

<b>Final Examination</b>	<b>Fall 2020</b>	<b>3<sup>rd</sup> Year 1<sup>s</sup> Semester</b>
<b>Course Code: CSE 305</b>	<b>Course Title: System Analysis and Design</b>	<b>Credits: 3</b>
<b>Full Marks: 120</b>	<b>Duration: 2 Hour</b>	

**Instructions:**

- or**

- a. The software solution company ‘ABCD’ has got the tender for a complete hospital management system for a famous hospital. Tough they were supposed to establish the complete system by April 2018, project manager Mr. Z has recently observed that the project is running behind the proposed schedule. So he decides to recruit ten more staffs, who would work parallel with the current staffs. If you think he has made the right decision, then justify your answer. Otherwise propose a better solution so that the project can run on schedule.

- b. What are the core values of XP? Discuss under which conditions XP works fine. Write the names of five most commonly used requirements elicitation techniques 10
3. a. Draw the corresponding class diagram for the system described in question 3 (b). And discuss the importance about coupling and cohesion among classes or Process. 20
- b. The figure below shows the level 1 DFD, which is the decomposition (i.e. break down) of the securities trading platform process from level 0 DFD. 10
- Explain in which phase and how DFD help you to develop a system.
  - Draw level 0 DFD from this Level 1 DFD.
  - Also draw level 2 DFD for this example by decomposing process 5(place order).

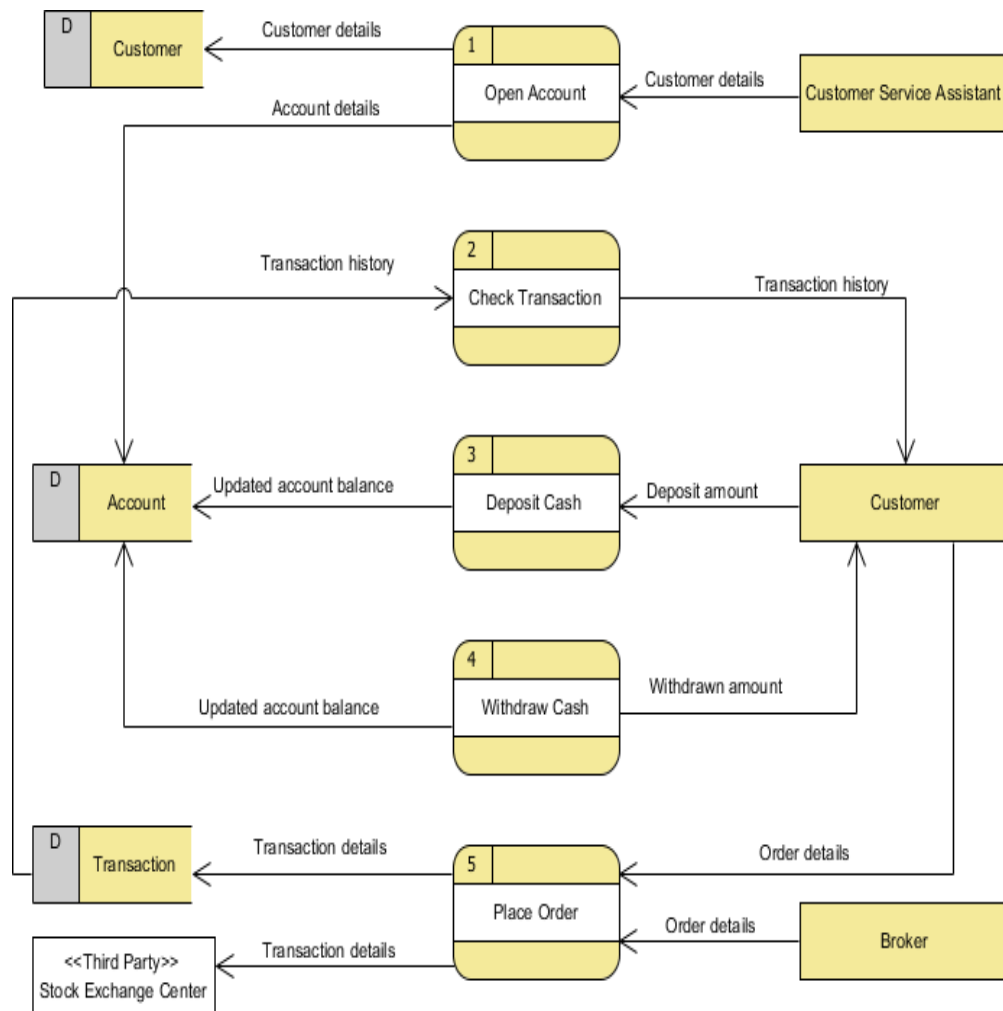


Fig: level 1 DFD.

4. a. Following is the activity list for a construction company's project. Find ES, EF, LS, LF and critical path of the project. 20
- [NOTE: ES= Earliest start time, EF= Earliest Finish time, LS= Latest start time and LF= Latest finish time]

Activity	Immediate Predecessors	Estimated Duration
A	None	I+5 weeks
B	None	I+10 weeks
C	A, B	I+20 weeks
D	C	I+5 weeks
E	C	I+10 weeks
F	E	I+5 weeks
G	D	I+15 weeks
H	E	I+7 weeks
Where I = last digit of your ID Number.		

- b. How will the project schedule be affected if
- A is delayed by 2 weeks
  - C is delayed by 1 week
- Explain your answer.

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