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Faculty of Technology

Department of Computer Engineering

B. Tech. CE Semester – V

Subject: (CE – 520) Advanced Technologies

ECOMMERCE WEBSITE

GROUP-2

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Abstract

The E-commerce Website Development Project is a comprehensive initiative aimed at creating a sophisticated and user-friendly online platform for conducting electronic commerce. In an increasingly digital world, this project seeks to empower businesses and consumers with an accessible and efficient means of buying and selling products and services. The website will serve as a virtual marketplace, bringing together vendors, customers, and a variety of products while providing a seamless and secure shopping experience.

Introduction Software Requirements Specification

Stakeholder Analysis

The various stakeholders are:

1. Admin
2. Business Owner
3. User

The functions which can be followed by the stakeholders

1. **Admin:**

- They will manage the whole system.

2. **Business Owner:**

- They are typically the primary stakeholders as they own or manage the e-commerce business. They have a vested interest in the success and profitability of the website.

3. **Users:**

- They will first login in the system then they will select the product.

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Functional Requirement

R.1 Login page

R.1.1.1 Login page for the user

Input: User enters their login credentials (username/email and password) on the user login page.

Processing:

- The system verifies the entered credentials against the user database.
- If the credentials are valid for a user, the system proceeds with authentication.
- If the credentials are invalid, the system displays an error message and prompts the user to re-enter the correct information.

Output:

- If the credentials are valid, the system authenticates the user and grants access to the user-specific features of the application.
- If the credentials are invalid, the system displays an error message and does not grant access to the application.

R.1.1.2 New user account

Input: User selects the option to create a new account.

Processing: The system proceeds to the user registration process.

The system redirects the user to the user registration page to create a new account.

R.2 Search Product

Input: User can search product according their need,

output: User can see their filter products.

R.3 Add Cart

Input: User can add the product in cart.

Output:At last user can see all their products in carts and total amount will displayed on the screen.

Other Non Functional Requirements

N.1 Performance:

When the user sign inr then it will be submitted within 1-2 seconds and the system will respond to that.

- The system should be able to handle 100 transactions per second.

N.2 Security Requirements:

- The user password must be of 8 characters and should contain any special character.
- The NGOs password must be of 10 characters and must contain any special character.
- The system should have regular vulnerability assessments and penetration tests to identify and remediate any security weaknesses.

N.3 Safety Requirement:

- The system should validate user input and prevent any data injection attacks.
- The system should have a recovery process for handling errors and exceptions.

N.4 Design Requirement:

- The system should have a user-friendly interface so that it is easy to use and understand.

Database Design

I have used mongodb as a database in my system.In which we have created tables adresses,brands,categories,products,users.Ecommerce website stored the information as email,name,mobile no.,password.In user we have their information as name, email, password,mobile no.

Implementation Details

i) Modules created and brief description of each modules

In Ecommerce project i have modules like addresses,brands,categories,products,users.

1.adresses:

This module contains all user address information like user name,address,pincode,state,contact no,email,city.

2.brands:

This module contains brand details of all products.

3.categories:

In Ecommerce website i have different product segment like skin-care,home-decoration,laptops,phone,fragrences so this module contain all information about the product.

4.products:

Product table contains the data of product like product name,price,discountpercentage,rating,stock,brand,

category,image.

2. Users:

This module contains the list of the users which use my website. This module contains the entities like name, email, mobile number, password.

Function prototypes which implements major functionality.

Testing

i) Describe the testing framework and testing method used. List down the test cases used to test your system.

Functional Testing:

Ensure that the core functions of the e-commerce site work as intended. This includes testing features like user registration, product search, cart management, and checkout.

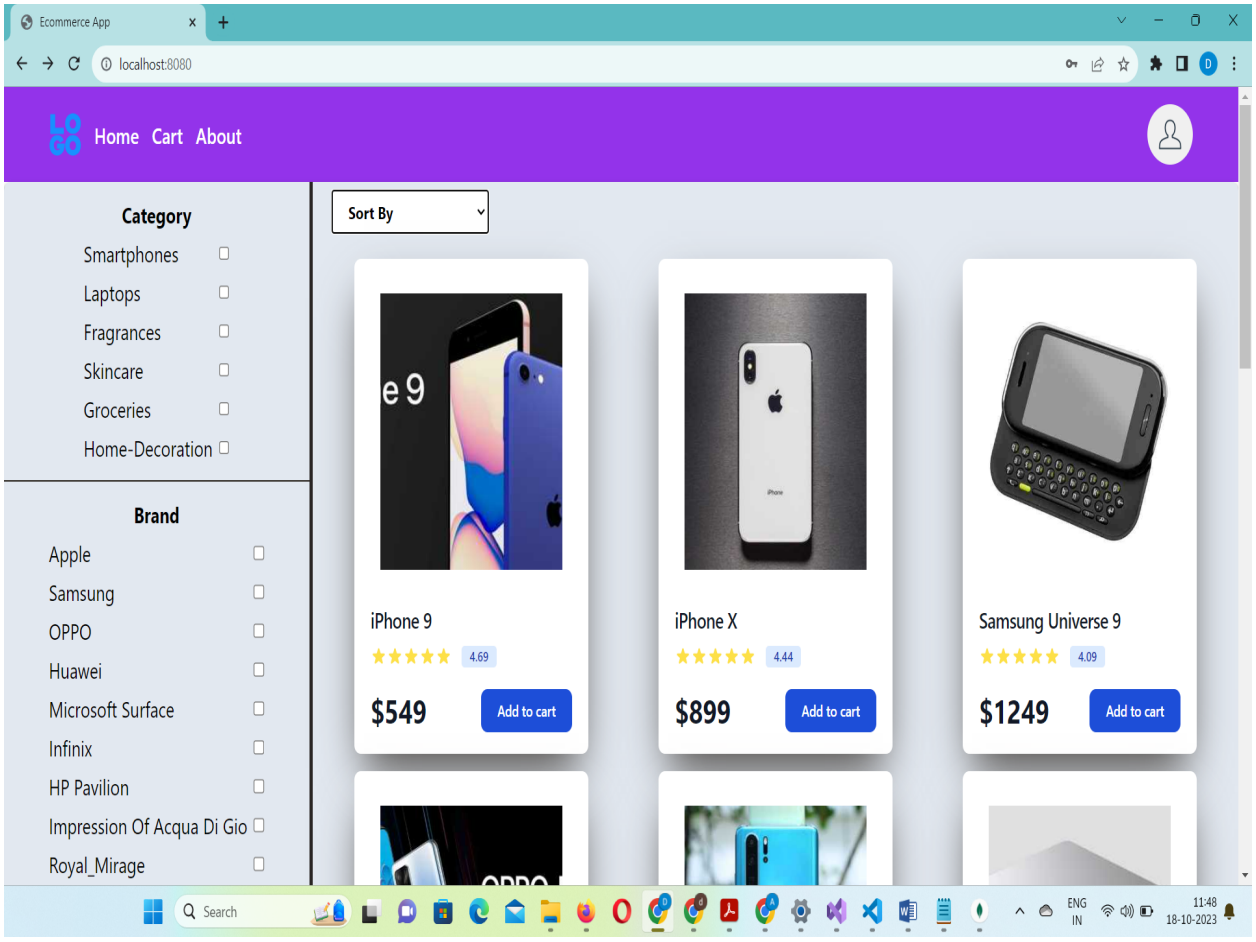
Security Testing:

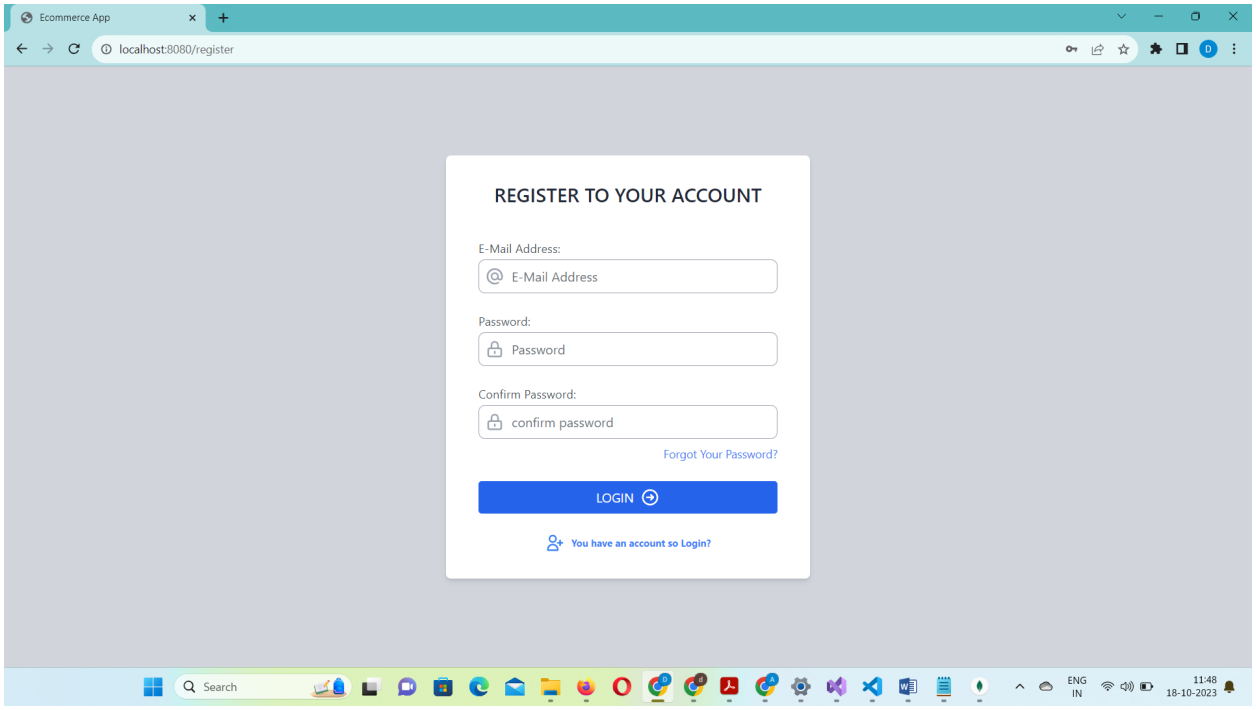
Identify and address vulnerabilities related to data security, authentication, authorization.

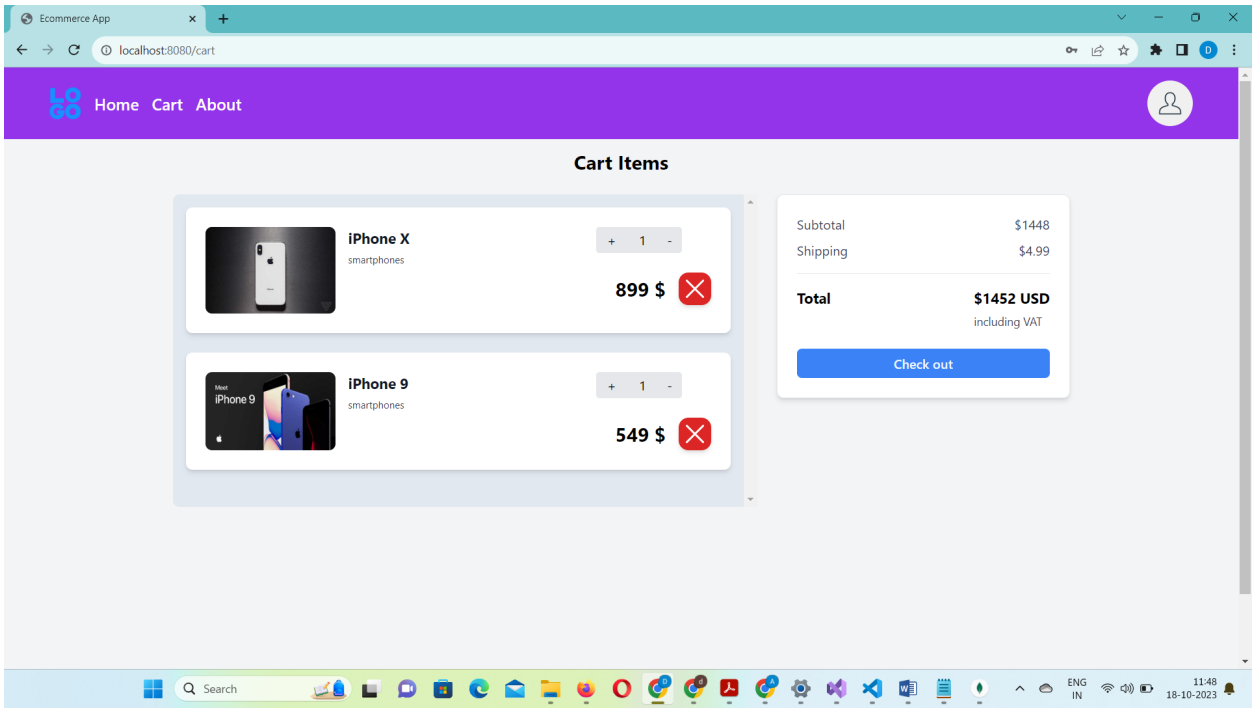
Regression Testing:

Verify that new updates or changes do not adversely affect existing features.

Screen-shots




Ecommerce App
localhost:8080/register
REGISTER TO YOUR ACCOUNT
E-Mail Address:
E-Mail Address
Password:
Password
Confirm Password:
confirm password
Forgot Your Password?
LOGIN
You have an account so Login?


Ecommerce App
localhost:8080/cart
Home Cart About
Cart Items
iPhone X
smartphones
899 $
iPhone 9
smartphones
549 $
Subtotal $1448
Shipping $4.99
Total $1452 USD
including VAT
Check out

Conclusion

Our System has various functionalities.
The functionalities which we have implemented are:

1. **Sign Up:**

   -> Ordinary: This includes the normal way to sign up, that is by entering the details provided in the form. At first we take the data entered by the user then we add it in our database if the user already exists then it gives the message of “User already exists”.

2. **Login:** After Sign Up the user has to login to perform various tasks on our website. When the user enters his email and password we take that check in our database that user email and password are valid or not.If not then the message displayed is “Please enter proper email and password.”If it is proper then it is redirected to the Home page.

3. **Logout:** When the user has completed his task then they can logout from the website.

4. **Filtering of the Categories:** As my website has the products of all the categories so if the user wants the products for only category then they can filter it out from the drop down list.If they want to see all the NGOs then can also see all the NGOs.

Limitation and Future Extension

The limitation of my project:

- The limitation of our website is to forget password.If we have changed the password then they have to be authenticated but here we have not implemented that.

    - I have not implemented payment gateway function so in future i will upon that.

List possible future extension to your project:

- My project is looking poor in front-end side so in future i might be work upon that part.
- I can also add user photo while they sign in.

Bibliography

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