered users
- Admin Dashboard (Admin can view the count of registered users, total order placed, etc.)

Required website is to provide online details to the customers of the specified products. The system should satisfy the following requirements:

General Aspects:

- Authenticate User
- Show Products and their details with type
- Website should be able to register new user.

Analysis:

- Authenticate user based on username & password.
- Keeping session track of user activity.
- Maintaining the record of products.

5.2 Non-Functional Requirements

- System should be able to handle multiple users.
- Login by username, password should be incorporated wherever necessary.
- Should be user friendly and display easy to understand error messages.

5.3 Software System Attributes

1. **Usability**: The links are provided for each form. The user is facilitated to view and make entries in the forms. Validations are provided in each field to avoid inconsistent or invalid entry in the databases. Some forms consist Hyper Links, which provides further details.

2. **Maintainability**: The products detail will be easily available for the user.

3. **Availability**: System will be available around the clock.

CHAPTER 6

RESULTS AND SNAPSHOTS

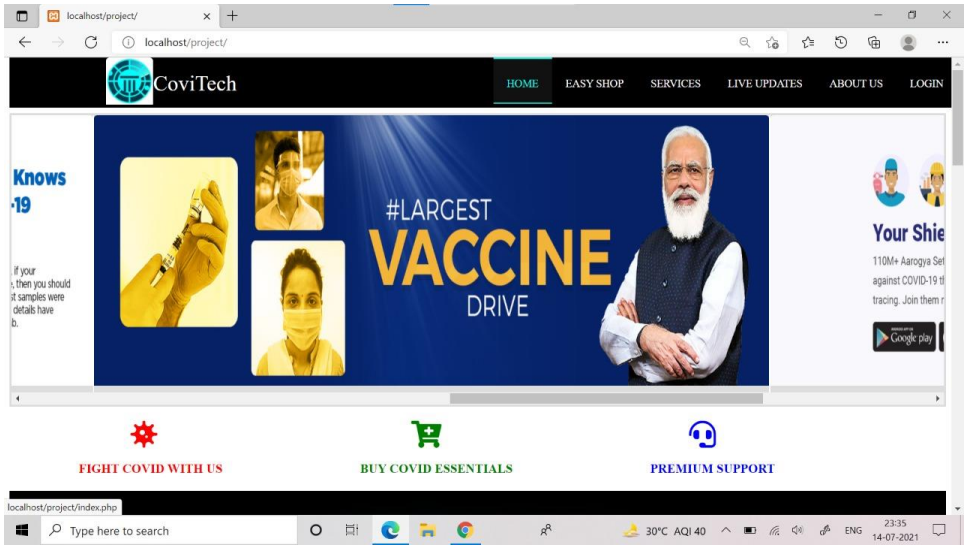
6.1 User

6.2 Admin

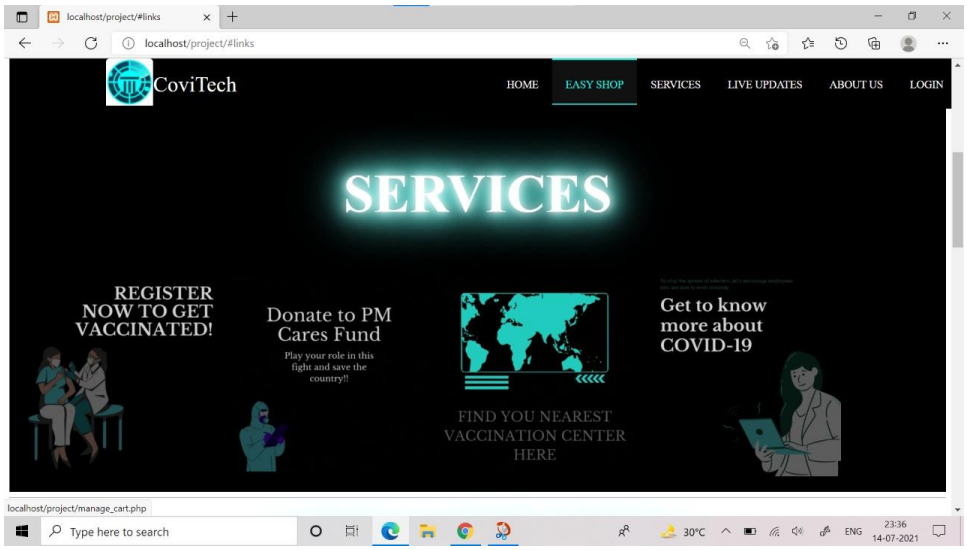
6.3 Actions

6.1. User

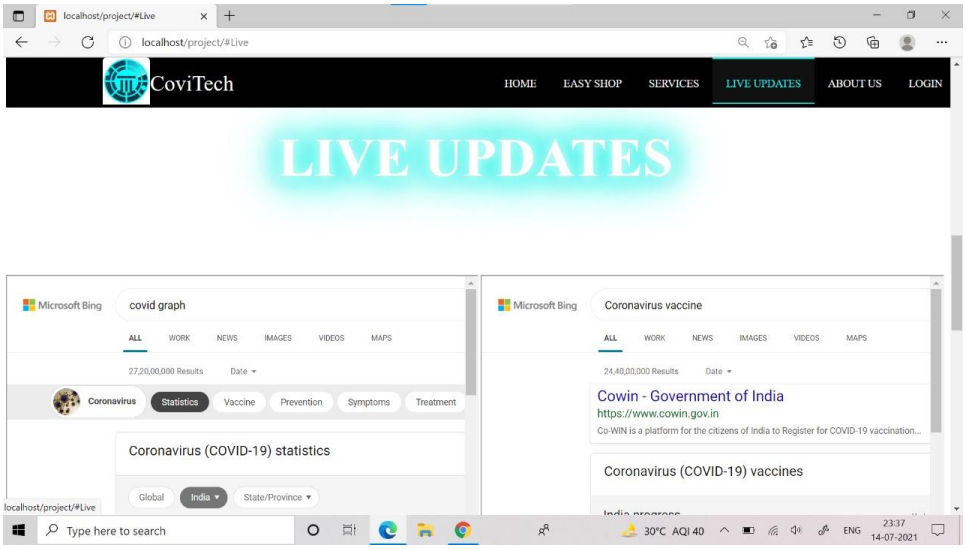
(I) Home Page

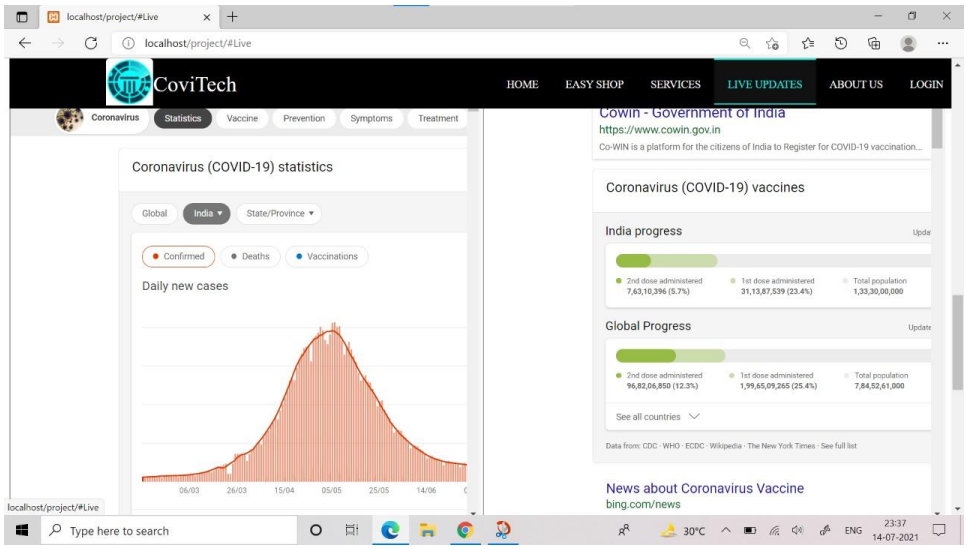


Services Page

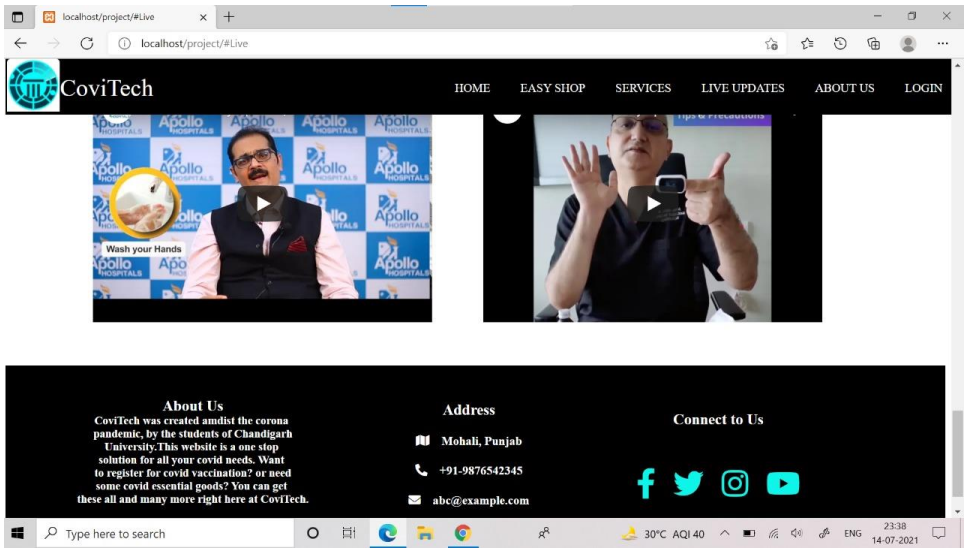


Live Updates

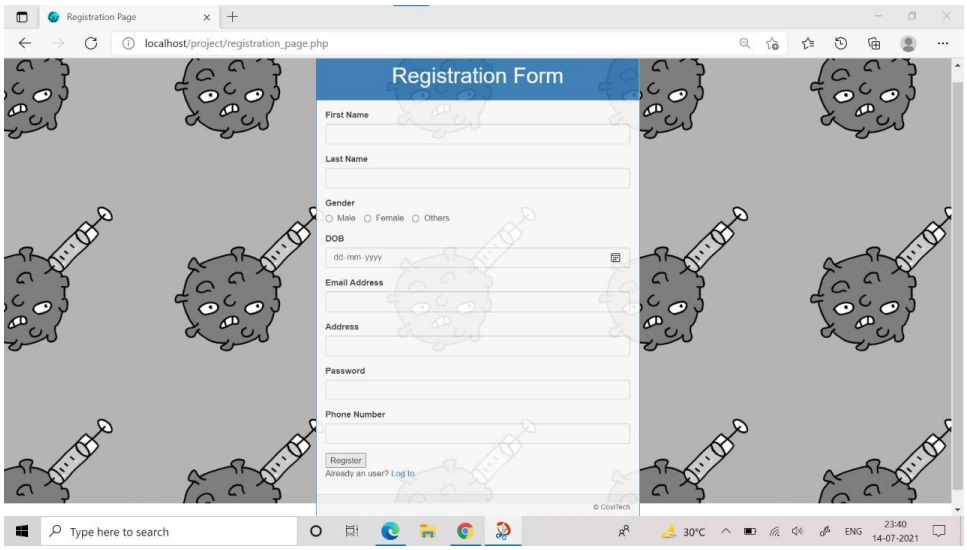




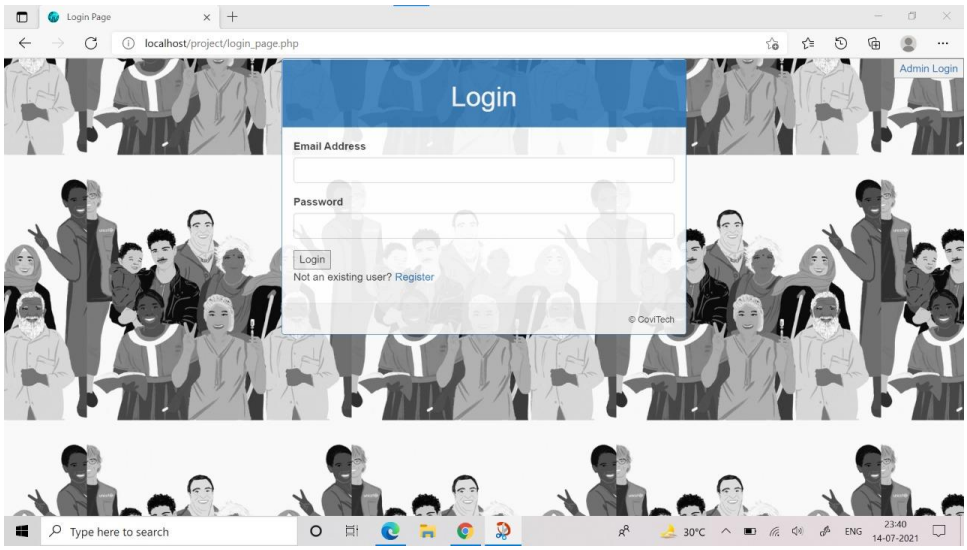
Useful YouTube Videos



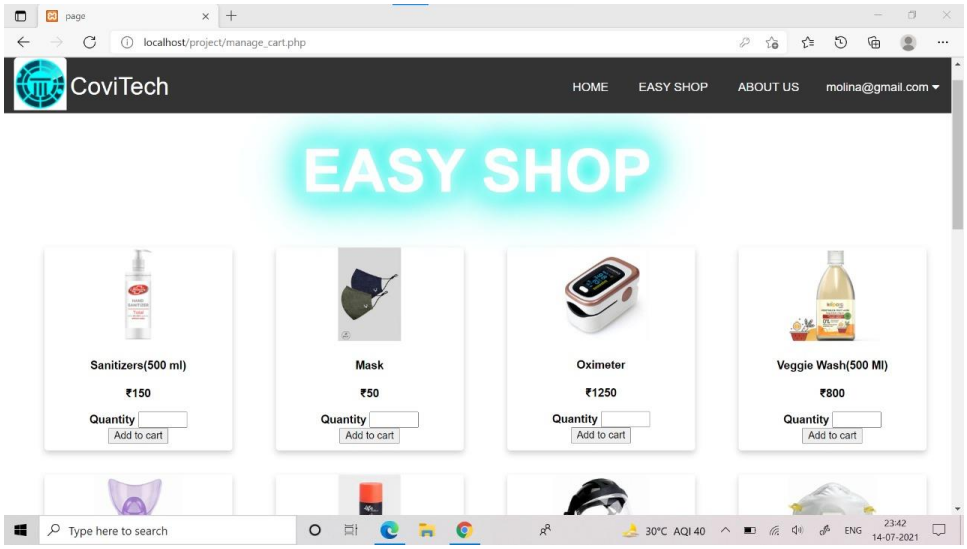
(II) Registration Form

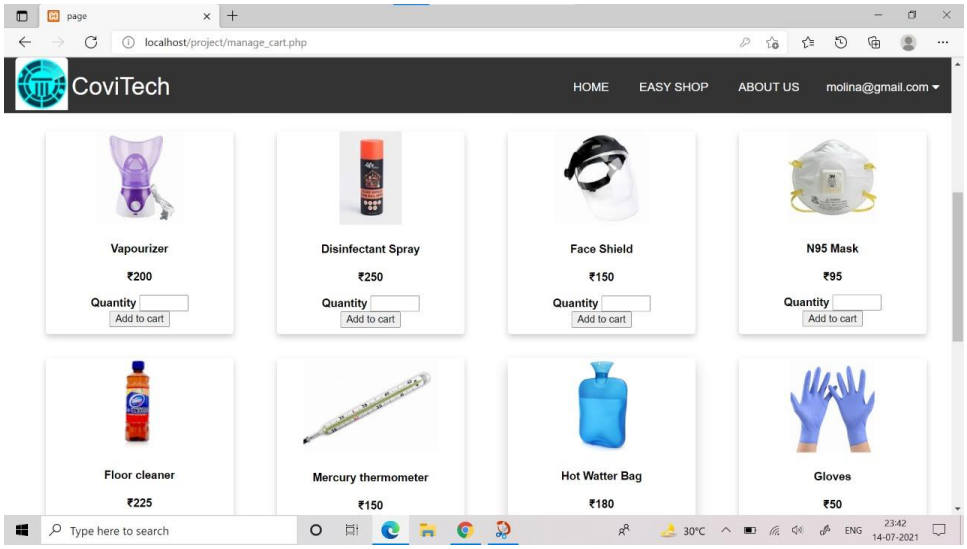


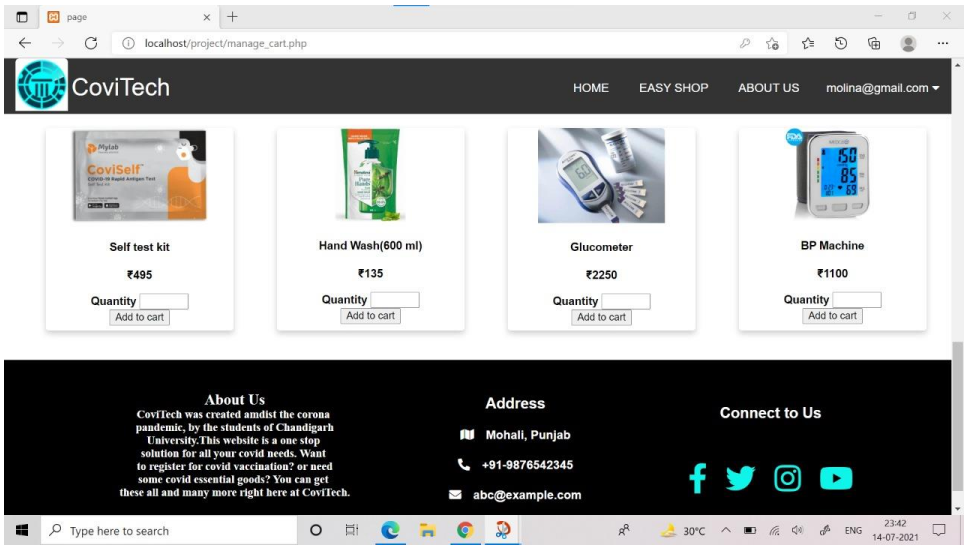
(III) Login Page- User



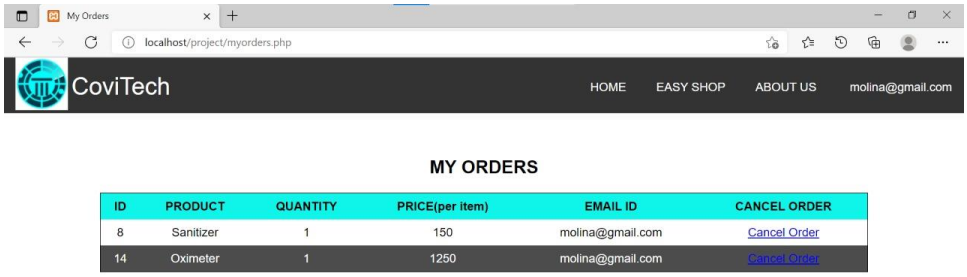
(IV) Easy Shop Page



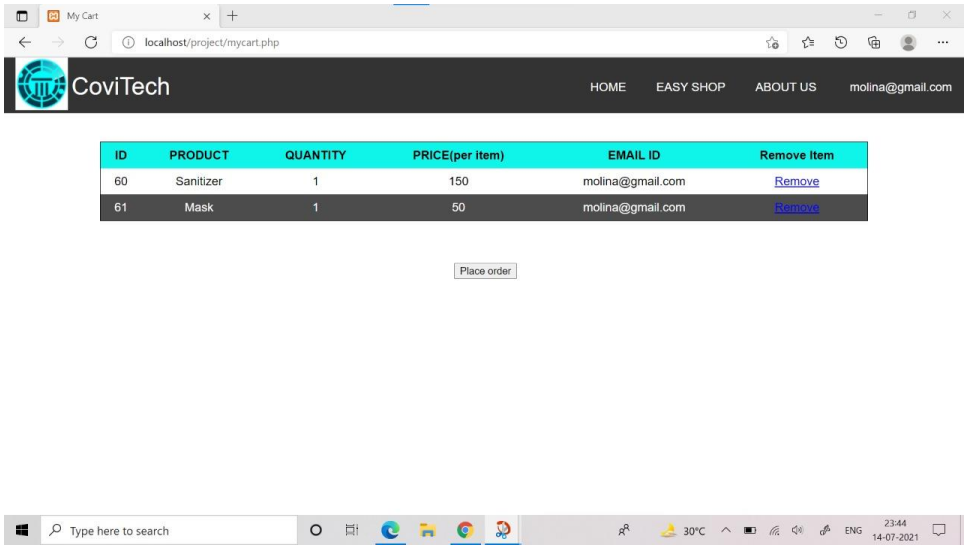




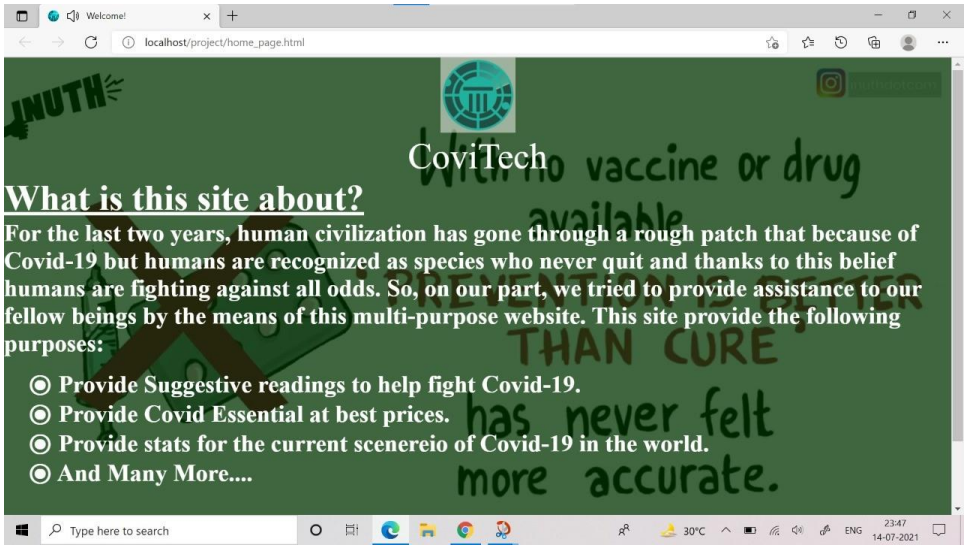
(V) My Orders (User)



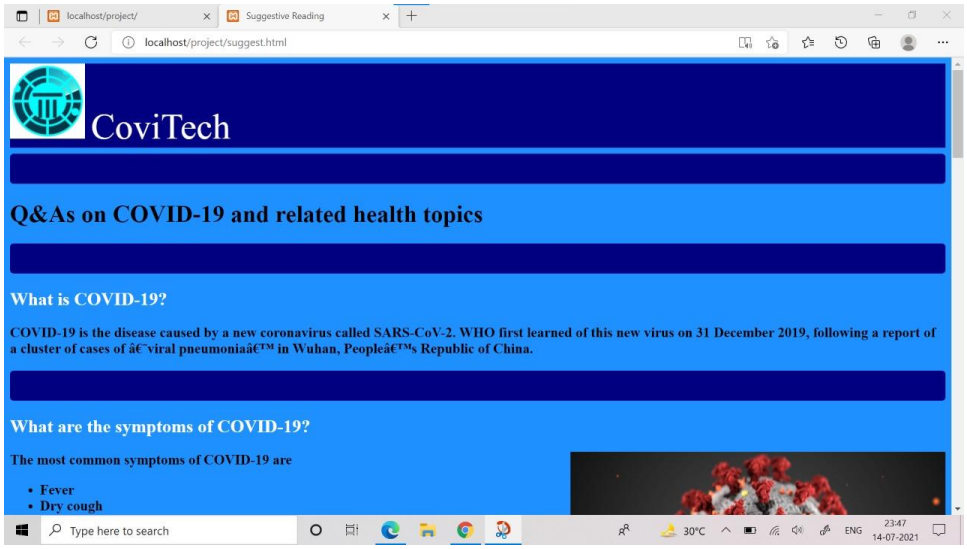
(VI) Cart

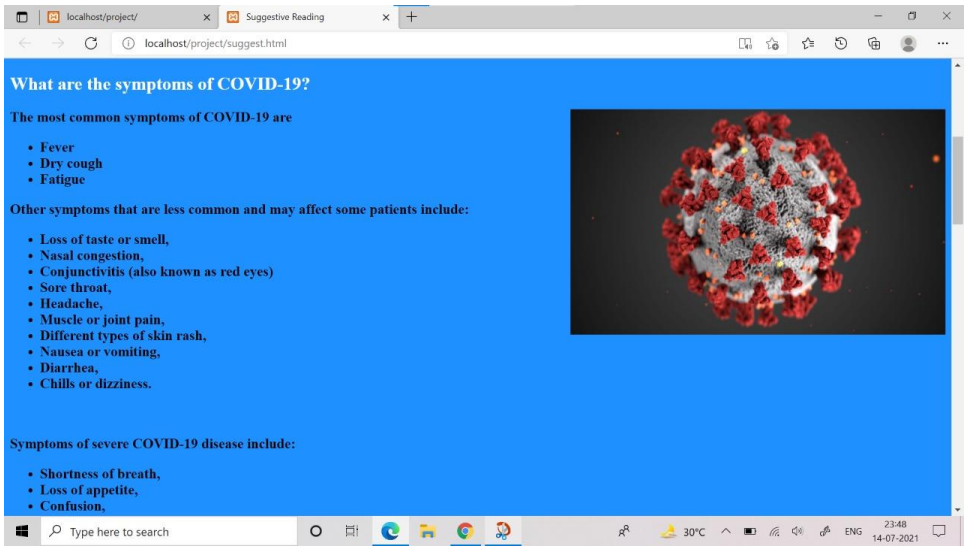


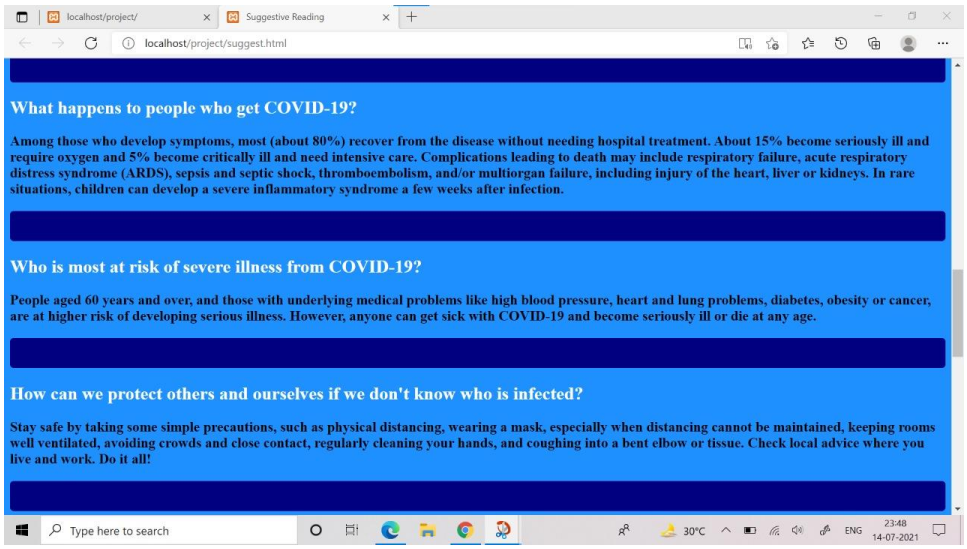
(VII) About us

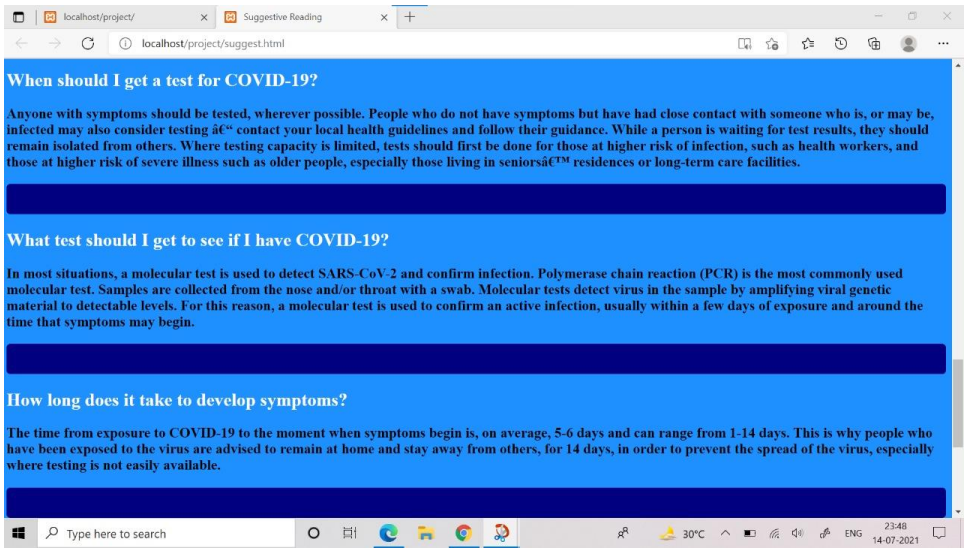


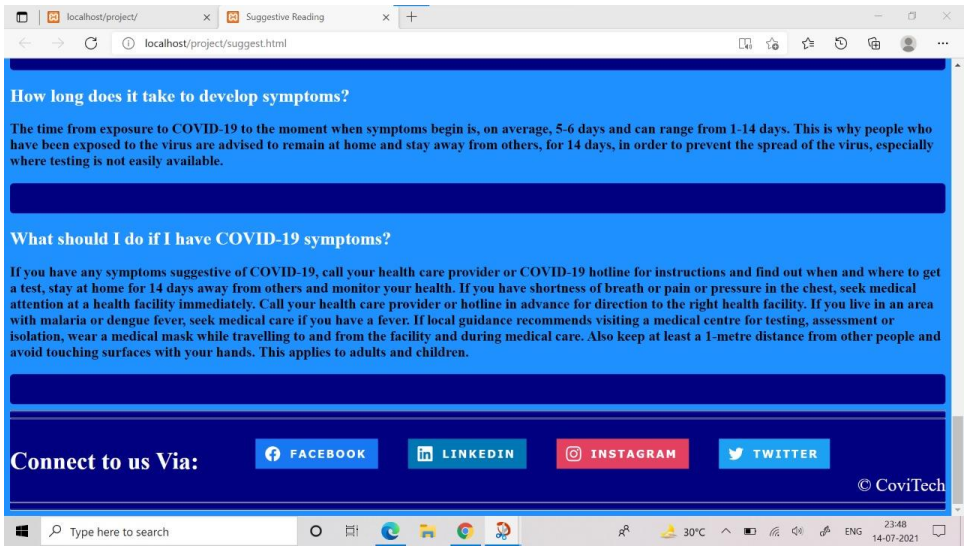
(VIII) Suggestive Readings






localhost/project/
Suggestive Reading
localhost/project/suggest.html
What happens to people who get COVID-19?
Among those who develop symptoms, most (about 80%) recover from the disease without needing hospital treatment. About 15% become seriously ill and require oxygen and 5% become critically ill and need intensive care. Complications leading to death may include respiratory failure, acute respiratory distress syndrome (ARDS), sepsis and septic shock, thromboembolism, and/or multiorgan failure, including injury of the heart, liver or kidneys. In rare situations, children can develop a severe inflammatory syndrome a few weeks after infection.
Who is most at risk of severe illness from COVID-19?
People aged 60 years and over, and those with underlying medical problems like high blood pressure, heart and lung problems, diabetes, obesity or cancer, are at higher risk of developing serious illness. However, anyone can get sick with COVID-19 and become seriously ill or die at any age.
How can we protect others and ourselves if we don't know who is infected?
Stay safe by taking some simple precautions, such as physical distancing, wearing a mask, especially when distancing cannot be maintained, keeping rooms well ventilated, avoiding crowds and close contact, regularly cleaning your hands, and coughing into a bent elbow or tissue. Check local advice where you live and work. Do it all!
Type here to search
30°C
ENG
23:48
14-07-2021


localhost/project/
Suggestive Reading
localhost/project/suggest.html
When should I get a test for COVID-19?
Anyone with symptoms should be tested, wherever possible. People who do not have symptoms but have had close contact with someone who is, or may be, infected may also consider testing â€“ contact your local health guidelines and follow their guidance. While a person is waiting for test results, they should remain isolated from others. Where testing capacity is limited, tests should first be done for those at higher risk of infection, such as health workers, and those at higher risk of severe illness such as older people, especially those living in seniorsâ€™ residences or long-term care facilities.
What test should I get to see if I have COVID-19?
In most situations, a molecular test is used to detect SARS-CoV-2 and confirm infection. Polymerase chain reaction (PCR) is the most commonly used molecular test. Samples are collected from the nose and/or throat with a swab. Molecular tests detect virus in the sample by amplifying viral genetic material to detectable levels. For this reason, a molecular test is used to confirm an active infection, usually within a few days of exposure and around the time that symptoms may begin.
How long does it take to develop symptoms?
The time from exposure to COVID-19 to the moment when symptoms begin is, on average, 5-6 days and can range from 1-14 days. This is why people who have been exposed to the virus are advised to remain at home and stay away from others, for 14 days, in order to prevent the spread of the virus, especially where testing is not easily available.
Type here to search
30°C
ENG
23:48
14-07-2021


localhost/project/
Suggestive Reading
localhost/project/suggest.html
How long does it take to develop symptoms?
The time from exposure to COVID-19 to the moment when symptoms begin is, on average, 5-6 days and can range from 1-14 days. This is why people who have been exposed to the virus are advised to remain at home and stay away from others, for 14 days, in order to prevent the spread of the virus, especially where testing is not easily available.
What should I do if I have COVID-19 symptoms?
If you have any symptoms suggestive of COVID-19, call your health care provider or COVID-19 hotline for instructions and find out when and where to get a test, stay at home for 14 days away from others and monitor your health. If you have shortness of breath or pain or pressure in the chest, seek medical attention at a health facility immediately. Call your health care provider or hotline in advance for direction to the right health facility. If you live in an area with malaria or dengue fever, seek medical care if you have a fever. If local guidance recommends visiting a medical centre for testing, assessment or isolation, wear a medical mask while travelling to and from the facility and during medical care. Also keep at least a 1-metre distance from other people and avoid touching surfaces with your hands. This applies to adults and children.
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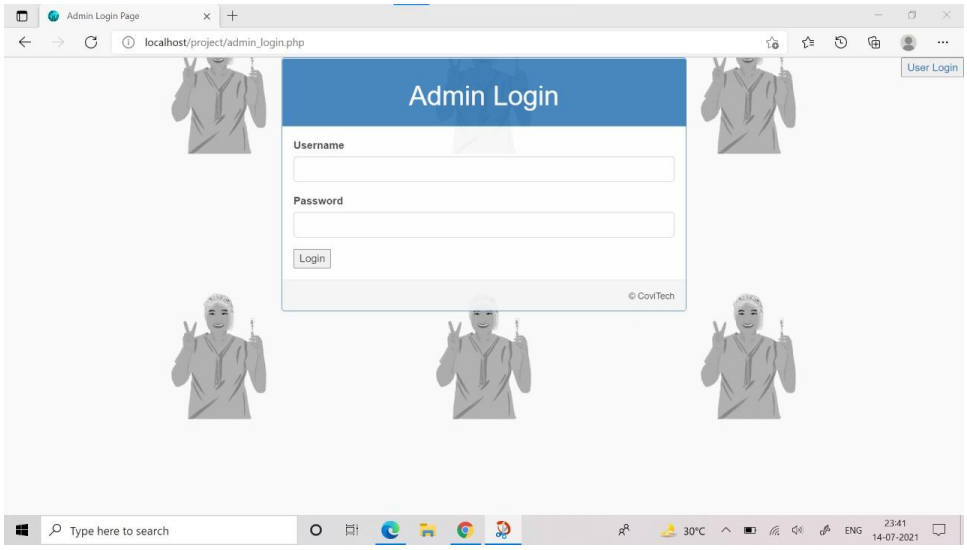
6.2 Admin

(I) Admin Login Page

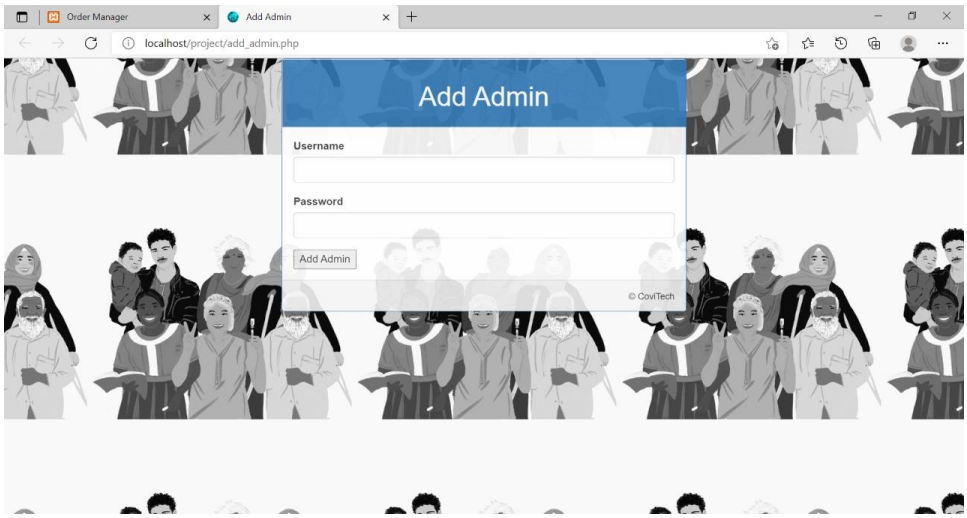


(II) Order Manager Page

ORDER MANAGER

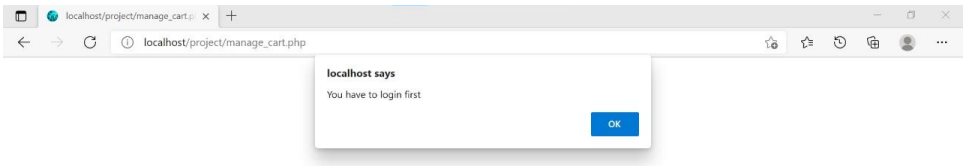
ID	PRODUCT	QUANTITY	PRICE	EMAIL ID	ADDRESS	ACTION
8	Sanitizer	1	150	molina@gmail.com	Prayagraj	Cancel Order
9	Mercury thermometer	1	150	abcd@gmail.com	Delhi	Cancel Order
10	Glucometer	1	2250	abcd@gmail.com	Delhi	Cancel Order
12	Mask	2	50	qwert@gmail.com	qwertyuii	Cancel Order
14	Oximeter	1	1250	molina@gmail.com	Prayagraj	Cancel Order
19	Disinfectant Spray	1	250	rahul@gmail.com	Siliguri, West Bengal	Cancel Order

(III) Add Admin Page

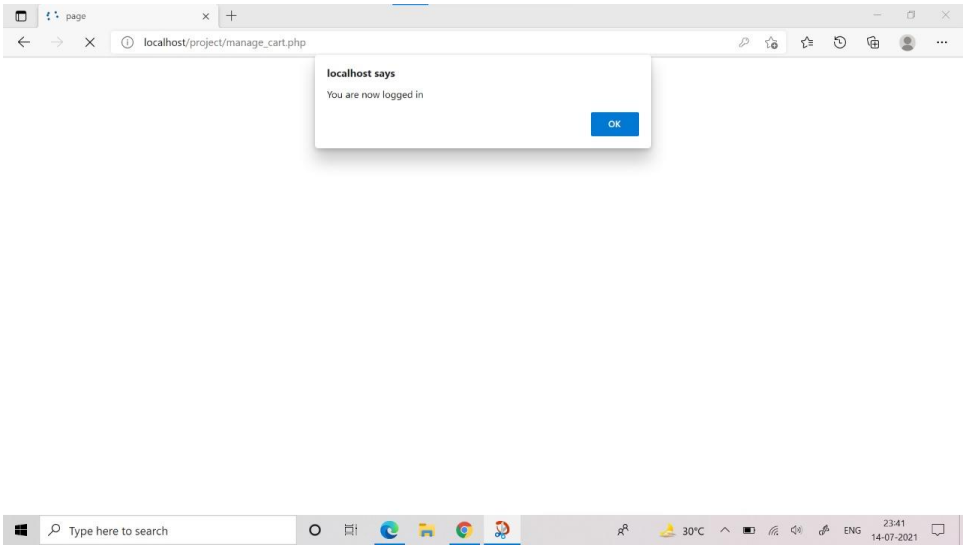


6.3 Actions/Messages

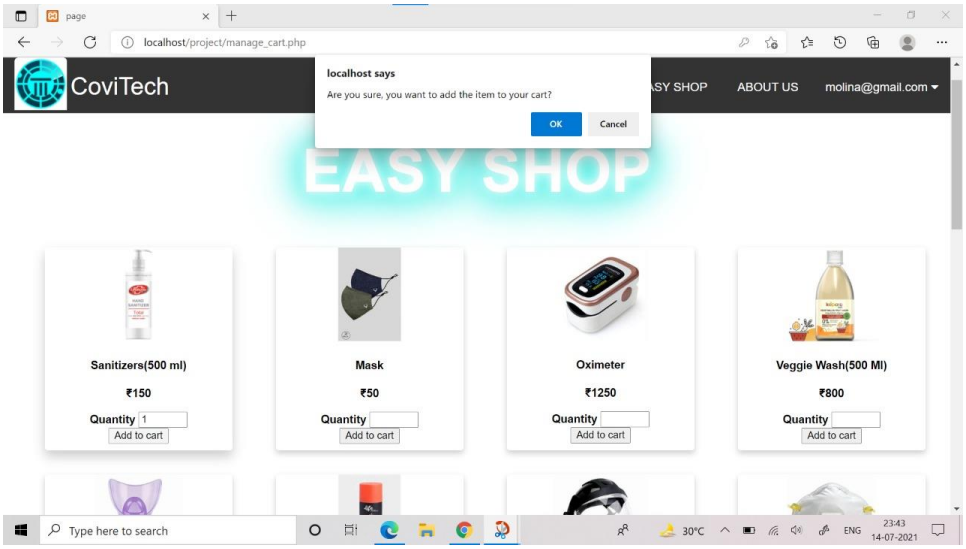
(I) Login Prompt



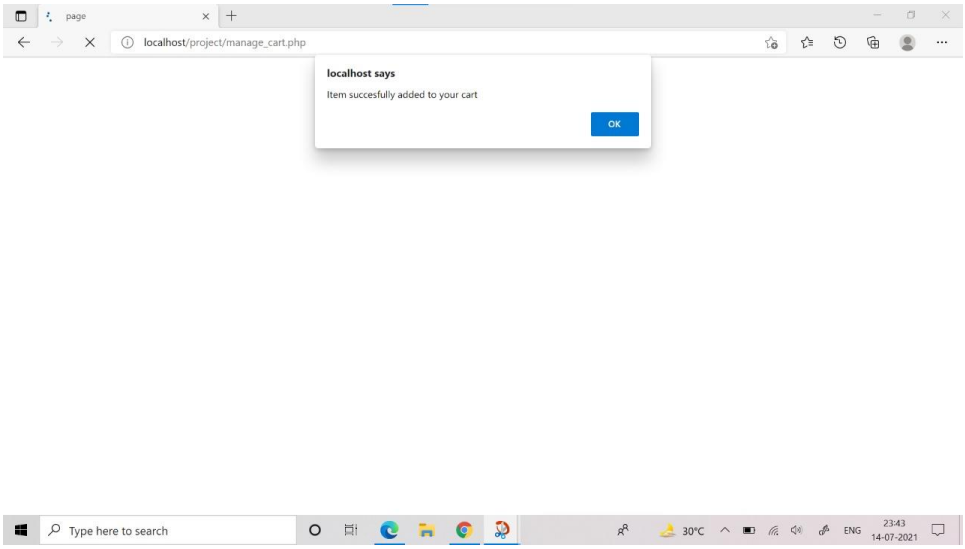
(II) Login Successful



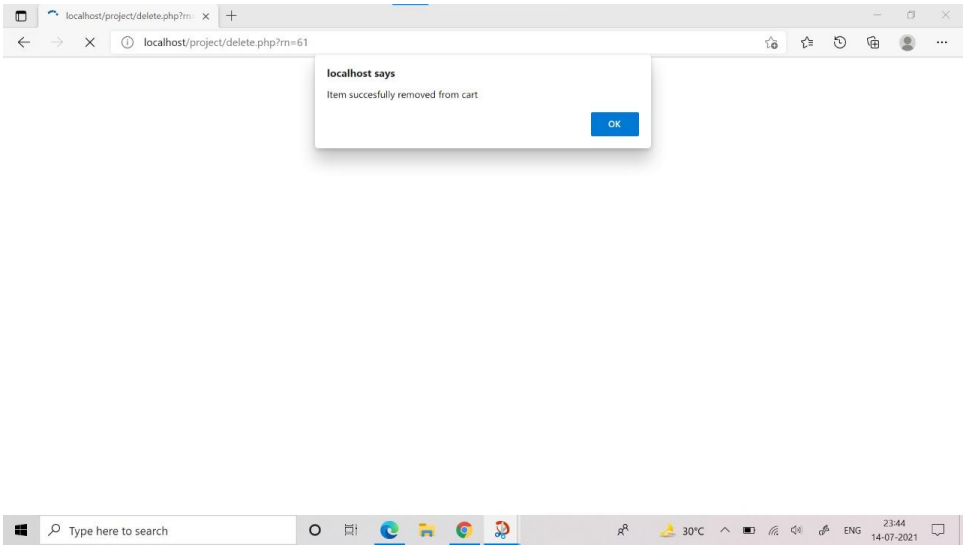
(III) Adding Items to cart Prompt



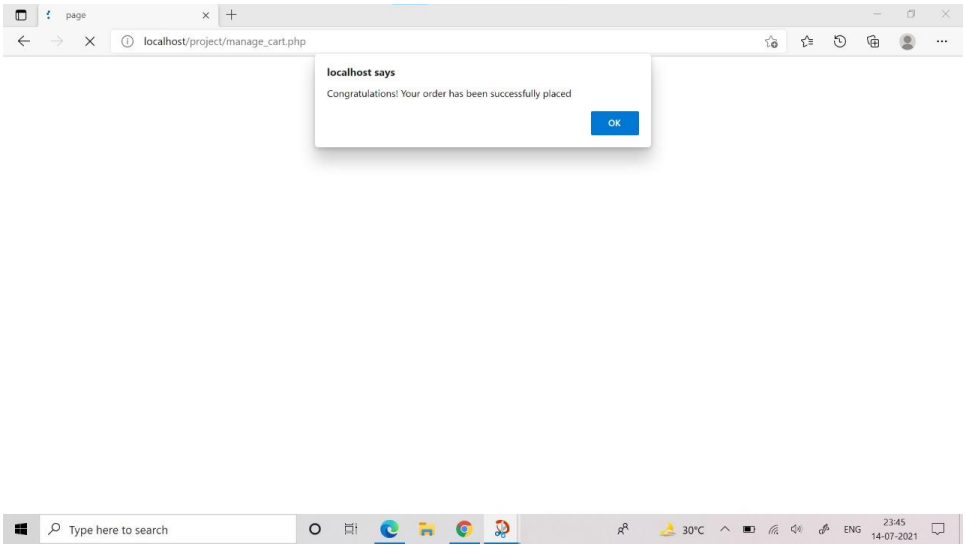
(IV) Item Successfully Added



(V) Removing Item



(VI) Order Successfully Placed



CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Conclusion

The project entitled E-Commerce Website: CoviTech was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application for purchasing covid essentials from a shop.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using HTML & CSS, usage of responsive templates, and management of database using MySQL. The entire system is secured. Also, the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications.

7.2 Future Scope of Project

There is a scope for further development in our project to a great extent. A number of features can be added to this system in future like: -

- The users could subscribe for price alerts which would enable them to receive messages when price for products fall below a particular level.
- Providing classes for customers so that different offers can be given to each class.
- System may keep track of history of purchases of each customer and provide suggestions based on their history.
- The users can give reviews about the quality of the product which will be beneficial for both buyer and seller.
- The users can filter products on the basis of color, size, prize, and company, etc.

These features could have implemented unless the time did not limit us.

CHAPTER 8

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https://www.w3schools.com/bootstrap/