

International School

**Requirements Engineering Project**

CMU-SE 200 GIS

**Project Proposal**

**Version 1.0**

**Date: November 21 2024**

**Bookstore Management Project**

**Created by <Group 8>**

*List names of team members with ID*

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**Approval of Mentor:**

Name Signature Date

#### **PROJECT INFORMATION**

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| --- | --- | --- | --- |
| **Project acronym** | Bookstore Management Project | | |
| **Project Title** | The smart travel system supports chatbot and integrates short video social network | | |
| **Start Date** | 21 Nov 2024 | **End Date** | 12 Dec 2024 |
| **Lead Institution** | International School, Duy Tan University | | |
| **Project Mentor** | Msc, Thuan, Nguyen Trung | | |
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| **Partner Organization** | International School, Duy Tan University | | |
| **Project Web URL** |  | | |
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**REVISION HISTORY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Version** | **Date** | **Comments** | **Author** | **Approval** |
| 1.0 | 21/11/2021 | Initial Release | All members |  |

**1. Project Title**

* Building an Automatic Bookstore Management Platform

**2. Project Overview**

* **Objective:** Build a comprehensive software system to effectively manage bookstore business operations, from book management, inventory import and export, to sales and customer interaction.
* **Targets:** Bookstore owners, sales staff, customers.
* **Expected results:** Increase management efficiency, minimize errors, enhance customer experience and optimize profits.

**3. Reasons and motivations for implementing the project**

* **Actual needs**: Bookstores today often face many challenges such as: manual management, loss of goods, difficulties in inventory tracking, and lack of effective sales support tools**.**
* **Benefits:** The new system will help bookstores automate processes, improve data accuracy, reduce personnel costs and management time, and create a more professional shopping experience for customers.

**4. Proposed solution**

* + **Main features:**
* **Book catalog management:** Add, edit, delete book information, classify books by genre, publisher.
* **Warehouse management:** Track inventory quantity, automatically import and export, low inventory warning.
* **Sales management:** Quickly calculate money, create invoices, integrate online payments.
* **Customer management:** Store customer information, build loyalty programs.
* **Statistical reports:** Provide detailed reports on revenue, inventory, customers to support business decision making.
* **Technology:**
* **Programming language:** Python, Java, C#
* **Database:** MySQL, PostgreSQL
* **Framework:** Django, Laravel, Spring
* **Cloud platform:** Google Cloud, AWS, Azure

**5. Similar projects**

* **Analysis**: Research existing sales management software on the market such as **Sapo, Haravan**, to compare advantages and disadvantages and identify features that need improvement**.**
* **Differences:**
* Integrate features specific to the book industry such as: related book suggestions, author and publisher management.
* Friendly interface, easy to use, suitable for non-tech people.
* Low implementation cost, easy to customize and expand.
* Note: To complete the plan, you need to perform the following steps:
* Detailed requirement analysis: Clearly identify the specific requirements of the bookstore, prioritize the necessary features.
* Implementation plan: Build a project implementation roadmap, assign tasks, determine necessary resources.
* Risk assessment: Identify possible risks and plan responses.Create a table for a comparison of these products. (see example)

**6. Objectives and Deliverables**

* **Objective**: Develop an efficient book warehouse management system, including warehousing, warehousing, inventory and inventory tracking.
* **Objective:** Build an intuitive interface for customers to search and order books
* **online.**
* **Objective:** Integrate a secure and convenient online payment system.
* **Deliverable:** A web or mobile application that manages the entire bookstore operations, from book management to customer interaction**.**

**7. Methodology and Tools**

* **Methodology:** Apply Agile methodology to flexibly adapt to changes and ensure product quality.
* **Tools:**
* **Backend:** Python (Django or Flask), PostgreSQL or MySQL for database management.
* **Frontend:** React or Angular for building user interfaces.
* **Payment:** Integrate with online payment gateways such as PayPal, Stripe.
* **Project Management:** Jira or Trello to track progress and manage tasks.

**8. Timeline**

* **Week 1:** Requirement Research and Analysis and Database Design and System Architecture
* **Week 2:** Backend Development and Frontend Development
* **Week 3:** Integration and Testing, Deployment and Delivery

**9. Project Team**

* **Kien** - Project Lead: Manage the entire project, coordinate work.
* **Thanh** - Backend Developer: Develop server-side software.
* **Duc** - Frontend Developer: Develop user interface.
* **All member** - Tester: Test product quality.

**10. Risk Management**

* **Risks**: Database issues, software bugs, changing customer requirements.
* Solution: Regular data backups, thorough testing, contingency plans, flexibility to change.

**11. Budget and Resources**

* **Budge**t: Estimated budget for software, cloud services, personnel costs.
* **Resources**: Computers, development software, cloud accounts, reference materials.

**12. Conclusion**

* **Example**: “This project aims to build a unified sales management platform, helping bookstores effectively manage different sales channels such as traditional stores, websites and e-commerce platforms. The system will help synchronize data, manage orders, track sales and provide detailed analytical reports. This project will contribute to the field of e-commerce and management information systems, helping bookstores adapt to the trend of online shopping.”