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**BOOKSTORE WEBSITE**

**activity report**

**march to may, 2023**



1. **STATUS OF ACTIVITY**

## ACTIVITY SUMMARY

During the reporting period, the E-commerce Bookstore Website project made significant progress towards its completion. The following activities were undertaken:

## Product Planning And Setup

* Conducted a thorough analysis of requirements and identified project scope.
* Created a detailed project plan, including timelines.
* Established communication channels and collaboration tools for effective project management: Trello, Microsoft Teams

## Technology Selection

* Conducted research and analysis to select appropriate technologies
* Choose Java Spring Boot as the BE framework and ReactJS as the FE library, considering their scalability, flexibility, and industry popularity.
* Identified and integrated necessary supporting tools and libraries

## System Architecture Design

* Designed the overall system architecture, following the principles of Domain-Driven Design (DDD), Model-View-Controller (MVC) & Component-Based architectures
* Defined the application layer, domain layer, and infrastructure layer, ensuring a clean separation of concerns.
* Implemented a component-based architecture for the frontend, enabling reusability and maintainability.

## Frontend Development:

* Developed intuitive UIs using ReactJS, ensuring a seamless and engaging user experience.
* Implemented responsive design techniques to optimise the website for different screen sizes and devices.
* Integrated component libraries and frameworks to enhance FE functionality and aesthetics.

## Backend Development:

* Implemented the backend functionalities using Spring Boot, including product management, voucher management, order management, order tracking, shopping cart, and payment processing.
* Integrated with third-party APIs for features such as payment gateways.
* Implemented data persistence and management using appropriate databases and ORM frameworks.

## Quality Assurance and Testing:

* Conducted rigorous testing to ensure the functionality, performance, and security of the website.
* Performed manual tests to identify and resolve issues.
* Collaborated with the Quality Assurance team to implement effective test strategies and ensure high-quality deliverables.

## Deployment and Release:

* Prepared the system for deployment in a production environment.
* Released the website to the live environment, monitoring its performance and addressing any post-deployment issues.

## Project Documentation:

* Created detailed documentation, including use case specifications, user manuals, ect.
* Compiled a comprehensive project report, summarising the project's purposes, achievements, challenges

Overall, the E-commerce Bookstore Website project has made substantial progress in terms of technology implementation, frontend and backend development, quality assurance, and documentation. The project team remains dedicated to delivering a high-quality and user-friendly online bookstore platform.

## MAJOR TASKS, PRODUCTS AND SERVICES

## Major Tasks:

Requirement gathering and analysis: Conducting interviews, surveys, and market research to understand the needs and expectations of bookstore customers and stakeholders.

## System architecture and design: creating a comprehensive system design that encompasses frontend and backend components, database structure, and integrations with third-party services.

## Frontend development: implementing the user interface (UI) and user experience (UX) design using HTML, CSS, and JavaScript frameworks such as ReactJS.

## Backend development: building the server-side logic, database management, and API integrations using technologies like Spring Boot, Java, and SQL.

## Database design and management: designing and implementing an efficient database structure to store and manage product information, customer data, and order details.

## E-commerce functionality: developing necessary features

## Quality assurance and testing: conducting comprehensive testing, including unit testing, integration testing, and user acceptance testing, to ensure the functionality, performance, and security of the website.

## Deployment and maintenance: deploying the website to a production environment, configuring servers, monitoring performance, and providing regular updates and maintenance to ensure a seamless user experience.

## Products and Services:

## Online bookstore website: a fully functional e-commerce website where customers can browse and purchase books conveniently.

## User registration and authentication: secure user registration and login functionality to allow customers to create accounts and manage their profiles.

## Role-Based Access Control: designing and implementing to manage user permissions based on their assigned roles. This involves associating specific roles with different functionalities and determining the level of access each role has.

## Product management: a system to manage and update the book inventory

## Voucher management: a system to manage and update the voucher inventory

## Shopping cart and order management: A feature that enables customers to add books to their cart, review their orders, and proceed with secure payment processing.

## Secure payment: ensuring the security of payment transactions is of utmost importance in a bookstore e-commerce website.

## Search, sort and filter capabilities: robust search functionality to help customers find specific books based on titles, authors, genres, and other relevant criteria.

## Order tracking and notifications: real-time updates on order status, shipping details, and notifications to keep customers informed about their purchases.

These major tasks and deliverables, along with the provided products and services, contribute to the successful implementation and operation of the Bookstore E-commerce Website project.

## SUMMARY OF ISSUES

## Lack of Mobile Responsiveness: the website may not be optimised for different devices, resulting in a subpar user experience for mobile users.

## Lack of User Account Management: the absence of robust user account management features, such as profile customization, password reset, and account deletion, may hinder user engagement and satisfaction.

## Lack of Wishlist and Bookmarks: the website does not offer a wishlist or bookmarking feature, which can limit user convenience and the ability to save and track desired books.

## Lack of Recommendation Function: the absence of a recommendation system based on user preferences and browsing history may reduce personalised book suggestions and hinder the discovery of new titles.

## Lack of User Ratings and Reviews: the website does not provide a platform for users to leave ratings and reviews for books, limiting the social proof and influencing purchasing decisions of potential customers.

## Lack of Shipping Management: the system may lack comprehensive shipping management features, leading to challenges in tracking orders, managing shipping options, and providing timely delivery updates to customers.

## Challenges in Performance Optimization: scalability issues, inadequate code optimization, insufficient performance testing and monitoring

## Addressing these weaknesses through proper planning, optimization techniques, and continuous performance monitoring will help enhance the overall quality and user experience of the Bookstore e-commerce website.

# events

## Member role

| **No** | **Name** | **Role** |
| --- | --- | --- |
| 1 | Đàm Thị Linh | Team lead, BE, FE, tester |
| 2 | Trần Thị Hường | BE, FE, BA, tester |
| 3 | Nguyễn Thị Nhung Anh | BE, FE, BA, tester |
| 4 | Lại Thị Minh Trang | BE, FE, BA, tester |
| 5 | Đặng Quỳnh Trang | BE, FE, BA, tester |
| 6 | Nguyễn Hoàng Vỹ | BE, FE, BA, tester |

## Project and activity Meetings

| **Date** | **Location** | **Title** | **Participants** | **Outcome (short report)** |
| --- | --- | --- | --- | --- |
| 19/2/2023 | HANU | Sprint 1 | All | Review all work done by each member  Gain new requirements from stakeholders  Distribute new sprint backlog and product backlog |
| 2/4/2023 | HANU | Sprint 2 | All | Review all work done by each member  Gain new requirements from stakeholders  Distribute new sprint backlog and product backlog |
| 23/4/2023 | HANU | Sprint 3 | All | Review all work done by each member  Closing project |

## Activities assignment

| **Title** | **Participants** | **Activities** |
| --- | --- | --- |
| Sprint 1 | Đàm Thị Linh | Project plan  System architecture  Login code |
| Trần Thị Hường | User Requirement  Use case diagrams for register, login, logout  Activity diagrams for register, login, logout |
| Nguyễn Thị Nhung Anh | Class diagrams for user, customer, admin  Sequence diagram for register, login, logout  Written use cases for register, login, logout  Register code |
| Lại Thị Minh Trang | User Requirement  Use case diagrams for register, login, logout  Activity diagrams for register, login, logout |
| Đặng Quỳnh Trang | Register code  Login code  Logout code |
| Nguyễn Hoàng Vỹ | Sequence diagrams for register, login, logout  Class diagrams for user, customer, admin |
| Sprint 2 | Đàm Thị Linh | Validate form in FE  Add product code, doc & test  Add product to shopping cart code, doc & test |
| Trần Thị Hường | Add product code, doc & test  Update product code, doc & test  Delete product code, doc & test |
| Nguyễn Thị Nhung Anh | Filter products by category |
| Lại Thị Minh Trang | Update profile code, doc & test |
| Đặng Quỳnh Trang | Homepage with paging code, doc & test  Search with paging code, doc & test  Sort with paging code, doc & test  Role-based access, not found & access denied page |
| Nguyễn Hoàng Vỹ | Upload product images from device |
| Sprint 3 | Đàm Thị Linh | Update order status  Get order history (customer)  Check out order |
| Trần Thị Hường | Check out order  Onlilne payment |
| Nguyễn Thị Nhung Anh | Update order status  Get order history (customer) |
| Lại Thị Minh Trang | Admin pages code, doc, test  Add, delete voucher (admin) code, doc, test  Add discount & paging in product management  Activity report |
| Đặng Quỳnh Trang | Admin pages code, doc, test  Add, delete voucher (admin) code, doc, test  Add discount & paging in product management  Activity report |
| Nguyễn Hoàng Vỹ | Upload product images from device (continue)  Online payment  Deployment |