This Lab session is designed to revise your knowledge on Interaction Diagrams Part I-Sequence Diagrams.

Please note that the sample answers given for each question. When demonstrating, you must draw it and explain with the scenario.

Activity 1

Toyota Lanka is famous Vehicle trading company. Also, it is famous for vehicle services for their own brand. When someone needs vehicle service from Toyota Lanka, they must take prior appointment. In that appointment, they check chassis number with original one. If it is original one, they will categorize it as Grade A vehicle services, if not they will mention it as Grade B. For Grade "A "Vehicles, if only registered year is recent one as last five years, company will assign specialized technician. Then, it will forward to the service center with detailed report.

Activity 2

Read the scenario and draw a sequence diagram.

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save it in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

For valid login, the user has to select the movie theater he/she prefers. Then the system will list down all the available movies with the details. The system allows people to book tickets for more than one movie show. For each movie show, he/she directs to the bookingUI. Then he/she submit movie name with the number of tickets to the system. Then the system checks for vacant seats. If there are vacant seat, system issues the e-ticket to the customer and increases the seat count. For invalid logging, system ask to re-enter details.

Hint: You may use suitable boundary, control, and entity classes in your answer.

Activity 3

Draw a sequence diagram for the following use case scenario "Add Items to Shopping Cart".

Name: Add Items to Shopping Cart
Actor: Customer
Flow of Events:
1. Customer login to the system by providing username and password.
2. Customer search for items by item names.
3. Then the customer adds the selected items to shopping cart.
4. If cart is not empty, the customer can remove items anytime.
5. Customer can add any number of items to the cart.
4. Once finished, the customer requests to process the order.
5. Then system will generate and display the bill.
Extensions
1-a. If login fails the customer will ask to login again.

Hint: You may use two boundary, two control and three entity classes in your answer.

Activity 4

Cathay Pacific Airways Ltd., more widely known as Cathay Pacific, is the flag carrier of Hong Kong. In their services, passenger check in plays vital role among other basic services. When passenger arrives at airport check-in counter, first they verify the ticket and if ticket is verified only, they ask to load the baggage. If not, they will provide the statement of invalid and they must talk with ticket issuing agency. Then they will measure the baggage and load it to transportation. If excess luggage noted, they would ask extra payment. Once they paid extra payment only, they can load the luggage to transportation. They will ask the seat preferences and issue the boarding pass.