

LAB 05 - GROUP 13

Question 1: State the ambiguities and omissions in int ticket-issuing system.

Answer:

1. What if the user wants to cancel a single/multiple ticket?
2. How will the system respond, If the credit card is invalid?
3. How will the user know about the details of price to different stations?
4. How can a user book multiple tickets?(Multiple destinations for same source/ multiple tickets for same destination) ?
5. How can a user book a return ticket, apart from doing it from the beginning?
6. Can a user book a ticket from another station, apart from the one in which he/she is present currently?
7. System is not asking for the age of the customer, is there any facility of concession in fare for children or senior citizens?
8. What if the user's payment has been done, but he/she hasn't received the ticket yet?

Question 2: Case Study- Identify the functional and non-functional requirements for the given problem specification

Functional requirements :

New registration: Any institute member who wants to use the library's facilities must register with the Library Information System(LIS). On successful registration, a member gets a user ID and password. He has to use these credentials for any future transaction in LIS.

Search book: Any LIS member can use this facility to check whether any particular book is present in the institute's library. A book could be searched by its:

- Title (Book name)
- Author's name
- Publisher's name
- ISBN or book number(given by institute)

Login : A registered user of LIS will log in to the system by providing his worker ID and User countersign as set by him whereas registering. Once winning login, the "Home"

page is shown from wherever he will access LIS's various functionalities: search book, issue book, come back book, reissue book. Any worker ID not registered with LIS cannot access the "Home" page -- a login failure message would be shown to him, and also, the login dialog would seem once more. This same factor happens once any registered user sorts in his countersign wrong. However, if incorrect countersign has been provided three times consecutively, the user's protection question (specified whereas registering) with an associate degree input box to answer it is shown. If the user answered the protection question properly, a replacement countersign would be sent to his email address. just in case the user fails to answer the protection question properly, his LIS account would be blocked. He must contact the administrator to form it active once more.

Issue book : Any member of LIS will be able to issue a book through his account provided that:

- The book is out there within the library; that is, it might be found by checking it out in LIS.
- No other member has recently issued the book.
- The current member/user has not crossed the maximum limit of issuing books through his LIS account.

The maximum books a user can issue at a time It must be specified by the system. Once a book has been issued to the user, the user account is updated accordingly (thereby updating its issuing limit as well).

Book return: A book must be issued for a finite time interval [let's say 15 days], i.e., a book should be returned within 15 days once it is issued by the corresponding LIS member. The update should be reflected in the user account once returned.

Reissuing a book: If a member who got the book issued needs to extend his period due to personal requirement, then he/she might choose to reissue the book and get it issued for the next 15 days also. Important thing to note is that a book can be reissued at most 2 times by a member, followed by a compulsory return of the book. The update of return of the book must also be reflected in the user account once reissued to him/her.

Non-functional requirements :

- 1) It must be developed using HTML 5.
- 2) It must be a web application which should work with every web browser.
- 3) It should make sure that the passwords are encrypted properly.
- 4) The system should be accessible only within the institute.

- 5) It should be accessible 24x7.
- 6) The system should be able to access many users at the same time.