

COEPD – Traditional Development

Capstone Project1 – Part -3/3 – 100 Marks - Pass 60 %

12 Questions

Instructions to follow:

1. Copy paste (either image, diagram or text) is not entertained. If done, the document will not be evaluated.

2. After submission of the answers of this prep exam, You should be prepared to attend viva and justify your answers in the prep exams. If in Viva, participant is NOT justifying the answers, Viva will be repeated until Candidates justify 60% correctness.

3. Mentor calls are scheduled only if the participant have submitted their task at least for one time. (should apply their knowledge in this task first)

4. For attempting prep exams participant should be thorough on the topics using their references.

5.Please format the document properly (Always have a question no., question and answer).

6. Have a consistent format (Font name: Arial/ Calibri -Font size 12, Font Color: Black).

7. Few Questions are related to the case study, check Questions thoroughly before you answer. 8. Answers should be elaborated in detail(*not as per the allotted marks).

9.Please focus on learning and applying the knowledge as this knowledge will be helpful in contributing at your BA job.

10. In the evaluation, students must answer all questions and should be able to justify at least 60% content and correctness of each answer.

Online Agriculture Products Store

Mr. Henry, after being successful as a businessman and has become one of the wealthiest persons in the city. Now, Mr. Henry wants to help others to fulfil their dreams. One day, Mr. Henry went to meet his childhood friends Peter, Kevin and Ben. They live in a remote village and do farming. Mr. Henry asked his friends if they are facing any difficulties in their day-to-day work.

Peter told Mr. Henry that he is facing difficulties in procuring fertilizers which are very important for farm. Kevin said that he is also facing the same problem in-case of buying seeds for farming certain crops. Ben raised his concern on lack of pesticides which could help in greatly reducing pests in crops.

After listening to all his friends' problems, Mr. Henry thought that this is a crucial problem faced not only by his friends but also by so many other farmers. So, Mr. Henry decided to make an online agriculture product store to facilitate remote area farmers to buy agriculture products. Through this Online Web / mobile Application, Farmers and Companies (Fertilizers, seeds and pesticides manufacturing Companies) can communicate directly with each other.

The main purpose to build this online store is to facilitate farmers to buy seeds, pesticides, and fertilizers from anywhere through internet connectivity. Since new users are involved, Application should be user friendly.

This new application should be able to accept the product (fertilizers, seeds, pesticides) details from the manufacturers and should be able to display them to the Farmers. Farmers will browse through these products and select the products what they need and request to buy them and deliver them to farmers location.



Mr. Henry has given this project through his Company SOONY. In SOONY Company, Mr Pandu is Financial Head and Mr Dooku is Project Coordinator. Mr. Henry, Mr Pandu, and Mr Dooku formed one Committee and gave this project to APT IT SOLUTIONS company for Budget 2 Crores INR and

18 months Duration under CSR initiative. Peter, Kevin and Ben are helping the Committee and can be considered as Stakeholders share requirements for the Project.

Mr Karthik is the Delivery Head in APT IT SOLUTIONS company and he reached out to Mr Henry through his connects and Bagged this project. APT IT SOLUTIONS company have Talent pool Available for this Project. Mr Vandanam is project Manager, Ms. Juhi is Senior Java Developer, Mr Teyson, Ms Lucie, Mr Tucker, Mr Bravo are Java Developers. Network Admin is Mr Mike and DB Admin is John. Mr Jason and Ms Alekya are the Tester. And you joined this team as a BA.

	<u>Your Team</u>		
	Project Manager - Mr VandanamSenior Java Developer - Ms. Juhi		
Java Dev	Java Developers - Mr Teyson, Ms Lucie, Mr Tucker, I Network Admin - Mr Mike		
	DB Admin - Mr John.		
	Testers - Mr Jason and Ms Alekya		
	BA - You		

Fertilizers, seeds, pesticides details from the manufacturers and should be able to display them to the Farmers.

To gather the business requirements from the client, you went to SOONY and met Mr. Henry. When Mr. Henry was asked about the project and what are they expecting from the project, Mr. Henry stated that he is expecting to have a login for all its users (fertilizers, seeds, pesticides manufacturers and Farmers), a product catalog of fertilizers, seeds, pesticides, a search option to search for products, payment process, and delivery tracking.

After doing the stakeholder analysis, you have found out that Peter, Kevin, Ben are the key stakeholders and you have scheduled an appointment to meet them. After meeting with them and trying to gather the stakeholder requirements, Kevin said that, a Farmer should be able to browse through the products catalog once they visit the website and need to have a search option so that they can search for any product they need. Peter said that, if a farmer wants to buy any product or add them to buy-later list, they need to login first using their email id and password. If it is a new user, then they can create a new account by submitting their email ID and creating a secure password. Ben added saying that, Farmers needs to have an easy-to-use payment gateway which should include cash-on-delivery (COD), Credit/Debit card and UPI options so that the user's experience should be better. Kevin mentioned that, a user gets an email confirmation regarding their order status. A delivery tracker to track the whereabouts of their order.

Identify Business Requirements (which includes Stakeholder Requirements)

BR001 - Farmers should be able to search for available products in fertilizers, seeds, pesticides



BR002 – Manufacturers should be able to upload and display their products in the application

Make suitable Assumptions and identify at least 10 Business Requirements.

List your assumptions

Give Priority 1 to 10 numbers (1 being low priority – 10 being high priority) to these Requirements after discussions with the stakeholders

Req ID	Req Name	Req Description	Priority
BR001	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides	8
BR002	Manufacturers upload their Products	Manufacturers should be able to upload and display their products in the application	8

Once the requirements are finalized, as a business analyst, one of the major roles is to act as a liaison between the client and the project team. To gather the requirements correctly from the client side and then to deliver those requirements to the project team in a way they understand.

To make the project team understand the requirements, you need to convert those requirements into UML diagrams and screen mock-ups.

You will draw use case diagram

Prepare use case specs for all use cases

And you will all Activity diagrams required

Question 1 – Functional Requirements - 15 Marks

Identify minimum 20 functional requirements

Example :

Functional requirement: When an order is fulfilled, the local printer shall print a packing slip.

<u>Non-Functional Requirement</u>: Packing slips shall be printed on both sides of 4"x 6" white paper, the standard size for packing slips used by local printers.



Req ID	Req Name	Req Description	Priority
FR0001	Farmer Registration	Farmers should be able to register with the application	8
FR0002	Farmer Search for Products	ch for products in fertilizers, seeds, pesticides	
NFR0101	Page Loading Time	Each Page should load within 2 seconds time	9
NFR0102	WCAG 2.1.	The system must meet Web Content Accessibility Guidelines WCAG 2.1.	8

Question 2–Minimum 5 page designs - 15 Marks

Make wireframe and prototypes

Question 3 – Tools (Visio, Balsamiq) - 15 Marks

Make a note of the Tools, which you are using for above concepts.

Question 4 – RTM - 6 Marks

A business analyst's key responsibilities are to keep track of the requirements and make sure that no requirement is missed.



Mr. Henry and peter have approached you regarding the current status of the project. How will you tackle this situation?

Req ID	Req Name	Req Description	Design	D1	T1	 T4	UAT
FR0001	Farmer Registration	Farmers should be able to register with the application					
FR0002	Farmer Search for Products	Farmers should be able to search for available products in fertilizers, seeds, pesticides					
NFR0101	Page Loading Time	Each Page should load within 2 seconds time					
NFR0102	WCAG 2.1.	The system must meet Web Content Accessibility Guidelines WCAG 2.1.					

Prepare RTM

Question 5 – 10 Test Case Documents - 10 Marks

Prepare 10 Test Case Documents

Question 6 – DB Design – 8 Marks

After the requirements are thoroughly explained to the entire project team by business analyst, the Database architects have decided to do the database design and also to represent the in-flow and out-flow of data.

Draw database schema and ER diagram

Question 7 – Data Flow Diagram - 3 Marks

What is a data flow diagram? Draw a data flow diagram to represent the in-flow and out-flow of data when a Farmer is placing an order for the product

Question 8 – Change Request - 10 Marks

Due to change in the Government Taxation structure . we should change the Tax structure

How do you handle change requests in a project?

Question 9 – Change Request Vs an Enhancement - 5 Marks



As the project is in process, Ben and Kevin have contacted you. The reason is to inform you that they want the Farmers to sell their crop yields through this application i.e. Farmers should be able to add their crop yields or products and display to general public and should be able to sell them. They also want to introduce Auction system for their Crop yields. As a BA, what will be your response?

Is this a change request or an enhancement???

Question 10 – Estimations - 6 Marks

Come up with estimations – How many Manhours required

Question 11 – UAT – 6 Marks

Project has finally completed all the stages i.e., design, development, testing etc. Now, it is the role of a business analyst to contact the client for testing of the final product and have to successfully complete it. How are you going to handle this situation? And once it is done, what will be the process to close the project?

Explain UAT Acceptance process

Question 12 – Project Closure Document - 6 Marks Explain Project closure document