**inSight 2017**

**Department : Department of Library**

**Problem Title : Library management application**

**Problem Code : PS08**

**Problem Description :**

Library management application is an android application which aims in developing a computerized system to maintain all the daily work of library with a user friendly interface. This project has many features which are generally not available in normal library management systems like facility of user login and teachers login .It also has a facility of admin (librarian) login through which the admin can monitor the whole system .It also has facility of an online notice board where teachers and student can put up information about workshops or seminars being held in our colleges or nearby colleges.

Main features:

* It must contain journals, notes, e-books and previous years question papers that are present in OPAC.
* It must push a notification to the students at the time of book issue.
* It must send alert notification to the student about book submission and overdues.
* Students and teachers must see the books that are issued to them.
* Librarian i.e. admin of this application must search the students and books (book bank as well as normal book) issued to particular students with their issue date.

**Proposed solution:**

We will make use of Android to solve this problem. We will use the database of android, in order to store all the records, and can access any of the records whenever the admin or user or teacher wants. The application will contain three sections, Admin i.e. Librarian, Teachers and Students. When the application is opened, there will basically be two options, one is LOG-IN and OPAC. If anyone wants to access the OPAC, they need not to LOG-IN. We will store journals, notes, e-books and previous years question papers in the database, these can be accessed from the database using the OPAC option. LOG-IN will come into use, to know the number of books being issued to any particular student or teacher and number of particular books available. We will make use of local server, whenever a book is being issued to a student, a notification will be sent to that student. With the help of that local server, we will also send alert notifications to the students one week prior to date of submission of books. Supposedly, if a student fails to submit or return the book on time, another alert notifications will be sent regarding the dues or fine to be paid. Whenever a teacher logs into the application, they can also get to know about the books they have issued. Apart from that, they will have an option to put up information about workshops or seminars being held in our colleges or nearby colleges. As soon as they will upload these information, the local server will upload these information in the student section as a notice.

Finally comes the admin (Librarian) log-in, after logging into the application, the admin can access the whole application. He can check which student has issued which book, the date of return and related information. Admin can also check the books being issued to Teachers. **Technology Stack :**

* **ANDROID**
* **FIREBASE**

**Use Case:**

ONLINE NOTICE BOARD

NOTIFICATION

TEACHER

STUDENT

LIBRARIAN

OPAC

**Team Members details:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Role** | **Name** | **USN** | **Email id** | **Phone no.** |
| Team Leader | Sanchay | 1si15cs093 | [Sanchay.verma479@gmail.com](mailto:Sanchay.verma479@gmail.com) | 8147302779 |
| Team Member 1 | Sankalp Saurabh | 1si15cs096 | [iamsankalpsaurabh@gmail.com](mailto:iamsankalpsaurabh@gmail.com) | 9206397461 |
| Team Member 2 | Shubham K Thakur | 1si15cs111 | [Shubhamt426@gmail.com](mailto:Shubhamt426@gmail.com) | 9535025273 |