

# Lab 5: Project Understanding, Elicitation, Features

## Q.1: Ticket issuing system

### ❖ Ambiguities and omissions:

#### → **Departure time:**

Is the departure time, time of journey, destination time mentioned?

#### → **Source Place:**

Is the default source of travel the place where the machine is situated? Can users book tickets for different source locations as well?

#### → **Availability of Tickets:**

The number of tickets available for a potential destination is not displayed.

#### → **Invalid credit card/ PIN:**

How will the system respond in case of payment failure or invalid card credentials?

#### → **Multiple Booking:**

Whether users can book multiple tickets from one session or have to perform individual sessions per ticket?

#### → **Price classification:**

There is no mention of whether prices are changed based on Age, Gender, or other special parameters.

#### → **Cancellation of ticket:**

Whether users can cancel tickets?

#### → **Abort session:**

Whether users are able to abort booking procedures in-between in case of wrong information input?

#### → **User Information:**

What user information does the system require while booking the ticket.

## Q.2: Library Information System (LIS)

### ❖ Functional Requirement:

- **New user registration:**

Generation of user ID and password on successful registration. Only Institute members can register to use LIS.

- **User login:**

Registered users can log in to their accounts by providing login credentials. After successful login, users can issue/ return books.

In case of a wrong password or forgot login credentials, the user can request for password change by providing a registered email address. The system will send a link to reset the password.

- **Cast about Library Catalog:**

Any user (member/ non-member) can check whether a particular book is available or not. The catalog can be filtered based on,

Title of the book, Author's Name or Publisher's Name

- **Issue book:**

Any registered user of the system can issue a book with given constraints:

- The user must be logged in to his/her account.
- The book should be available to issue.
- The user has not reached his/her maximum book borrowing limit.
- The user must not be suspended by the admin.

If the book is not available at that period, the user can pre-book it.

- **Returning book:**

A book is issued for a limited time. That is, a book, once issued, should be returned within the next couple of days. After returning a book, the user account is updated to show the same.

- **Reissuing book:**

The One who has issued a book might find that his requirement is not over by the limited time given by the LSI for issuing. In that case, he might choose to reissue the book and get permission to keep it for another particular time duration that has been decided by LSI. However, a member can reissue any book an only couple of times, after which he has to return it. Once a book has been successfully reissued, the user account is updated to display the information.

- **Librarian Access:**

- Librarian can enter a new record into the system when a new book has been purchased, or delete a record in case any book is taken off the shelf.
- Can suspend users if needed.

- ❖ **Non-functional Requirement:**

- **Performance Requirements:**

This system should remain accessible 24x7, and multiple users should be able to access any time.

- **Database Requirements:**

The library catalog should be persistent.

- **Design Constraints:**

The system should be user-friendly.

The LIS has to be developed as a web application using HTML 5.

- **Security Requirements:**

This system should be accessible only within the institute LAN.