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## **Python Project Pre-Evaluation**

**Course Name: - INT213 Python Programming**

*Submitted To*

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*Submitted by*

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## **Introduction**

Book management is a key part of library management in any institution, The project “Design a Books Management System in LPU using python” (BMS using python) aims to build a compatible, extensible and general book management system software such that it can be integrated with any existing library management software to serve the key responsibilities such as in BMS issuing books, returns, record keeping etc.

The software we develop will adhere to the compatibility preferences without compromising on performance and security. As the book management system accounts for how robust a library management system is, and also considers the importance of transaction management in the design of a book management system.

## **Project Description**

The book management system, since a key part of the library management system, needs to be consistent about the storage of activity and transactions of books. The project is ensured to satisfy the basic needs of the book management system i.e., the foundational functionalities such as issue book, return book, view book stack, renew a book, etc.

The project support functionalities through independent, highly cohesive modules which are divided based on the operations they are responsible for.

## **Module Division**

The crucial modules, which might be simplified further, in building a book management system might include the following:

1. Main.py
2. Login.py (login/sign in)
3. Books.py (All books related activities)
4. Store.py (Book stocks and other activities)
5. NeedHelp.py (For newbies)
6. Report.py (Bugs or request)

## **Work Division**

We are a good team of 3 members and each of us is good at different tasks. In design and high-level planning (part of pre-work for the project) we 3 collaboratively improve or decide. In the actual development phase, the above mentioned, the work is divided into modules.

The 6 modules in the project are divided equally between the 3. The exact modules divided among the people are decided later on while implementing the modules since the expertise needed might vary.

## Roles & Responsibilities

The modules are divided among the teammates to easily streamline the work in a collaborative fashion.

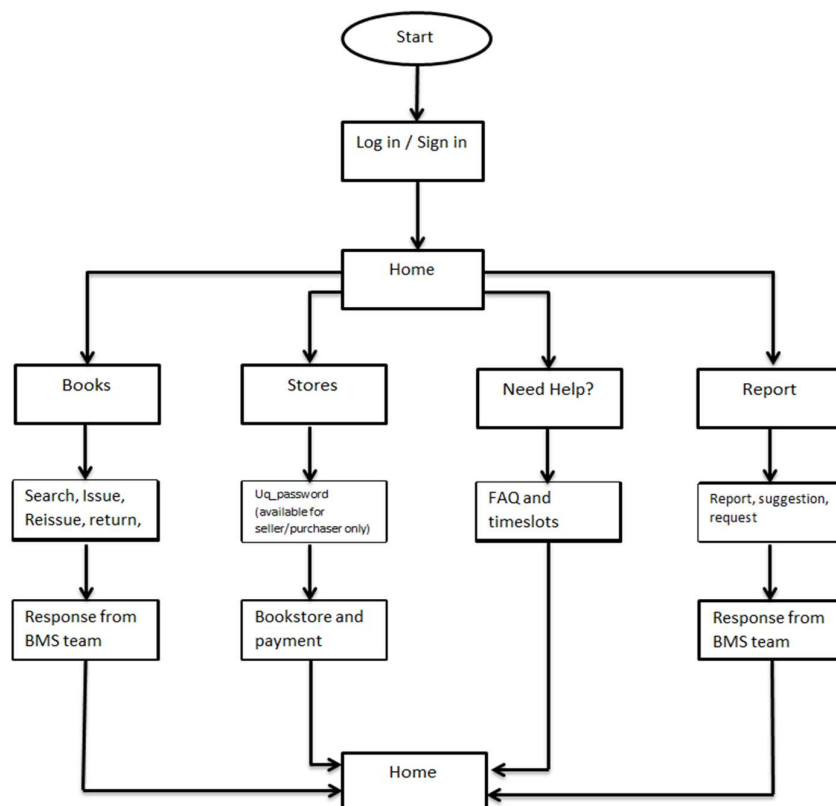
1. Suraj Singh: All the GUI and design functionalities, and perform unit testing.
2. Vasudeva Kilaru: Will implement up Main.py module to integrate modules
3. Anand Ubarhande: Will implement modules such as login.py and handle database.

## Tech Stack

In order to build the project, python is used as the foundational language. A wide variety of python libraries and plugins such as Tkinter, SQL connector, etc are used to build the interactive application, a faulty support system that serves every basic responsibility of book management in circumstances. If time permits, we also plan to extend the application by building a web interface for easy access and compatibility. For the web interface, we use HTML, CSS, and Javascript. In order to test the application, we use selenium (a python package) before rolling out the final version.

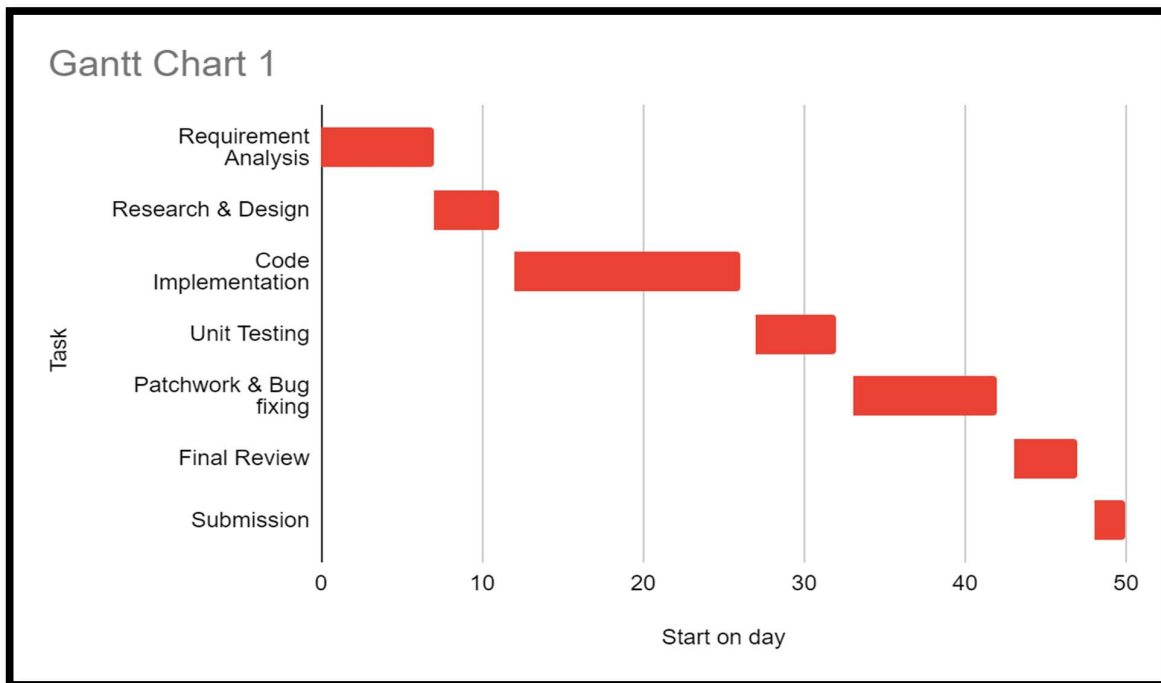
## Data Flow Chart

Below shows the Data Flowchart of how the book management software interacts with end users based on the inputs or functionalities requested.



## Gantt Chart

Below shows the Gantt chart that describes the timely plan on how we develop the project and deliver before the deadline. The project starts from 28th Sept and continues till Nov 15, 2022. The last few days are planned to review the project and submit before the deadline i.e. Nov 18, 2022 (a total of 50 day span project). We divide the project into phase for efficient development and collaboration between the team members. The project consists of 6 main phases including requirement gathering, design, coding etc, as shown in the diagram.



## Design to Implement

**Project No: 18**

**Student Details**

**Project Title:** Design a Books Management System in LPU using python.

**Project Description:** The minimum requirement of GUI as follows:

**BMS**

**Register**

Name

Address

Gender

Mobile no

Email Id

Male

Female

Login Page

User Name

Pass Word

Login Now

New User

Submit book

USER Name

Book Name

Price

in Rs

Submit

Request book

USER Name

Available books

Price

AI

DS

in Rs

25

## Conclusion

The project is expected to complete by November. The project supports all the standards needs of the book management system, which is consistent. The project shall be robust to concurrent requests and maintains the integrity of the records, book statuses etc. The data flow chart provides an overview of the project in a pictorial form. Additionally, the gantt chart explains the day-to-day, week-to-week plan.

**Thank You!**