

# **A Proposed offering Library Management System at Navotas City Library**

**Prepared by:**

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## **INTRODUCTION**

The Proposed Library Management System for the Navotas City Library is a digital platform developed to make it easier for the visitors in finding the book their looking for and to help the staff in managing the library. Instead of the visitors search through the bookshelves one by one, they can just ask the librarian through the help of this system and it will help the librarians in managing books, tracking borrowed books and returned books. This system aims to reduce the work for both the visitors and the librarian.

Most of the libraries still operate without a digital system and only operates through manual record keeping and listing which is prone to human errors such as lost of books, tracking errors, and inefficient management of books. As a result, this errors often leads to frustration and addition to the work of the librarians. By the help of a Library Management System libraries can better organized their management and help their visitors too.

### **This project aims to:**

- Develop an easy to use system so that the librarians can manage it easily.
- Implement a search feature to easily find books their looking for.
- Provide assistance in tracking the borrowed and returned books.
- Improve the overall work in the library and reduce human errors.

## CLIENT INFORMATION



**Client Organization:** Navotas City Library

### **Other Information's**

#### **Address:**

M. Naval St., Barangay Sipac-Almacen, Navotas City, Navotas, Philippines

#### **Facebook Page:**

[https://www.facebook.com/NavotasLibrary?mibextid=rS40aB7S9Ucbxw6v\](https://www.facebook.com/NavotasLibrary?mibextid=rS40aB7S9Ucbxw6v)

#### **About Navotas City Library:**

Navotas City Library is a public library committed to promoting reading, learning, and community engagement. It offers a wide selection of books and educational resources for all ages, hosts literacy programs and events, and provide a welcoming space for study and exploration. The library also shares updates and activities through its active Facebook page, helping connect with the local community.

## PROJECT SCOPE

**Deliverables and Outcomes:**

These are the specific outcome of this project

- Fully functional Library Management System.(for Laptop or Computer only)
- Simple and Manageable User Interface.
- System Database to manage books, and borrowing history.
- Track borrowed books, due dates and return logs.
- Reduction in manual errors and paperwork.

**Inclusions:**

These are all covered in this project

- On-site installation
- Database (for book and borrower's information).
- Book search functionality.
- Training session (for the librarians).

**Exclusion:**

These are not covered in this project

- Mobile app version of the system.
- Prints receipts when borrowing books.

**Assumptions:**

These are the assumptions made during the project planning

- The librarians will manually encode the books information.
- One of the Librarians will volunteer in this project's training.

### **Constraints:**

These are the possible constraints that may impact this project

- The system design is for windows 10 above only.
- System failure or errors.

### **PROJECT APPROACH**

The project will follow the Agile Methodology, which allowed the client to be involved with the project. The methodology allowed the proponents to gather feedback from the users and addresses their concerns.



### **Agile Phases:**

## **1. Planning**

Define the system features, user roles, and reports to be included based on the project's objectives.

Gather all necessary data for the library management.

## **2. Designing**

Design the database structure (for books and borrower's information).

Create user interface for manageability.

## **3. Developing**

Develop the book management, track borrowed books and returned books.

## **4. Testing**

Perform testing using sample system.

Check accuracy of the database and other features.

## **5. Deploying**

Prepare the final system for demonstration.

Document and present the project to the instructor or panel.

## **6. Reviewing**

Gather feedback from Librarians.

## **PROJECT TIMELINE**

This project will follow a clear timeline based on the Agile ScrumMethodology.

Milestone	Target Weeks
Planning	Week 1
Designing	Week 2
Developing	Week 3-4
Testing	Week 5
Deploying	Week 6-7
Reviewing	Week 8

Table 1: Library Management System Timeline

### Project Resource

These are the resources required in this project

#### A. **Hardware** (Equipment needed):

Laptops or desktops (windows 10 or above only).

#### B. **Software** (Programs needed):

Visual Basic 2010 (for the design or UI).

Sql Server Management Studio (for the database)

#### C. **Human Resources** (People needed):

Developer

Librarians

#### **Budget:**

1,000- for the Library Management System

1,000- for the Training and Services

500 – for other expenses like check up for the system and etc.

Total budget of 2,500 pesos.

## Risk Management

This table shows the potential risks that may impact this project and its mitigation for addressing identified risks.

Potential Risks	Mitigation Strategies
Accidental deletion and corruption of the database.	Implement regular data backups (local and cloud if possible).
Hardware failure that may cause issues to the system.	Maintenance of all the hardware use in the system.
Schedule delays that may cause delays in making the system	Strictly follow the project timeline to avoid delays.
Librarians not adjusting to the system	Prepare a proper training for the Librarians

Table 2: Risk and Mitigation

## COMMUNICATION PLAN

This is the overview of how communications will be managed throughout this project.

Frequency and format of project meeting

- **Frequency:** Weekly or as required.
- **Format:** Email updates or short presentations during class.
- **Purpose:** Provide updates on development status and milestones reached.

Key stakeholders and communication preferences

- **Librarian:** Prefer Facebook messages for quick coordination.
- **Instructor/Panel:** Prefer scheduled updates via email or class presentations.

## PROJECT GOVERNANCE



The Project Developer will oversee the development process, manage tasks, and ensure deadlines are met.

**Project Developer** – Handles all the system works.

**Librarians**– Validate features and give feedback.

## **APPROVAL**

Approved by: \_\_\_\_\_

(Client Representative: Navotas City Library)

Date: \_\_\_\_\_

## **APPENDIX**

### **Reference:**

A P, Shanmugam & A, Ramalakshmi & Ganeshan, Sasthri & S, Baalachandran. (2020). Library Management System. Xi'an Jianzhu Keji Daxue Xuebao/Journal of Xi'an University of Architecture & Technology. 12. 743-753. 10.37896/JXAT12.11/29777.