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Project Report

On..

**Library Management System**

Developed By..

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&

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Submitted to ..

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Guided by..

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**Preface**

The purpose of this Library Management System is to improve the user experience and their awarenesses.

The Library Management System project will be used to minimize the time and the resource by maintaining the details of the user systematically so that the data can be used in possible quickest time.

While the resources which minimized are workforce,money and paper etc.

The system is user-friendly and will help the library and the scholars.

**Index**

|  |  |  |
| --- | --- | --- |
| **Sr.**  **No.** | **Description** | **Page**  **No.** |
| 1 | **Project Profile** | **3** |
| 2 | **Project Requirement** | **4** |
| 3 | **Technology Requirement** | **5** |
| 4 | **Data Flow diagram** | **6** |
| 5 | **ER diagram** |  |
| 6 | **Data Dictionaty** |  |
| 7 | **Screen Shots** |  |
| 8 | **Future Enhancements** |  |
| 9 | **Limitations of Project** |  |
| 10 | **Bibilography** |  |

**Project Profile**

|  |  |
| --- | --- |
| Project Title | The Library Management System |
| Objective of System | The Library management system will allow user to register with its user name and password and then user can login itself on this aaplication and can collect books for reading. |
| Hardware Requirements | Pentium 90 MHz or faster and 1GB RAM or higher |
| Software Requiremnts | Python version 3.11.9 or higher,  Mysql |
| Front-End | Python Customtkinter,tkinter |
| Back-End | Python Mysql.connector |
| Database | Mysql |
| Others | Ms-word 2019 |

**Project Requirement**

* Hardware Requirement

|  |  |
| --- | --- |
| **Hardware Name** | **Hardware** |
| Processor | Pentium or AMD |
| storage | 150MB or Higher |
| RAM | 1GB or Higher |

**Technology Requirements**

* Software Requirement

|  |  |
| --- | --- |
| **No.** | **Software Used** |
| 1 | Python |
| 2 | Mysql (Laragon) |
| 3 | Windows OS (Windows 10/11) |
| 4 | Visual Studio Code |

**Data Flow Diagram**

Library Database

User

Administrator

(view the book) user register

Read and write

Book request

and return

**ER Diagram**

Issue/

return

Manage

Admin

Users

Books

Keep

track

**Data Dictionary**

* **Reg\_table**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr no.** | **Field Name** | **Data**  **Type** | **Size** | **Constrain** |
| 1 | User\_id | Int | 5 | Primary Key,Foreign Key |
| 2 | First\_name | Varchar | 255 | - |
| 3 | Last\_name | Varchar | 255 | - |
| 4 | Address | Varchar | 255 | - |
| 5 | Email | Varchar | 128 | - |
| 6 | Mobile\_no | Varchar | 10 | - |
| 7 | Username | Varchar | 255 | - |
| 8 | Password | Varchar | 8 | - |

* **Admin Login**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr no.** | **Field Name** | **Data**  **Type** | **Size** | **Constrains** |
| 1 | Username | Varchar | 255 | - |
| 2 | Password | Varchar | 8 | - |

* **Books**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr no.** | **Field Name** | **Data**  **Type** | **Size** | **Constrains** |
| 1 | Book\_id | Int | 5 | Primary Key, Foreign Key |
| 2 | Title | Varchar | 255 | - |
| 3 | Author | Varchar | 255 | - |
| 4 | Genre | Varchar | 255 | - |
| 5 | Available | Boolean | - | - |

* **User\_collection**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr no.** | **Field Name** | **Data**  **Type** | **Size** | **Constrains** |
| 1 | Id | Int | 5 | Primary Key |
| 2 | User\_id | Int | 5 | Foreign Key |
| 3 | Book\_id | Int | 5 | Foreign Key |

**Screen Shots**