**SYNOPSIS**

LIBRARY MANAGEMENT SYSTEM

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SUB: DATABASE MANAGEMENT SYSTEM

**ABSTRACT:**

* **INTRODUCTION:**

Library Management project is a computer-based system. It reduces human made errors and to increase the efficiency. The main objective of this library management system project is to reduce human efforts and time. The maintenance of the records is made easy and all the records are stored in the SQL database which can be retrieved easily after words. Suitable navigation control is given in all the forms to navigate through the records in this project.

* **PROBLEM STATEMENT:**

Design a database that stores all the requirements of the library admin (librarian) and the customers.

* **BRIEF IMPLEMENTATION DETAILS:**

By using Python3 as frontend and keeping MySQL as the backend I am creating library database system. There will be several tables created inside the database which will represent each entity that I am going to create. These entities are related to each other by relationships and are mapped by cardinality ratios. The primary keys and the foreign keys are related to each other wherever it is necessary. All the constraints that a database should follow and the constraints that are applicable to the users are also are maintained properly.

* **EXPECTED OUTCOME:**

If the number of records is very large then user has to simply type in the search string and he will get the results immediately. The editing is also made simpler. The user has to just type in the required field and press the update button to update the required field. The Books and members are given a unique id no. So that they can be accessed without any error. Our main objective of this project is to get the correct data about a particular student and books available in the library. Even the library admin can access the information about the user and can check about the books issued by him/her. Librarian can also see the information about the issue and due date of a particular book issued by the user.

**SOFTWARE DEVELOPMENT:**

* FRONT END: Python3 language
* BACK END: MySQL