Practical 9

Collaboration Diagrams

Aim: Draw two collaboration diagrams for each of the examples given below:

Judiciary Information System: The attorney general's office has requested to develop a software system to help handle court cases and also to make past court cases easily accessible to the lawyers and judges. The details for each case are entered by the court registrar. The registrar assigns a date of hearing for each case as well as he enters the summary of the case after each hearing. The data regarding presiding judge, the public prosecutor is also maintained in the system. The judges and lawyers should be able to browse old cases and the relevant details.

Newspaper Agency Automation: The local news paper delivery agency has asked to develop software for various clerical activities. The software is going to be used by manager and delivery persons. The delivery person should be allowed to print a list of addresses for delivery daily. The details of customers should be maintained in the system. The record of news paper and magazine suppliers should be properly maintained. Bills should be produced at the end of each month and the payment related information should be managed.

Supermarket Automation: The manager of a supermarket wants to automate the system. The supermarket stocks a set of items. Customers pick up desired items from different counters and present those items to sales clerk. The system should allow users to maintain item details, generate bills and print various reports.

University Department Information System: A system is required for automating the activities of various departments of university.

1. Manage various details of students since they are registered in the department
2. Allow course registration for students every semester
3. Compute CPI and SPI at the end of every semester as per records submitted by faculties, Print results
4. Allow tracking of inventory of the department

Medicine Shop Automation: It is required to develop software for a medical store to manage various activities. The shop owner should be able to maintain medicine details. System should produce report for the items to be ordered at the end of the day. The details regarding supplier should be properly managed. System should give a list of items which have expired to the shop owner. Proper bills should be printed by the system.

CASE Tool: A company wants to develop a CASE tool that should support following features:

1. The user should be allowed to draw and save data flow diagrams with proper steps and symbols.
2. Tool should support editing the data flow diagrams.
3. User should be able to determine balancing errors if there are any in the DFD model.
4. The tool should be able to generate data dictionary automatically.
5. The tool should support printing the diagrams on various printers.