

GUJARAT TECHNOLOGICAL UNIVERSITY

MASTER OF COMPUTER APPLICATION

SEMESTER: II

Subject Name: **Object Oriented - Unified Modeling**

Subject Code: **3620004**

Practical List

A. List of Practical Related to OOUM:

1. Consider a Book Shop, Consider a book store in a shopping mall. The customer selects the books from racks to purchase. Prepare a sequence diagram for bookstore checkout system. The customer brings selected books to cashier. The cashier scans each item with checkout system to prepare an order. **Prepare a Use-case and Use-case documentation.**
2. Consider an Online shopping web site, where customer selects the items and adds into cart. At the customer will proceed for payments. Prepare a Use case, Activity and sequence diagram for online shopping checkout system. The customer brings selected books to cashier. The cashier scans each item with checkout system to prepare an order. **Prepare a Use-case and Use-case documentation.**
3. The case study 'Online Mobile Recharge' gives us the information about all the mobile service providers. This application provides us the complete information regarding any mobile service provider in terms of their plans, options, benefits, etc. Suppose, any Airtel customer wants to have the information of all the schemes and services provided by the company, he/she can have the information and according to his convenience he can recharge the mobile from the same application. The major advantage of this proposed system is to have the recharging facility of any service provider under same roof. **Prepare a Use-case and Use-case documentation.**
4. In tour management system, System will check whether the customer is existing or new. New user will enter his personal and tour details for reservation. This login information could be used for further transactions. When customer is satisfied with tour package he/she would request for reservation of tour. Personal details of new customer is stored in cust_info while the details regarding the tour selected by particular customer is stored in tour_info and the details regarding it would be restructured in Tour Information System. Existing customer can update his/her personal details in cust_info and cancel reservation for tour from tour_info and changes regarding it are also reflected in Tour Information System. After confirming the tour package the customer will make payment either online or through staff by personally going at the office. Customer can make payment by cash, credit card or by cheque. System checks for the validity of staff. Once the payment is done by customer, valid staff will make Ticket Reservation System. Reserved customer will be able to view details about reservation by providing login information from cust_info and tour_info system. Administrator can add, delete or modify tour schemes from Tour Information System. **Prepare a Use-case and Use-case documentation.**
5. **Prepare a Use-case and Use-case documentation for Railway Reservation System.** Its detail is following:
"Railway Reservation System is a system used for booking tickets over internet. Any Customer Can book tickets for different trains. Customer can book a ticket only if the tickets are available. Customer searches for the availability of tickets then if the tickets are available he books the tickets by initially filling details in a form. Tickets can be booked in two ways by i-ticket or by e-ticket booking. In case of i-ticket booking customer can book the tickets online and the tickets are couriered to Particular customer at their address. But in case of e-ticket booking and cancelling

tickets are booked and cancelled online sitting at the home and customer himself has to take print of the ticket but in both the cases amount for tickets are deducted from customers account. For cancellation of ticket the customer has to go at reservation office than fill cancellation form and ask the clerk to cancel the ticket than the refund is transferred to customer account. After booking ticket the customer has to checkout by paying fare amount to clerk".

6. **Prepare a Use-case and Use-case documentation for a restaurant bill.** There should be a charge for each delivered item. The total amount should be subject to tax and service charge of 18% for groups of six or more. Any coupons charge submitted by the customer is subtracted from bill. 6. The University runs various diploma, graduation and post-graduation courses such as DE, Dpharm, BE, MBA. MCA, ME, Mpharm etc. The courses follows semester patterns and under each course various subjects are taught. Students seek admissions to these courses and if found eligible, the student is enrolled for the requested course. There are several faculty members in the university who teach the various subjects of these courses. The subject teacher conducts semester examinations for the concerned subject at the end of the semester and the student's performance is recorded. Even if a student is unable to pass a subject, he is promoted to the next semester but has to reappear for the subject examination again and clear his backlog.
7. The University runs various diploma, graduation and post-graduation courses such as DE, Dpharm, BE, MBA. MCA, ME, Mpharm etc. The courses follows semester patterns and under each course various subjects are taught. Students seek admissions to these courses and if found eligible, the student is enrolled for the requested course. There are several faculty members in the university who teach the various subjects of these courses. The subject teacher conducts semester examinations for the concerned subject at the end of the semester and the student's performance is recorded. Even if a student is unable to pass a subject, he is promoted to the next semester but has to reappear for the subject examination again and clear his backlog.
 - Draw Use Case diagram for it
 - Draw Class Diagram for University
 - Draw Activity Diagram for Admission
 - Draw Sequence Diagram for Admission
8. **Prepare a Use-case and Use-case documentation for:**
 - a) Facebook Application.
 - b) WhatsApp Application.
 - c) Identify Actors and Use Cases of Library Management System and draw its Use Case Diagram, Sequence Diagram, Activity Diagram and Class Diagram.
 - d) Identify Actors and Use Cases of Online Quiz System and draw its Use Case Diagram, Sequence Diagram, Activity Diagram and Class Diagram.
 - e) Identify Actors and Use Cases of ATM System and draw its Use Case Diagram, Sequence Diagram, Activity Diagram and Class Diagram.

Tools: All the programs mentioned in this list are to be performed in VISIO, Open Source Tools like, Dia etc.