ourdiu.com | Shared by SUPAN ROY

Daffodil International University
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Midterm Examination, Fall 2022, Level 3 Term 2
Course Code: CSE325, Course Title: System Analysis and Design
Time: 1:30 hours, Marks: 25

Answer all the following questions

You must answer parts of a question sequentially. The figure in square brace at the right side of a question indicates the marks allocated to the questions.

1. a) If an information system were to be design for a "*Bank Loan Management System*", **what** would be the operational, strategic, tactical, and statutory information? **[3] C01**

b) Mr. Irfan Aman is a system analyst and he is working in SAZ Tech ltd. As a system analyst Mr. Irfan Aman should have an "Analytical Mind". **Why**? **[2]**

2. With your group members, role-play a series of interviews with various system users at Shell Transport. Each member of your group should choose one of the following roles: company president, information technology director, dispatcher, customer service agent, or truck driver. Those group members playing roles of Shell Transport employees should attempt to briefly describe their job responsibilities, goals, and informational needs. Remaining group members should play the roles of systems analysts and devise interview questions for each employee. If there are enough people in your group, each analyst may be assigned to interview a different employee. Those playing the roles of systems analysts should work together to develop common questions that they will ask, as well as questions tailored to each individual employee. Be sure to include open-ended, closed, and probing questions in your interviews. Shell Transport is attempting to change from outdated and unreliable technology to more state-of-the-art, dependable technology. The company is seeking to move from dumb terminals attached to a mainframe because it wants to use PCs in some way, and is also interested in investigating a satellite system for tracking freight and drivers. In addition, the company is interested in pursuing ways to cut down on the immense storage requirements and difficult access of the troublesome handwritten, multipart forms that accompany each shipment. **[5] C03**

Interview all five interviewee in a role-playing exercise. If there are more than 10 people in your community, permit two or more analysts to ask questions.

3. Clients wishing to put their property on the market visit the estate agent, who will take details of their house, flat or bungalow and enter them on a card which is filed according to the area, price range and type of property. Potential buyers complete a similar type of card which is filed by buyer name in an A4 binder. Weekly, the estate agent matches the potential buyer's requirements with the available properties and sends them the details of selected properties. When a sale is completed, the buyer confirms that the contracts have been exchanged, client details are removed from the property file, and an invoice is sent to the client. The client receives the top copy of a three part set, with the other two copies being filed. On receipt of the payment the invoice copies are stamped and archived. Invoices are checked on a monthly basis and for those accounts not settled within two months a reminder (the third copy of the invoice) is sent to the client. **[5] CO4**

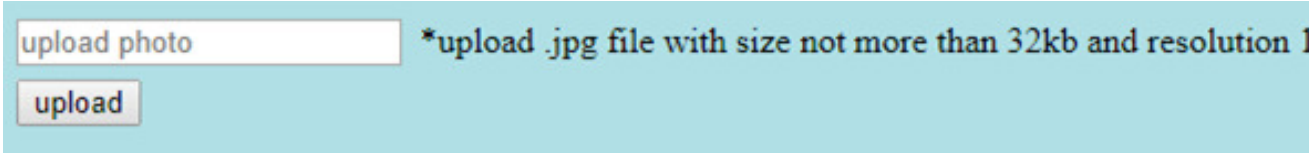
Construct a DFD-0 Diagram for the above and Construct Level-1 DFD from your DFD 0.

ourdiu.com | Shared by SUPAN ROY

4. Consider the dialogue box which will ask the user to upload photo with certain conditions like – **[5] CO3**

a) You can upload only '.jpg' format image.
b) File size less than 32kb.
c) Resolution 137*177.

If any of the conditions fails the system will throw corresponding error message stating the issue and if all conditions are met photo will be updated successfully.



Constract the decision tree and table for the dialogue box.

5. LifeCare Hospital" is going to open within a very short time due to treating Corona patients. The CEO of this hospital is very kind hearted and tries to help her best to every employee and patient. But her manager tried to please her by showing extra profit every year. But this manager suggested the CEO of the hospital develop a new system by which she can observe every movement of employees and patients. They have decided to develop this system by "Z Generation Research and Development Team". For this reason, the CEO of ABC Hospital invited the developer team along with their CEO in their HQ to collect their initial requirements. In this meeting both concluded that they will work in an agile method. After this meeting, the developer team started their development and faced some difficulties like changing requirements frequently, hiding information, adding requirements which might be causal of security issues etc. So, the developer team paid a visit in the LifeCare Hospital to collect onsite requirements from their employees and patients. Employees are found to be very nervous of sharing their requirements because of their new policies. Patients are not cleared enough because maximum patients are suffering from extreme breathing problems. But there is a shortage of ventilators in this hospital. Maximum patients are treated by nurses and intern doctors. On the other hand, the manager of Ezan Hospital tried to cheat the developer team by giving them wrong information. Moreover, he tried to get the system before the expected delivery date. **[5] C02**

Now, **Classify** the above problems into missing functions, unsatisfactory performance, and excessive cost of operation.

Relate your goals and sub-goals to meet the deficiencies.