PHASE 3- REPORT

Laptop Retail Store - an e-commerce portal that will enable people to purchase laptops online

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1. Abstract:

The designed application is about the web-based application. Designed and developed in Visual Studio – ASP.net, MVC, Entity framework using C# and bootstrap. The whole application consists of UI i.e., the front end which receives and operates on data through the backend i.e., SQL database using SQL server. The whole application is also mobile responsive. The application contains different controllers and navigation which used to provide support for the website.

Problem statement:

Design an e-commerce portal for an existing retail company to sell the laptops, that lets people to purchase laptops on their website. The website must give interactions for the customers, admin and seller. Website should have features from shopping to billing for customers. Admin needs to have the facility to perform crud operations from backend.

3. Software Requirement:

- a. Visual Studio
- b. Bootstrap (HTML, CSS, Bootstrap)
- c. Libraries
 - i. Microsoft.AspNetCore.Identity.EntityFrameworkCore
 - ii. Microsoft.EntityFrameworkCore
 - iii. Microsoft.EntityFrameworkCore.SqlServer
 - iv. Microsoft.EntityFrameworkCore.Tools
 - v. Microsoft.VIsualStudio.Web.CodeGeneration.Design

4. Project Design:

• Firstly, install all the libraries required for the project. Give the connection string and setup the configuration for the backend and add the services for the same.

- Use Code first approach, to create Identity database table which will store the details of all users in the backend.
- Create the required tables in the backend. Using Data Base first approach and scaffolding method, import all the code for the tables and setup the complete backend and frontend configuration.
- Using ASP.net mvc and entity framework core, create all the controllers, models and views required for the project. These will include code for basic crud operations like listing, adding, editing, deleting, detailed view.
- Design the view, as per the customer requirement and give a structural design. Use the navigation method for navigation between different controllers and views.

5. Project Description:

a. The project mainly consists of 5 sections: Home, Identity, Customer, Admin and Seller.

b. Home Page:

- i. Consist of welcoming, about us and contact us page.
- ii. Gives navigation for sign up and sign in page

c. Identity page:

- i. Sign up: this will provide user to get registered either as customer or seller. As user gets registered their details get stored in the database
- ii. Sign in: this will provide user to get signed into dashboards. Using entity framework users get validated to their email and password and get into dashboard

d. Customer Dashboard:

- In customer dashboard, customer can view their account details, edit their account or permanently delete their account.
- ii. A logout button is provided to get out of the session
- iii. Customer can purchase the products available on the dashboard.

- iv. Customer can place their interested products in cart or delete from cart.
- v. Customer can buy the laptops through series of steps and can get the bill for the purchase

e. Seller Dashboard:

- i. In seller dashboard, seller can view their account details, edit their account or permanently delete their account.
- ii. A logout button is provided to get out of the session
- iii. A seller can view the products that they published and can perform crud operations on those products.
- iv. A seller can only see all the products available in the store and cannot manipulate anything.
- v. A seller can add new products to the website.

f. Admin Dashboard:

- i. Admin act as intermediate between sellers and customers.
- ii. There will be only one admin to the website
- iii. In admin dashboard, admin can view their account details, edit their account or permanently delete their account.
- iv. A logout button is provided to get out of the session
- v. Admin can view all the customers list who had registered and can delete the customer if they want.
- vi. Admin can view all the customers list who had registered and can delete the customer if they want.
- vii. Admin can view all the sellers list who had registered and can delete the seller if they want.
- viii. Admin can see all the products list available and can delete the products if they wish.
 - ix. Admin can see complete sales report of their website.

g. All these data that are getting operated will be updated in database. Every operation related to data performed with the help of database.

6. Conclusion:

From the assignment, I could learn about web-based application. I could able to learn about ASP.net, mvc core, entity framework, sql data base and many more concepts regarding front-end and backend technologies.