

North South University - Spring 2023

Course Code : CSE 215L
Topic(s) : Guidance for Lab Project
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An Idea to a Project Design

Suppose, there is a book store near your home. There you will get only books for IELTS exam preparation. When you went there, the shopkeeper told you that there is a series of books (1-17) available and he has 10 copies of each book. Then you purchased one copy of some books (11-17) and received a payment slip where customer information and list of purchased books were mentioned with quantity and price.

You shared that information with your friend Rasel, a CSE student of North South University. Then he wished to design a system for that store using the knowledge of Java language (OOP and GUI parts are must to apply).

The project can be divided into 3 main features: books, customers and purchase history. All the features will be available only for the logged in users. There will be a main menu for the customers to register, login, reset password and exit from the system. A logged in user can access all the features.

For the book part, there will be CRUD operations. Whenever a customer purchases some books, a purchase history entry will be generated and the number of available book copies will be updated in the store. Then a user can visit his purchase history and access the payment slip for that particular purchase.

Some Project Ideas

You can choose similar type project topics from the list given below. Then, find out the features and operations for your project according to the case study.

- Movie Ticket Booking System
- Hotel Booking System
- Bank Management System
- Library Management System
- Patient Management System
- Restaurant Management System
- Bus Reservation System
- Shop Management System (Product must be different for each group)

Marks Distribution

Project Proposal + GitHub Accounts	05
Project Demo + Viva Session	05
GitHub Activities	05
Project Report	05
Total	20

Step-1: Project Proposal

- Select your project group members.
- Create a GitHub account for yourself.
- Create a public repository for the lab project and add all project group members into it.
- Choose a project topic based on your preference.
- Describe the selected project in short.
- Enlist all the possible operations of each feature in your project using bullet points.

Step-2: Coding Part & GitHub Activities

- You must apply almost every concept of the course (Java & OOP).
- You must use the suggested GUI (Graphical User Interface) library (Swing / JavaFx) in the project.
- You can't use any extra database and only use files to store data.
- There must be some common operations in your project for different features.
[C - create, R - read, U - update, D - delete, Q - query / search]
- Divide the project work among the group members and push your works on GitHub regularly.
- Upload all lab project related documents (proposal, codes, reports etc.) on that GitHub repository.

Step-3: Project Demo

You have to show the project demo offline or there will be an option to create a short video demo of maximum 7 minutes (2 minutes - description of project progress and 5 minutes - project demo) on the project demo. It will be confirmed later based on the situation.

Step-4: Viva Session

There can be a dedicated viva session based on the project and lab contents. All the questions will be conceptual and be mentally prepared for that.

Step-5: Project Report Format

- You will get a sample template for the cover page. Don't change its format.
- Describe your project topic with a short intro on each feature and operations.
- Add the required screenshots.
- You must include your project codes using "Courier New" font with size 12.
- All other texts should be written on "Times New Roman" or "Garamond" font with size 12.

NB

- If you don't follow the instructions properly, there will be some penalties.
- You must complete each step by the given deadline posted on canvas.
- All the instructions are tentative and can be changed based on the requirement.