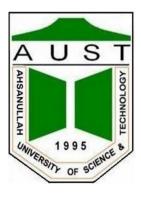
AHSANULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY (AUST) 141 & 142, Love Road, Tejgaon Industrial Area, Dhaka-1208.



Department of Computer Science and Engineering Program: Bachelor of Science in Computer Science and Engineering

Project Report

Course No: 3100

Course Title: Software Development IV

Project Title: HobNob (An E-Commerce Website)

Date of Submission: 24.08.23

Submitted to

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HobNob

An One Stop Solution to All Your Shopping Needs

Introduction:

The HobNob ECommerce Website is a comprehensive online platform that offers a seamless shopping experience for users while providing businesses with a platform to showcase and sell their products. The platform features both an admin panel and a user panel, allowing administrators to manage products and users while users can browse, select, and purchase products.

Motivation:

The surge in online shopping's popularity has driven the development of HobNob. The project's core motivation is to create a robust, efficient, and userfriendly web platform that meets the diverse needs of online shoppers. By harnessing technological capabilities, HobNob aims to redefine the ecommerce landscape.

Advantages:

HobNob is all about enhancing your shopping experience. With an intuitive interface, we make browsing a breeze. Our vast product range ensures there's something for everyone. Enjoy tailored recommendations from our data driven system, and shop with confidence thanks to our secure transactions. We're not just a marketplace – we empower local businesses and promote sustainability by partnering with ecofriendly vendors. Join HobNob for a thoughtful and enjoyable shopping journey that supports both your needs and the planet.

Disadvantages:

While HobNob boasts clear advantages, it's also attentive to potential drawbacks:

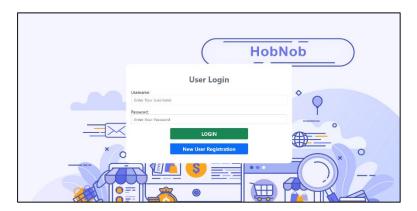
Initiating the platform demands substantial upfront investments in technology and marketing. Continuous maintenance and updates are vital for sustained efficiency, possibly requiring extra resources. Despite careful development, technical glitches can arise, affecting user experience and reputation. Competing in a crowded ecommerce market requires strong differentiation to carve out a niche. HobNob addresses these challenges proactively to ensure a successful journey.

Design Overview:

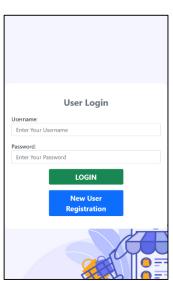
Following is the UI (User Interface) Design of our website.

<u>User Panel</u>

User Login -

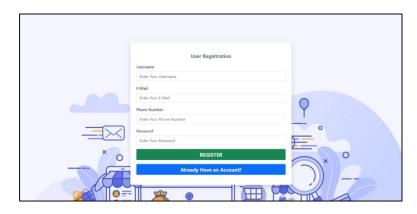


Desktop View

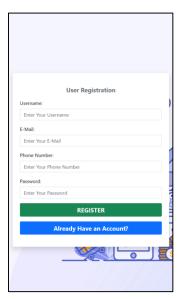


Mobile View

User Registration -

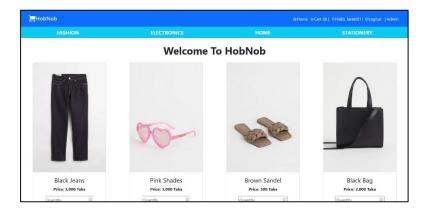


Desktop View



Mobile View

Home Page -

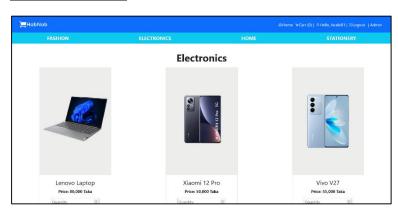


Desktop View



Mobile View

Sort By Category -

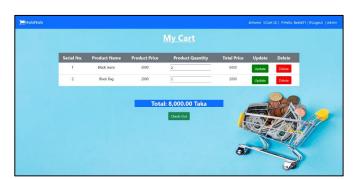


Desktop View



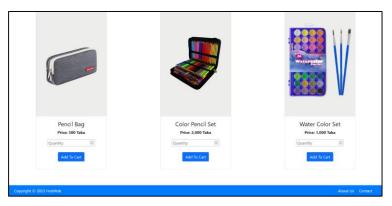
Mobile View

My Cart -

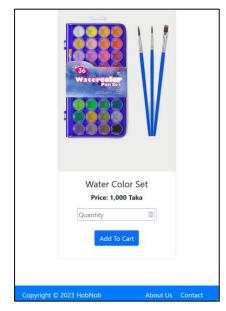


Desktop View

Footer -

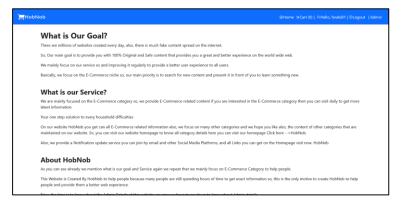


Desktop View

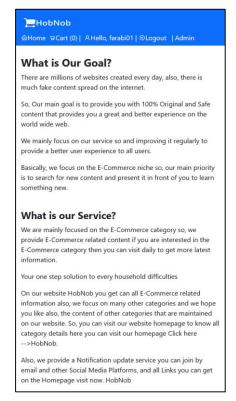


Mobile View

About Us -

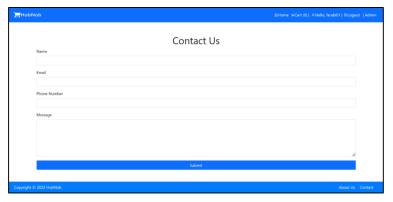


Desktop View

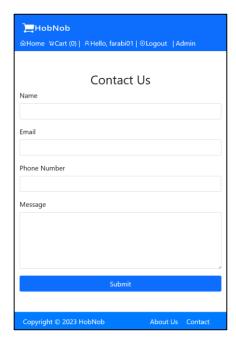


Mobile View

Contact -



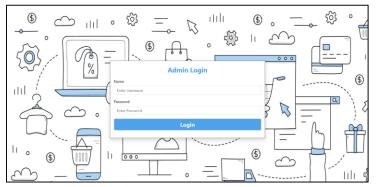
Desktop View



Mobile View

Admin Panel

Admin Login -



Desktop View

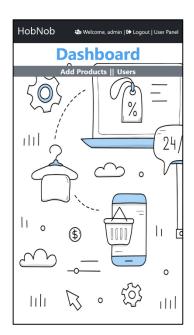


Mobile View

Admin Home Page -

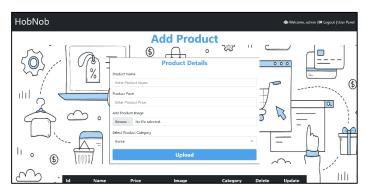


Desktop View

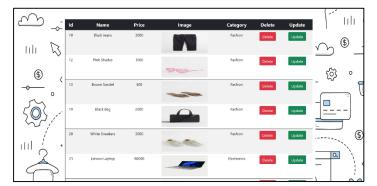


Mobile View

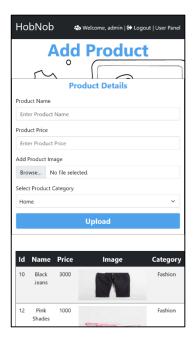
Add Product -



Desktop View



Table



Mobile View

User List -



Desktop View



Mobile View

Web Application Specifications:

Front-End Language: HTML (Hyper Text Markup Language)

CSS (Cascading Style Sheet)

Back-End Language: PHP (Personal Home Page)

IDE: Microsoft Visual Studio Code

Features:

- **I. User Registration**: The user can create his or her own profile with all the necessary information required login to the website.
- **II. Customer/ User Login:** The user or customer can login after completing their registration in the application and use the application to its full potential.
- **III. Admin Login:** The admins of the app can login and maintain all the admin works like add, update and delete products. See the total number of users registered in the website
- **IV. Category Sort:** User can sort the products based on the categories available in the website. This enables easy navigation for the user and creates ease of use.
- **V. Shopping Cart:** User-friendly cart to manage all the selected items by the user or customer.
- VI. Add Products (User): Users can add products to the cart for shopping.
- **VII. Check-Out:** The user or customer can checkout and place the order successfully for a secure and streamlined order process.
- VIII. Add Products (Admin): Admins add new products and its image to the catalog.
- IX. User List: Admins can view and manage registered users.
- X. About Us: Details about design and development team behind the application.
- **XI. Contact:** Users can contact the developer through a message box.

Functionalities:

The website's functionalities provide a user-friendly experience, including easy registration and login, efficient product browsing, secure transactions, order tracking, user reviews, and responsive customer support. These features empower seamless navigation and confident interactions within the platform.

Implementation Approach:

Developing HobNob entails a comprehensive approach:

Front-End and Back-End Development: Expertise in both frontend (user interface) and backend (server side) development is essential for a seamless experience.

User Interface Design: A visually appealing and user friendly design is critical for user engagement and retention.

Integration of User and Admin Logins: The secure login systems need to be integrated seamlessly into the platform's architecture.

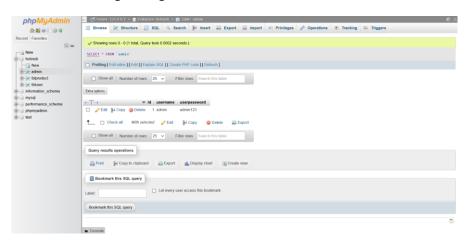
Product Management Functionalities: Developing user friendly tools for sellers to manage their product listings is crucial.

Shopping Cart and Checkout Process: Creating a smooth, secure, and user friendly shopping cart and checkout process is essential for conversion rates.

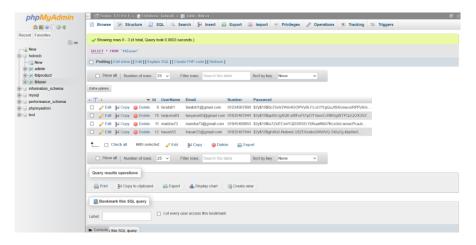
Database:

HobNob's database will store all the essential data

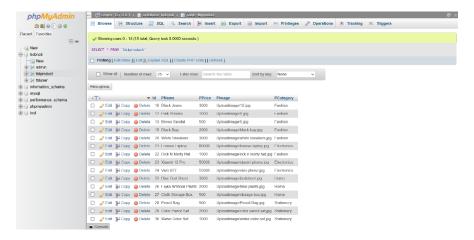
Admin Credentials: Secure storage of login information



User Credentials: Secure storage of login information.



Product Details and Categories: Accurate and up-to-date product information.



Errors and Difficulties:

Anticipated challenges in HobNob's development and operation include:

During the development and operation of the platform, challenges such as unexpected technical glitches despite rigorous testing, the ongoing need to ensure robust security against breaches, potential compatibility issues across devices and systems, addressing scalability challenges during traffic surges, and managing the balance between promoting sustainable products while considering potential cost implications may arise. These hurdles necessitate proactive measures to maintain a seamless user experience and successful platform performance. Some of the notable difficulties faced are —

- Adding a robust payment system.
- Dynamic update of product quantities after check-out
- Customer feedback and review after purchase
- Enlarged view of each item after clicking on it

In conclusion, the HobNob ecommerce platform is propelled by the need for an outstanding online shopping experience. While its advantages offer substantial benefits, potential disadvantages and challenges underscore the complexity of its development. A thorough implementation approach, meticulous database management, and proactive measures to address errors and difficulties are essential to realizing HobNob's vision of reshaping the ecommerce landscape.