

Exercise 1: (1.5 points)

Suppose a large project related to the "College Registration System" is to be developed. The system has three major subsystems whose requirements are well known. The Dean of the College wants to use each subsystem once it is completed. Suggest the most appropriate software process model that might be used as a basis for managing the development of the system. Giving reasons for your choice based on the type of system being developed.

Answer:

I will use Evolutionary because
The Dean wants to use each subsystem once it
is completed because that I can't use Waterfall.

Exercise 2: Circle the correct answer (s) (3 points)

The only deliverable work product for a successful project is the working program.

- a) True
- b) False

Which one of the following is not a fundamental activity for software processes activities in software engineering?

- a) Software testing
- b) Software Project Management
- c) Software design and implementation
- d) Software evolution

Which one of the following is not an Evolutionary Process Model?

- a) Spiral Model
- b) Incremental Model
- c) Concurrent Development Model
- d) All

Which of the following is project management goal?

- a) Keeping overall costs within budget
- b) Delivering the software to the customer at the agreed time
- c) Maintaining a happy and well-functioning development team
- d) All

Which one of the following is not a step of requirement engineering?

- a) Elicitation
- b) Design
- c) Analysis

- d) Documentation
- e) Feasibility study

u.s

Exercise 3: (4.5 points)
Identify at least three functional and three non-functional requirements in the situation given below.

A Software Company gets a client who wants a software solution for his hotel. A software engineer is assigned the task to interact with the client to get, analyze and finalize the requirements. After interacting with customer, software engineer comes to know that client needs a system that should permit the company staff to add, update, delete and search guests' information in the system. The company staff should also be able to book the room for any guest. Manager should be able to add new staff, update and delete an existing staff in the system. Staff should be able to generate the invoice for any guest staying in some room. Client has a local network and system will be installed on the local network in the hotel and it will not be online system. Client clearly informs the software engineer that the company has licensed version of windows 10 on every machine and the software must run on windows. Client also conveys that system should be developed in C#(C Sharp Computer Language) with the Microsoft SQL Server for database connectivity. Every invoice generated from the system must include 5% Value added Tax (VAT) as a Government Policy.

Answer:

Functional Requirements:

- 1- Permit the company staff to add, update, delete guest information.
- 2- Manager able to add new staff, update
- 3- Staff able to book any room for any

Non-Functional Requirements:

- use windows 10 on every machine (System should be installed on the local network in the hotel and it will not be online system)
- System should be developed in (C Sharp)
- System must include 5% Tax

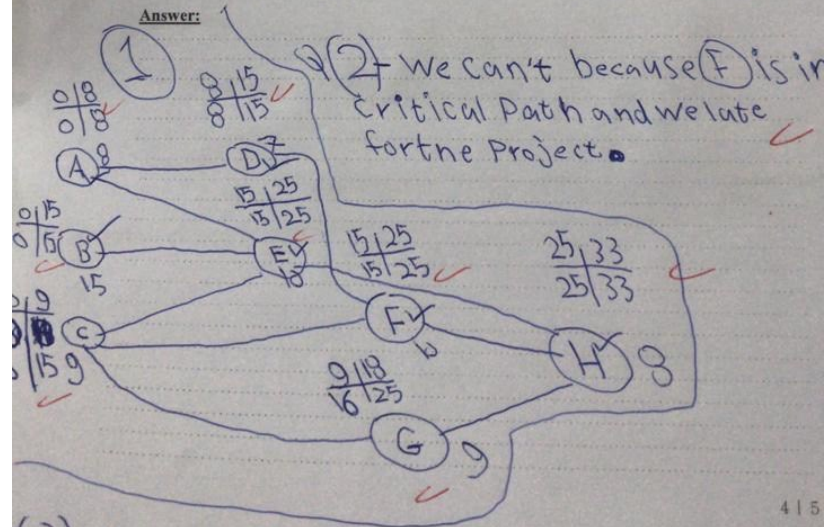
Exercise 4: (6 points)

Consider a project with the following activities. Times are given in weeks.

Activity	Preceding	Time (week)
A	--	8
B	--	15
C	--	9
D	A	7
E	A-B-C	10
F	C-D	10
G	C	9
H	G-E-F	8

1. Draw the network activity diagram and find the earliest and the latest start/finish time for each activity?
2. If activity F is delayed by 6 weeks, will the project completion time be affected? Justify your answer.
3. If activity G is delayed by 1 week, will the project completion time be affected? Justify your answer.
4. Identify critical path(s) if any.

Answer:



Q(4)- A-D-F-H

A-E-H

B-E-H

		Result				Assessor's Feedback
Question	Relevant ABET Student Outcome	Relevant NCAAA Student Outcome	SO is Covered by %	Full Mark	Student Mark	
1	b	2.1	22.5%	4.5	0	
3			22.5%	4.5	4.5	
4			30%	6	6	
2	General Question	----	25%	5	5	
als			100%	20		
I certify that the work contained within this assignment is all my own work and referenced where required.						Feedback Received
Student Signature: _____ Date: _____						Student Signature: _____ Date: _____