

Lab Assignment 5

Group 16

Que 1. Discover ambiguities or omissions in the ticket issuing system.

- If a customer selects some different destination by mistake and wants to change then how will the system deal with it?
- What if a customer selects more than one destination place at a time, how will the system respond to that situation?
- Are there multiple payment modes available and if yes, how will the system react to failure in a payment mode?
- Is there any difference in ticket prices of a child, adult and senior citizens?
- Can tickets for multiple people be bought in a single transaction? If yes, then what is its limit?
- If a customer is inputting the wrong identifier many times, will he/she be blocked?
- Is fare visible to the customer after he selects the destination and proceeds to payment?
- After the successful transaction and issuance of the tickets, how should the system respond?
- Is cancellation of a ticket possible after payment? And if yes how will the refund take place?

→What does the potential destination mean? Is it the same as all possible destinations or is it something else?

Que 2. Case Study- Identify the functional and non-functional requirements for the Library Information System(LIS).

❖ **Functional Requirements:**

- **Registration:** Users should be able to register themselves as members.
- **Login:** Users should be able login into their account.
- **Profile:** Users should be able to change their profile details such as name, email address, contact number etc.
- **Search:** Any user, including guest users, should be able to search or browse for books.
- **Borrow:** Members should be able to borrow a book.
- **Return:** Members should be able to return books after borrowing it.
- **Reserve:** Members should be able to search if a book is booked by other members and reserve it for the next available issue cycle.
- **Reissue:** Registered users could issue or reissue the books if it is not booked by anyone.
- **Administration:** The librarian/administrator has control of the whole LIS and should be able to add or remove entries for new books that come in or old books rejected respectively.

❖ **Non Functional Requirements:**

- **Privacy:** Personal data of members such as phone number, email address should be kept hidden from all other Members. Only names should be visible to others.
- **Security:** The system should only be accessible through the institute LAN.
- **Security:** Personal information of the user can be stored in any format but their passwords should not be stored in plain text. It should be very well encrypted then stored in the database.
- **Reliability:** The system should be available 24x7 for searching and booking the books but can issue or return only during working hours of the library.
- **Performance:** The System would work for a large number of people.
- **Design Constraint:** The system should work on both mobile and desktop, and it should work in all major operating systems.