CASE TOOLS LAB Assignments

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Assignment 1: Develop the project management plan using Micro soft Project for an ATM system and

produce as deliverable the project development plan. Assume the Waterfall process model is followed.

Assignment 2: LIBRARY SYSTEM

The Library System is a web-based application used to automate a library. It allows the librarian to

maintain the information about books, magazines and CDs. It also allows the librarian to maintain the

information about its users. It provides the facilities such as search for items, browse, checkout items,

return items, make reservation, remove reservation etc. to its users. To borrow the items from the library,

the users must register in the system. The search option allows the users to search for any item in the

library. If the user finds that the required item is available in the library, he/she can check out the item

from the library. If the item is currently not available in the library, the user can make reservation for the

item. When the item becomes available the respective user who made the reservation for that item first is

notified. The reservation is canceled when the user checks out the item from the library or through an

explicit cancellation procedure. The system allows the librarian to easily create, update, and delete

information about titles, borrowers, items and reservations in the system. The librarian is an employee of

the library who interacts with the borrowers whose work is supported by the system.

Question 1: Prepare all use cases for this case study.

Question 2: Draw Class diagram &amp; Object diagram for Library System.

Question 3: Draw Interaction diagrams for Library System.

1. Sequence diagram

2. Collaboration diagram

Question 4: Draw State chart diagram.

Question 5: Draw Deployment diagram &amp; Component diagram.

Assignment 3: POINT OF SALE SYSTEM

Point of sale or POS as it is more commonly refers to the capturing the date and customers payment

information at a physical location when goods are sold. The POS transaction is captured using a variety of

devices which include computers, cash registers, optical and barcode scanners, magnetic card readers etc.

The System is computerized system In the phone to delivery are also provided, The stock details, the

billing and the customer information stored in computer If the product is purchased it is automatically

deducts from the stock.

The products are scanned through scanners then the cost will be displayed, we have to provide debit card

facility, we have to analyze the sales based upon season and product, we provide the warranty for the

products and after the warranty period the details of the products will be automatically removed.

Question 1: Prepare all use cases for Point of sale system.

Question 2: Draw Class diagram &amp; Object diagram for Point of sale system.

Question 3: Draw Interaction diagrams for Point of sale system.

1. Sequence diagram

2. Collaboration diagram

Question 4: Draw State chart diagram.

Question 5: Draw Deployment diagram &amp; Component diagram.

Assignment4: JOB PORTAL

It is the corner for the jobseekers, in which there is an exchange of information between the employers in

the organization and jobseekers who are applying for the job. Here the employers are looking for the

skilled persons who are suitable for that post. The organization specify their requirements, no. of

vacancies and categories and the qualification for that area. In the same manner, the jobseekers are also

specify their qualification and skill set. By the exchange of information between the employer and

jobseeker, they attain the suitable person for the particular job which is used for the growth of the

organization. The portal is divided into two blocks. One block for the organization and another block for

the jobseekers.In the Organizational Block, each organization contains its own profile and its

requirements.In the jobseekers block, there is a register field which is useful for the jobseekers to register

into the portal. There is a chance for the jobseekers to update their resume at any time. The updated

resumes are viewed by the webmaster and forwarded to the organization.

A single person may have an opportunity to apply for the no.of jobs by using this portal.

Question 1: Prepare all use cases for this case study.

Question 2: Draw Class diagram &amp; Object diagram for Job portal.

Question 3: Draw Interaction diagrams for Job portal.

1. Sequence diagram

2. Collaboration diagram

Question 4: Draw State chart diagram.

Question 5: Draw Activity diagram.

Question 6: Draw Component diagram.

Assignment 5: ONLINE TICKET RESERVATION SYSTEM

Online ticket reservation system for railway department has to be developed. The System developed

should contain following features, The System should provide information about arrival and departure

trains along with information about stations through which it passes. Search about train passing through

stations can be obtained either by means of train no, train name or specifying the source and destination

stations. While displaying information about train it has provide following information’s  Stations

through which train passes along with arrival and departure time. Availability of seats in different classes

along with waiting list. While reserving ticket online the system obtain following information’s from the

user

a)      Passenger name, Sex, Age, Address

b)      Credit Card No, Bank Nam

c) Class through passenger is going to travel i.e. First class or Second class or AC

d) Train no and Train name, Date of Journey and number of tickets to be booked.

Based on the availability of tickets the ticket has to be issued. The ticked issued should contain the

following information’s PNR NO, Train No, Date, K.M., no of adults and children, Ticket No, Class,

Ticket No, Coach, Seat/Berth, Sex, Age, Reservation fee, Total Cash, Train Name, Departure time.

Cancellation of booked tickets should be available.

Question 1: Prepare all use cases for Online ticket reservation system.

Question 2: Draw Class diagram &amp; Object diagram for Online ticket reservation system.

Question 3: Draw Interaction diagrams for Online ticket reservation system.

1. Sequence diagram

2. Collaboration diagram

Question 4: Draw State chart diagram.

Question 5: Draw Activity diagram.

Question 6: Draw Component diagram.

Assignment 6: COURSE REGISTRATION SYSTEM

As new students registration system. The college would like a new client-server system to replace its

much older system. The new system will allow students to register for courses and view report cards from

personal computers attached to the campus LAN. Professors will be able to access the system. To sign up

to teach courses as well as record grades.

 At the beginning of each semester, students may request a course catalogue containing list course

offerings for the semester. Information about each course, such as professor, department and

prerequisites, will be included to help students make information decisions.

The new system will allow students to select courses offerings for the coming semester.

At the end of the semester, the students will be able to access the system to view an electronic report card.

Since student grades are sensitive information, the system must employ extra security measures to prevent

unauthorized access.

Professors must able to access the online system to indicate which courses will be teaching. They will

need to see which students signed up for their course offerings. In addition, the professors will be able to

record the Grades for the students in each class.

Question 1: Prepare all use cases for registration system.

Question 2: Draw Class diagram &amp; Object diagram for registration system.

Question 3: Draw Interaction diagrams for registration system

1. Sequence diagram

2. Collaboration diagram

Question 4: Draw State chart diagram.

Question 5: Draw Activity diagram.

Question 6: Draw Deployment diagram &amp; Component diagram.