

Progress Report

IT2143 Visual Programming (P)
Group M

Title: University Library Management System

Objective: The objective of this project is to develop a user-friendly and efficient library management system using C# and Visual Studio. The system will enhance the library's ability to organize and manage its resources effectively, improve accessibility and user experience for library patrons, and facilitate collaboration and communication between library staff and patrons.

Prototype:

Figma Project Link:

<https://www.figma.com/proto/yQi3fmJqOkXyGENafoGmGR/Library-Management-System?type=design&node-id=1-7&t=UwoSvT4biuXP7Q1P-1&scaling=contain&page-id=0%3A1&mode=design>

Progress:

- **Identified User Groups:** Our team has identified the primary users of the system as library administrators and students.
- **Defined Functional Requirements:** We have outlined the key functionalities required by both user groups:
 - **Admin:** User management, book and resource management, system maintenance, reporting and analytics, security, and data import/export.
 - **Students:** Book search and browsing, borrowing and return management, hold and reservation placement, account management, online resource access, review and recommendation features, and library information access.
- **Development Strategy:** We have decided to build the system iteratively, starting with a basic version and gradually adding more features based on feedback and user needs.
- **Development Focus:** Initially, we will focus on developing the admin side of the system, ensuring its functionality before moving to the user interface and functionalities.
- **Design Progress:** We have created wireframes and a prototype interface design for the system using Figma.

We plan to utilize the following technologies and tools for development:

- **Programming Language:** C#
- **Integrated Development Environment:** Visual Studio
- **User Interface Design:** Figma/Visual Studio
- **Database:** MySQL

We will utilize the Agile Scrum methodology for development, which allows for iterative development with short cycles of planning, execution, and review. We plan to address technical difficulties through continuous testing, code reviews, referring online resources, and seeking expert help. We will manage scope creep by prioritizing essential features and using a detailed project plan. To keep healthy communication between team members we plan to hold online meetings through communication platforms like WhatsApp, zoom and we are currently maintaining a WhatsApp group to share important notices and a GitHub repository to share current progress among ourselves.