

Computer Practical Project 2021

by **Saksham Sharma**
on **September 23, 2021**

Overview

Following is a document listing the features of a Library Management System that was built after being frustrated by the manual handling of data at the local library. The features include a system to manage a database of books, Admins and Clients, and the ability to modify, sort and export relevant data. The document also includes basic instructions if one wants to modify the program

Objective

To Build a Library management system that is easy to use and provides a hassle free experience

- * Built with Python and QT Framework
- * MySQL Database Hosted on Azure

Features

Main system

- * Login Page
- * Users
- * Add Users (Signup)
- * Add a Book
- * Edit Book Info
- * Delete Book
- * Categories
- * Settings [Categs, Author, Publisher]
- * Day To Day Transaction Log
- * Reports [Excel Files]

Book

- * Title
- * ISBN Code
- * Description
- * Category
- * Price

- * Author
- * Publisher

Admin

- * User Name
- * Password
- * Email Id

Client / Students

- * Username
- * Student ID
- * Email ID

Day-to-Day

- * Book name
- * Type (Issue / Return)
- * Duration (weeks)

Category, Publisher, Author

- * Names

- * List

Future Prospects

- * WebApp
- * Integrate barcode scanning
- * Ability to select local or cloud database

Resources

Requirements

If you want to edit the .ui files ie the actual LOOK or LAYOUT

- * **Install on Windows (Link)**
- * **Install on Mac (Link)**

Installing on Linux (Debian and Fedora)

```
sudo apt-get install  
qttools5-dev-tools qttools5-dev  
sudo dnf install qttools5-dev-tools  
qttools5-dev
```

To install python dependencies use the requirements.txt file with python pip

Icon Manipulation:

Follow these steps to change the programs icons

1. Keep the same name (for ease)

In the folder, open terminal and run the following code

```
pyrcc5 icons.qrc -o icons_rc.py
```