Mid-term Answer Sheet

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Answer to the question 1(a)

Soln: From the question above I find out that being a system analyst, ~~for~~ of my company, I have to brief the upper management how I plan to complete a big critical project. So, before giving a presentation to the management I decide to use SDLC (System Development Life cycle) methodology for project development. I am providing reasons and justification for my choice in below:

Reasons: One of the best reasons is that SDLC aims to produce a high-quality software that meets or exceeds customer expactations, reaches compilation within times and cost estimates. It ~~contain~~ consists of a detailed plan describing how to develop, maintain or enhance specific ~~sou~~ software. Here, the life cycle defines a methodology for improving the quality of ~~sowt~~ software and the overall development process.

Justification: The SDLC is a phased approach to ~~ana~~ analysis and design which holds that systems are best developed through the use of a specific cycle of analyst and user activities. SDLC divided into ~~ta~~ total 7 phases. ~~Eac~~ Each

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Phase has unique user ~~activity~~ activities and certain ~~de~~ deliverable.

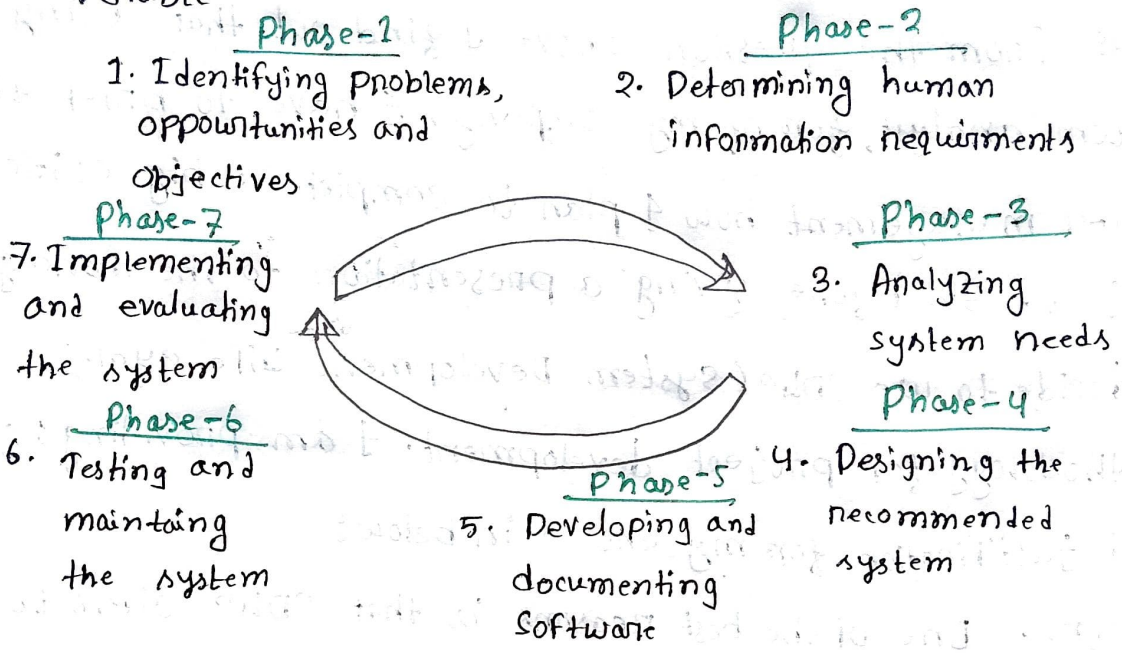


Fig: The seven phases of the system development life cycle

Phase-1

Problems: Recognize and define the problem of the organization. Turn the loss into opportunities. Find how can the business reach its objectives.

Phase-2

The primary ~~ph~~ purpose of this phase is to understand what users need to perform their jobs. Formal process of using: Research, interview and questionnaries.

Phase-3

The primary purpose of this phase is to determine what information and processes are needed to resolve

a problem or take advantage of an opportunity.

Phase-4

The primary purpose of this phase is to design the logical and physical components necessary to implement the recommeded system.

phase-5

The purpose of this phase is to build the recommended system.

Phase-6

The purpose of this phase is to test the information system, system maintenance documentation.

Phase-7

The purpose of this phase is to train users, analyst plans to smooth conversion of from old system to new system.

So, from the above ~~disew~~ reasons & justification, I can say that I should use SDLC as my system development methodology.

Ans:

Answer to the question 1(b)

~~Soln:~~ ~~I should say no~~ As ~~my opinion~~ I ~~should~~

Soln: As my opinion I should say no to the Busoft management i.e. I am totally disagree with it. In the previous answer, 1(a), I said that I ~~will~~ will use SDLC as system development methodology. In this methodology ~~maintai~~ maintenance is kept to a minimum. ~~They~~ ~~ha~~ The RMG client have to include the maintenance service and cost after delivering the project. Otherwise, the project will be fail. To run the project perfectly, the RMG client have to support our stategy & objectives. So, as a system analyst I have to make them understand that how impontant it is to ~~man~~ maintain a project. And for this we need ~~main~~ cost ~~of~~ ~~H~~ and have to maintain the service. ~~So~~, To solve this problem I have to make a feasibility report & give to the ~~Busoft~~ RMG client. But before giving it to RMG, I have to talk to them ~~&~~ and have to identify their problem. By doing this I have to ensure that the project is feasible. or more precisely the project has Economic Feasibility.

Economic feasibility determines whether value of the investment exceeds the time and cost. ~~And this includes:~~ Moveover, I have to make report on technical feasibility. Technical feasibility ~~tal~~ determines if is it possible to develop the new system given the current technical resources. Also, I have include operational feasibility on the report. Operational feasibility determines if the human resources are available to operate the system once it has been installed.

So, from the above discussion I can say that I will disagree with their decision.

Answer to the question 2(a)

Soln: From the question I find out some information to make a context-level data flow diagram. Those are -

TRMG client → want to develop "E-commerce site"
→ want to receive order for "Buying house"

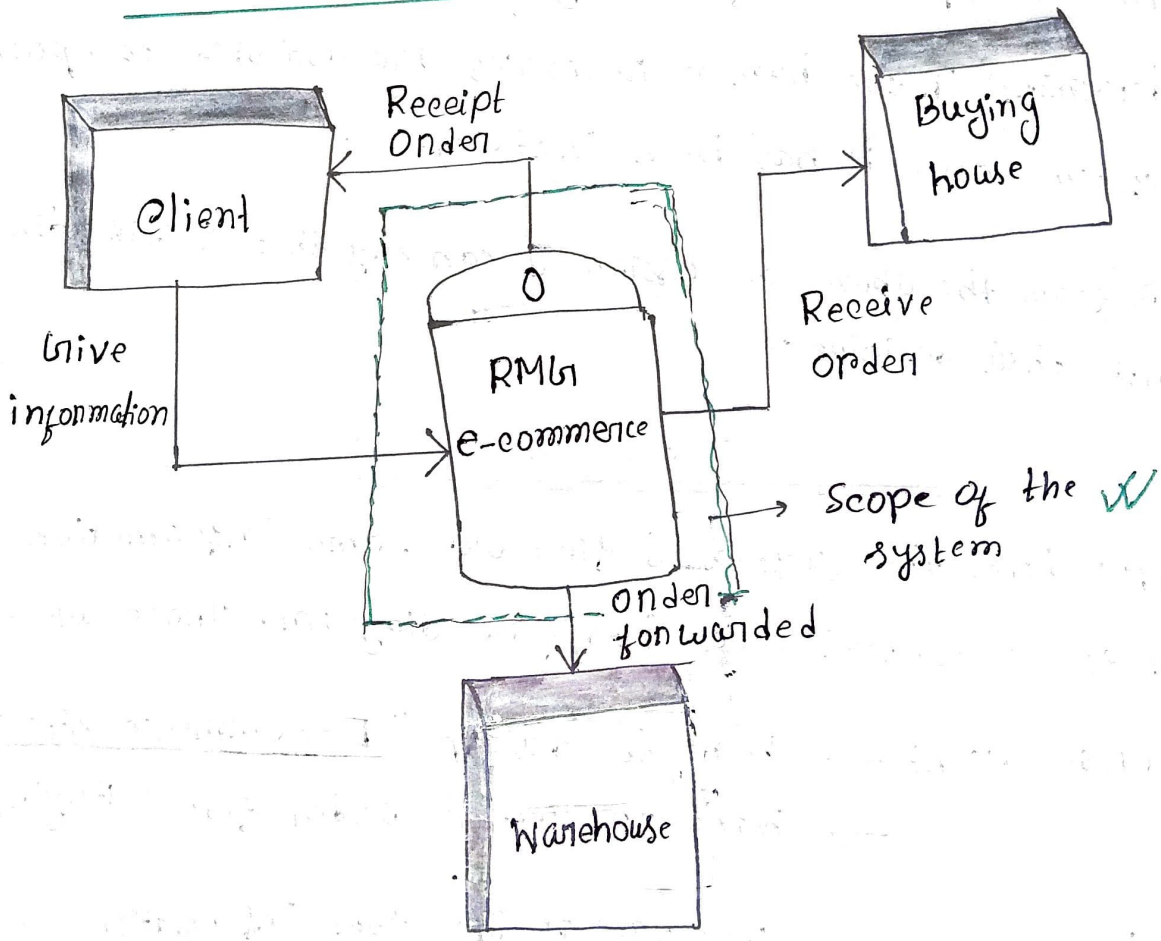
client → Order (they have to give some information)

Order forwarded → Warehouse

Before making the context-level DFD we have to know what is it. So, I am describing it breifly:

context-level DFD is the highest level in a DFD. It contains only one process, representing the entire system. The process is given the number 0. Here, all the external entities, as well as major data flows are shown.

Context-level DFD for RMG e-commerce



From the above diagram we can see the scope of the system. Where the external entities are outside the scope of the ~~sso~~ system. We can see that the client

~~the~~ have to give some information to the system to do order. So, RMG e-commerce will be receive order from the client. All the will be go to the buying house. At last all the order will be ~~form~~ forward to the warehouse.

Answer to the question 2(b)

Soln: Zero level DFD is the explosion of the context diagram. Here, major data stores and all external entities are included.

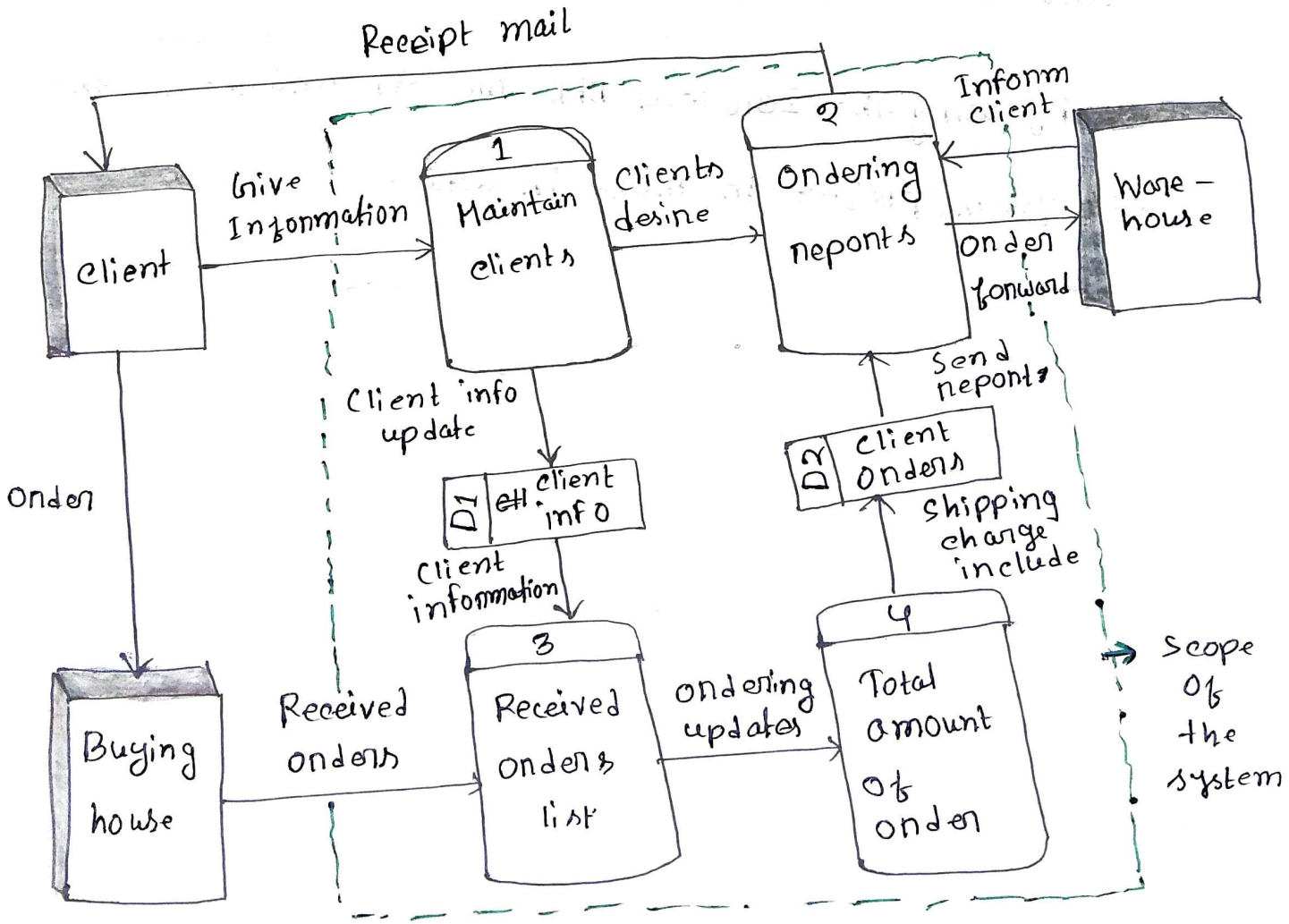


Fig: Zero-level DFD for RMG e-commerce

Hence, Zero-level DFD is the explosion of the context level DFD so it included all the ~~minor~~ & major as ~~wee~~ well as minor entities. ~~Here~~, so, here the Zero-level DFD is in detail. Here client will be order & ~~the~~ they have to give some information. Buying house will receive the orders. And ~~after~~ before the order is placed, ~~inclu~~ including shipping charge the total amount will be shown. Then ~~the~~ ~~Order~~ ~~wi~~ when the order forwarded to the warehouse, the Client will be receipt a mail.

So, by using the Zero-level DFD we can understand the ~~Ze~~ system / project ~~in~~ more in detail.

Answer to the question 3

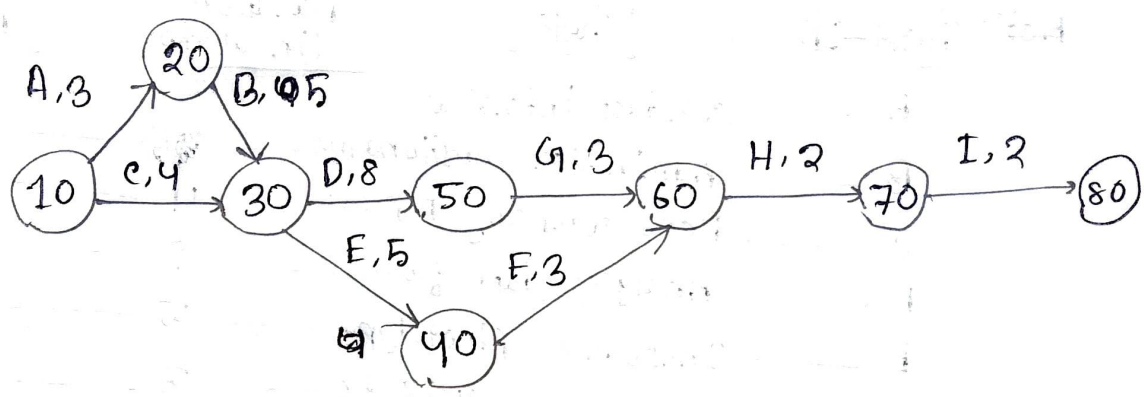
Table creation

~~Acti~~ Task-ID	Task	Duration (in weeks)	Predecessor
A	conduct interview	3	None
B	Administer questionaries	5	A
C	Read company reports	4	none
D	Analyze data flow	8	B, C
E	Introduce prototype	5	B, C
F	observe reactions to prototype	3	E
G	perform cost-benefit analysis	3	D
H	prepare proposal	2	F, G
I	present proposal	2	H

For this project I have to do these task. At first I have to conduct an interview with the organization to hear about their requirments. Then have to ask them question. After reading their report & analyzing data flow, I have to make a prototype to show. I have to observe their Reaction. Then I have to do the cost-analysis to know either it is feasible or not. After that I will prepare the proposal. At last I will present the proposal.

3(a)

Pert Diagram



3(b)

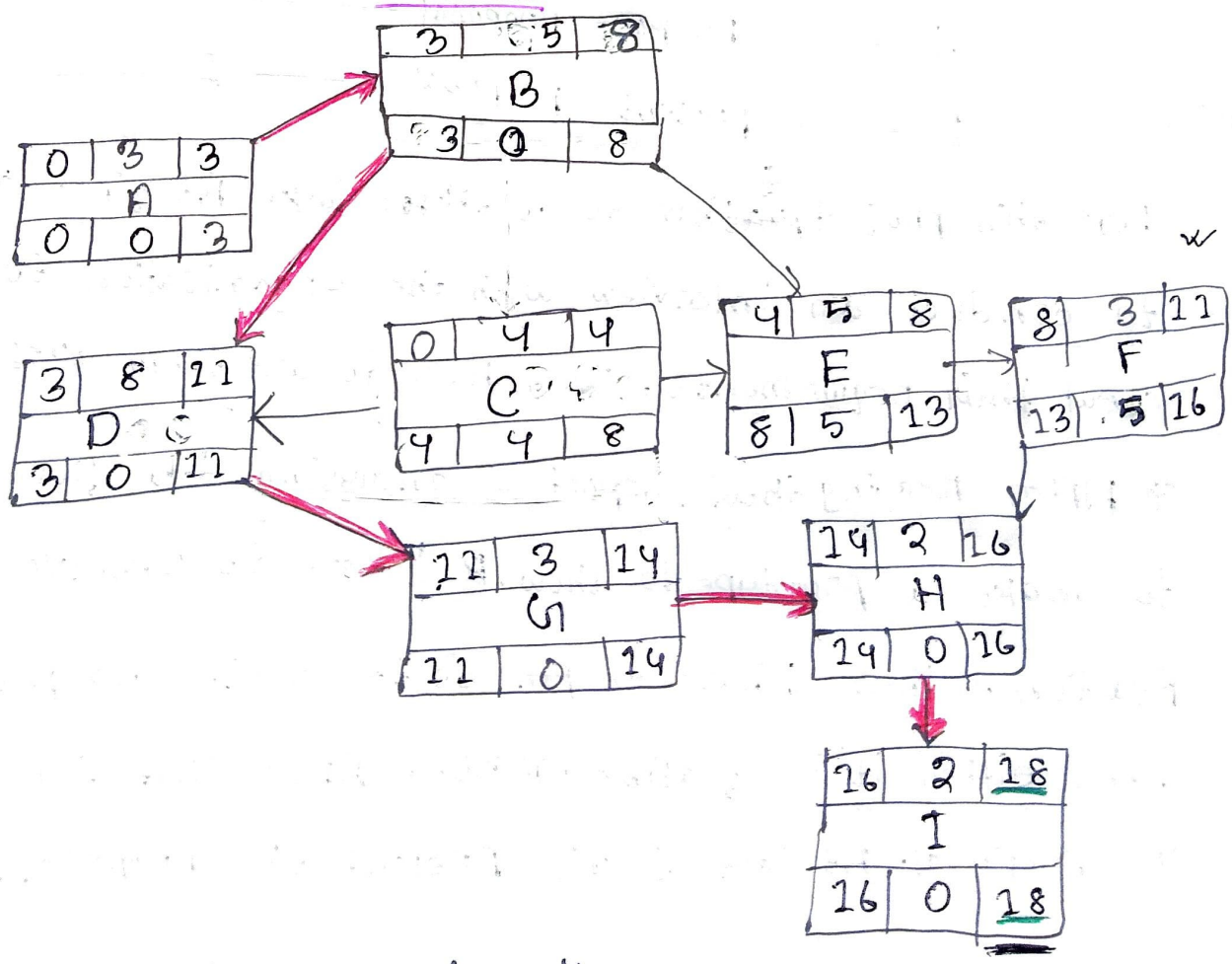


Fig: Critical paths

We know that the critical path is the longest duration path through the network. And activities on this path can n't be delays. When TF (total float) = 0 ~~thros~~, then those are the critical paths.

Here, critical paths: A → B → D → G → H → I

Other paths / Alternative paths:

A → B → E → F → H → I

From the table (the created table at first) we found that we will need: 3 + 5 + 4 + 8 + 5 + 3 + 3 + 2 + 2
(as I asumed it)
= 35 weeks (it is more than 30 weeks)

But after drow the pert diagram & determine the critical path we ~~found~~ find that we will need 18 weeks which is smaller than 30 weeks.
So, the project compilation time is 18 weeks.
and ~~and~~ I can do this project within 30 weeks.

Ans