**FACULTY OF ENGINEERING, DESIGN AND TECHNOLOGY**

DEPARTMENT OF COMPUTING AND TECHNOLOGY

EASTER 2024 SEMESTER PROJECT-BASED EXAM REPORT

PROGRAM: Bsc. Data Science and Analytics

COURSE: Web Application Development

COURSE LECTURER: Mr Kenneth Musasizi

PROJECT TITLE: CEN-BOOKS --online bookstore

*Submitted by*

|  |  |  |  |
| --- | --- | --- | --- |
| S/N | Reg Number | Name | Signature |
| 1. | M23B38/005 | EMMANUEL NSUBUGA |  |

Date Submitted: …………………………………

GitHub Link:…………………………

Video Link:………………….

1.0 Abstract *(Half a page)*

2.0 Introduction, problem statement, and project objectives *(1-2 Pages)*

3.0 Methods, tools, and designs used for the project *(1-2 Pages)*

Online bookstore application developed using ReactJS.

Styling was made using

CSS

React-Bootstrap

Font Awesome Icons.

Designs

REST API (backend)

Client App (frontend)

Features of Cen-books app:

3.3.1 Navbar and Footer

Navbar: Implemented a responsive navigation bar for easy navigation throughout the website, providing links to key sections such as home, categories, user profile, and shopping cart.

Footer: Designed and integrated a footer section containing essential links, contact information, and social media links for enhanced user experience and accessibility.

3.3.2 Register and Login Forms

Register Form: Created a user-friendly registration form allowing new users to create an account by providing necessary information such as username, email, and password.

Login Form: Developed a login form with proper validation to authenticate users securely and grant access to their accounts.

3.3.3 Validations

Implemented form validations on the registration and login forms to ensure the integrity and security of user input, preventing common issues like invalid email formats or weak passwords.

3.3.4 Administrator Role

Administrator Dashboard: Created a dedicated admin panel accessible only to users with administrative privileges, enabling them to manage books, user accounts, and site settings.

Book Management: Implemented functionality for administrators to add new books, edit existing book details, and delete books from the inventory.

User Account Management: Provided administrators with the ability to view user accounts, edit profile information, and delete accounts if necessary.

3.3.5 Edit Profile Information

Implemented a user profile section allowing registered users to view and edit their profile information, such as username, email address, and password, providing a seamless user experience.

3.3.6 Breadcrumbs

Integrated breadcrumb navigation throughout the website to enhance user navigation and provide clear paths for users to backtrack through the website's hierarchical structure.

3.3.7 Shopping Cart

Developed a shopping cart functionality allowing users to add books to their cart while browsing the bookstore and proceed to checkout when ready, facilitating a convenient shopping experience.

3.3.8 Filters

Implemented filters and sorting options to help users easily find books based on criteria such as genre, author, publication date, and price range, enhancing the browsing experience and enabling efficient book discovery.

3.3.9 Order History

Created a feature enabling registered users to view their order history, including details such as order date, book titles, quantities, and total cost, providing transparency and facilitating repeat purchases.

Tech used

Backend

- Nodejs

- Rest API

- Expressjs

Frontend

- Reactjs

- CSS

- javascript

- Font Awesome Icons

- React-Bootstrap

4.0 Results *(2-5 Pages)*

*(Description of the project developed, justifying how it solves the problem and achieves the set objectives.)*

5.0 Conclusion & Recommendation (1 Page)

6.0 References (if Any)

7.0 Appendices *(if any, including screenshots, codes, etc)*