**Question: 1 BPM**

**Identify Business Process Model for Online Agriculture Store – (Goal, Inputs, Resources, Outputs, Activities, Value created to the end Customer)**

**Answer:**

A Business Process Model is a representation, tasks, activities, and flow of information in a business process. It serves as a blueprint for understanding how a particular business process works, from start to finish. The model highlights the actions, inputs and outputs, decision points, and potential interactions between various departments or systems. Business process models are used for analysing, improving, and optimizing business operations.

**Goal:**  Revenue & profitability from selling of agricultural products with maximum reach to target customers

**Inputs:** Manufacturers, Raw materials suppliers, Farmers, Warehouse, Logistics & Budget.

**Resources:** Internet, Mobile, Agricultural products, Project manager, developers, testing teams, Marketing team

**Outputs:** An user friendly E-commerce website for agriculture products which will facilitate farmers to buy seeds, pesticides, and fertilizers from anywhere through their mobile devices, Tabs or laptops.

**Activities:** Requirement Gathering and analysis, Designing User friendly UI, Easy & Secure Payment gateway, Maintenance, Training.

**Value created to the end customer:** Remote area farmers can easily get agriculture products & can communicate directly with product manufacturers/sellers/dealers etc. It will be convenient for customers to buy online, and they can save time and travelling cost.

**Question: 2 SWOT**

**Mr Karthik is doing SWOT analysis before he accepts this project. What Aspects he Should consider as Strengths, as Weaknesses, as Opportunity and as Threats**

**Answer:**

**SWOT analysis** is a strategic planning tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats of an organization, project, or business. It helps in identifying both internal and external factors that could impact decision-making and strategic planning.

* Strengths: Internal attributes and resources that support a successful outcome.
* Weaknesses: Internal factors that may hinder the achievement of objectives.
* Opportunities: External conditions or trends that could be leveraged for success.
* Threats: External challenges or risks that could harm the organization’s performance or position.

By assessing these four aspects, SWOT analysis helps organizations identify areas of improvement, potential growth avenues, and risks to be mitigated.

**Strength:** Strong link with suppliers/ Manufacturers providing subsidies. Wide presence. Vision to encourage the consistency, standardize in agriculture market place. Actual value sighting constructed on demand and supply. Reconstructing the measures between Farmers and suppliers/ Manufacturers.

**Weakness:** Less awareness among farmers about the latest technology. If this app is launched in market, there will be several other companies who might launch same app which will be a threat. In this case we need to maintain the brand name, quality and standard of our products and business turnovers.

**Opportunity:** All the manufacturers and suppliers come under platform. The app will open ways for more selling of agricultural product. Not just remote farmers, anyone can order from the store 24\*7. This will help buyers to have good sell and encourage adding better products. They can also put ads for new product launches/offers/discounts. It will be convenient for customers to buy online, and they can save time and travelling cost.

**Threats:** Cutthroat competition. Delivery to remote areas. Recruiting delivery person who are willing to travel and deliver. They might demand higher pay or allowances such as fuel/incentives etc. Not all farmers will be tech savvy so some might not be able to use the app. Ordering from remote areas could be challenging because of external factors such as electricity, internet etc

**Question 3 – Feasibility study**

**Mr Karthik is trying to do feasibility study on doing this project in Technology (Java), Please help him with points (HW SW Trained Resources Budget Time frame) to consider in feasibility Study**

**Answer:**

A **feasibility study** is an analysis conducted to determine the viability of a proposed project or business idea. It assesses whether the project is technically, financially, and operationally feasible, and evaluates the likelihood of its success. The study examines various factors such as costs, resources, market demand, legal considerations, and potential risks to determine whether the project is worth pursuing.

Technology- Mr. Karthik will use JAVA technology to build this application with the help of software development team.

Budget- Two Crores INR

Time- 18 months

Software – JAVA application

We required technical team to create app and professional JAVA developers. We required data for agriculture farmers and professional advisers for farming. The team needed –

* product manager
* Technical team
* Java developer
* Tester

The time required for the production is a maximum of 3 months for collecting data

and arranging and complaining about the software

The feasibility study focuses on helping answer the essential question of “should we proceed with the proposed idea”. Possibility of doing a project within some constraints like technology, budget & time. Technology includes Software, Hardware and Trained Resources.

* Technical feasibility- Hardware and software. Existing/ New technology & Manpower.
* Financial feasibility- Initial investment/ Investors. Resources to procure capital such as Banks, investors, venture capitalists.
* Market feasibility. Type of industry, previous companies available in market. Quality, Demand, Supply, usage and timely delivery of the products
* Organizational feasibility- Available talent pool and Permanent available resources within 18 months at the cost of 2 Cr

**Question 4 – Gap Analysis**

**Mr Karthik must submit Gap Analysis to Mr Henry to convince to initiate this project. What points (compare AS-IS existing process with TO-BE future Process) to showcase in the GAP Analysis.**

**Answer:**

**Gap analysis** is a method used to assess the difference between an organization's current performance and its desired performance or goals. It helps identify the "gap" between where the organization currently stands and where it wants to be, whether that relates to processes, systems, skills, resources, or other aspects of operations

**AS IS PROCESS:** Stakeholders Peter, Kevin and Ben are facing difficulties in procuring fertilizers, seeds, pesticides and other agricultural products which is important for farming.

**TO BE PROCESS:** To avoid purchase of agricultural products manually, Mr. Henry decided to make an online agriculture product store. It will be a one stop place to connect remote farmers to commercial product suppliers/sellers, online, anywhere and anytime. This will facilitate the process of finding fresh produce for buyers and provides farmers with predictable markets and fast payment methods.

**GAP:** The payment method would introduce procedural inefficiencies, such as delays in payment settlement to merchants. To overcome these issues, we need to integrate mobile money services into their platforms. Other gaps such as delay in delivery of products, finding manpower to work for remote areas, product shortage after order placed etc.

**Outcome:** Reduced wastage, Improved income of sellers/dealers, increased productivity of farmers, convenient method, time saving, more employment of delivery boys/packers etc

Mr. Karthik needs to hand over the GAP analysis report to Mr. Henry, So as of now AS-IS: The current situation is farmers are not getting the products on time as per their requirement due to distance of shops and availability of the products on shop, so they can bear the loss. But while doing GAP analysis TO-BE: future process while introducing the online app for local farmers to buy the best quality product in the easily available period as well the advance tech. of doing farming in their preferred language will help profit-making and time-saving

**Question 5 – Risk Analysis**

**List down different risk factors that may be involved (BA Risks And process/Project Risks).**

**Answer:**

**Risk analysis** is the process of identifying, assessing, and evaluating potential risks that could negatively impact an project. The goal is to understand the nature of the risks, their potential consequences, and the likelihood of their occurrence. This helps in making informed decisions on how to mitigate or manage those risks.

**BA Risk:**

* Improper information at requirement gathering
* The period for project development
* Choosing improper elicitation technique
* soil and climate study for crops
* Change requests given by stakeholder in last phase.
* Multilanguage input for the whole Indian farmer
* coding and java developer coordination are important
* Easy payment gateway as well proper connect with delivery channel partner

**Process/Project Risks:**

* Seeds quality and quantity in fare prices
* Not a proper Awareness of the app among the farmers can cause the failure
* Advice for farming should be according to land and climate
* Portal handling for the product is cost-efficient for the farmer to buy.
* For understanding the app function and its working module should be easy for the farmer to understand

**Question 6 – Stakeholder Analysis (RACI Matrix)**

**Perform stakeholder analysis (RACI Matrix) to find out the key stakeholders who can take Decisions and Who are the influencers.**

**Answer:**

**Stakeholder analysis** is the process of identifying and assessing the interests, influence, and expectations of individuals or groups that have a stake in a project, initiative, or decision. This analysis helps to understand stakeholders' potential impact and the role they should play in the project's success.

The RACI Matrix is a tool commonly used in stakeholder analysis to clarify roles and responsibilities. "RACI" stands for:

* **R (Responsible):** The person(s) who actually perform the work or task.
* **A (Accountable):** The person who is ultimately accountable for the completion of the task, ensuring it meets the objectives.
* **C (Consulted):** Individuals who provide input, expertise, or feedback during the task, typically in a two-way communication.
* **I (Informed):** Those who need to be kept updated on the progress or results of the task but are not directly involved in decision-making or execution.

The RACI Matrix helps ensure clear communication, proper task delegation, and alignment of expectations among all stakeholders. By identifying each stakeholder’s role and responsibilities, it minimizes confusion and ensures smoother project execution.

Below is the list of Stakeholders.

**Project Stakeholders**

* Business Analyst – Rohini
* Delivery Head – Mr Karthik
* Project Manager – Mr Vanadanam
* Development Team – MS Juhi, Mr. Teyson, Ms Lucie, Mr Tucker, Mr Bravo
* Testing Team - Mr Jason and Ms Alekya
* Network Admin - Mr Mike and DB Admin is John.

**Business Stakeholders**

* Business Sponsor - Mr. Henry
* Influencers - Peter, Kevin and Ben.
* Finance team - Mr Pandu
* Project Team - Mr Doku

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Name | Position | \* | (R)  Responsible | (A)  Accountable | (S)  Supporting | (C)  Consulted | (I)  Informed |
| Mr. Henry | CEO | Yes |  |  |  | Yes | Yes |
| Asita | BA |  | Yes |  |  |  |  |
| Mr. Vanadam | Project Manager |  |  | Yes |  |  |  |
| Mr. Doku | Finance head |  |  |  | Yes |  |  |
| Mr. Pandu | Project Coordinator |  |  |  | Yes |  |  |
| Kevin, Ben & Peter | Friends |  |  |  |  | Yes | Yes |

**Question 7 – Business Case Document**

**Help Mr Karthik to prepare a business case document**

**Answer:**

**A Business Case Document** is a comprehensive report that justifies the initiation of a project or investment by outlining the rationale, benefits, costs, risks, and expected outcomes. It provides decision-makers with the information needed to assess whether the proposed project or initiative is worthwhile, feasible, and aligned with organizational goals.

1. Why is this project initiated?

Mr. Henry identified need for farmers to deliver them agriculture products on their doorstep and opportunity for himself to capitalize an opportunity.

1. What are the current Problems?

Difficulties in procuring fertilizers which are very important for farm. Buying seeds for farming certain crops and lack of pesticides which could help in greatly reducing pests in crops.

1. With this project, how many problems could be solved?

This project will facilitate farmers to buy seeds, pesticides, and fertilizers from anywhere through internet connectivity

1. What are the resources required?

Financial resources such as banks, investors. Manpower such as packers, delivery boys. Developers and testers to test and develop the project. Sellers/Dealers to tie up and sell products online.

1. How many organizational changes is required to adopt this technology?

No Change required as such

1. What is the time frame to recover ROI?

6 Months

1. How to identify stakeholders?

Understanding purpose of identifying stakeholders. Determine their impact on the project. Their needs in relation to the project. Mr Henry, Peter, Kevin, Ben, Farmers and sellers are the prime stakeholders

Following are the high-level scope for this engagement:

* Requirement Study
* Design
* Testing
* Development

**Question 8 – Four SDLC Methodologies**

**The Committee of Mr. Henry, Mr Pandu, and Mr Dooku and Mr Karthik are having a discussion on project Development Approach.**

**Mr Karthik explained to Mr. Henry about SDLC. And four methodologies like Sequential Iterative Evolutionary and Agile. Please share your thoughts and clarity on Methodologies**

**Answer:**

**SDLC (Software Development Life Cycle) Methodologies** are structured approaches used to design, develop, test, and maintain software applications. These methodologies guide the software development process, ensuring that projects are completed efficiently, on time, and within budget. Various SDLC methodologies emphasize different aspects of the development process, and organizations choose the one that best fits their project needs, team structure, and business goals.

**Sequential:**

**Sequential SDLC (Software Development Life Cycle)** refers to a development approach where the phases of software development are completed in a strict, step-by-step order, one after another, with each phase dependent on the completion of the previous one. This method is most commonly associated with the **Waterfall model** of software development. **Waterfall model** is broken down into phases, and other modern methodologies can even pull from

these phases and utilize them, these phases are:

* Requirement Analysis
* Planning
* Architectural Design
* Software Development
* Testing
* Deployment
* Maintenance

According to the Waterfall method, the software development process goes through all the SDLC phases with no overlapping and consists of a single development cycle. According to the fact that it is a linear sequential life cycle model, any phase in the development process can begin only if the previous one is complete. Teams are large and everyone on the team like business analysts, architects, developers, tester, operations, etc. all work within their

own divisions.

After the entire architecture, data structures, and functional designs are ready, the development team starts coding the software. Only after all the code are written, integration and validation start. This means that the code is not tested before the Testing phase and only unit tests are executed during development.

Finally, the software finishes testing and is deployed to production and for the first time, where users can put it across real time testing. The Waterfall method can take several months or even years to complete, which means, if it doesn’t meet user expectations, changes are extremely slow and expensive. In many cases, defects are not recognised/fixed at all.

Likewise, due to the lack of feedback from customers or other stakeholders during the design and development process, it’s quite common for Waterfall teams to build unnecessary or under-used features, leading to wastage of time, effort, and capital.

**The Iterative Model –**

The Iterative methodology was an early precursor to Agile. The iterative process is the practice of building, refining, and improving a project/product.

With the Iterative Model, only the major requirements are known from the beginning. Based on these, the development team creates a quick and cheap first version of the software. Then, as additional requirements are identified, additional iterations of the software are designed and built.

Each iteration goes through all the phases of the SDLC, and these cycles are repeated until completion. It is common for the team to work on several SDLC phases at the same time.

**Evolutionary - Spiral Model**

A Spiral Model of Software Development and Enhancement.” The Spiral Model boils down to a metamodel, which evaluates the specific risk profile of the project before recommending an approach that blends aspects of the other popular methodologies of the day, including Iterative and Waterfall. As such, it rejects a one size fits all approach to process model adoption.

**Agile**

Agile is the mainstream methodology used in modern software development and expands its influence beyond coding into many aspects of product development, from ideation to customer experience.

The Agile methodology breaks a project down into multiple cycles, each passing through some or all the SDLC phases. The focus is on people and how they work together to get the project done. Agile calls for continuous collaboration between team members and stakeholders with regular cycles of feedback and iteration.

The Agile Manifesto’s 4 Core Values

1. Individuals and interactions over processes and tools
2. Working software over comprehensive documentation
3. Customer collaboration over contract negotiation
4. Responding to change over following a plan

**Agile Roles**

Agile Roles assign responsibilities to members of the team. They are different than positions as a single person can take on multiple Agile roles depending on the scope of the project. Conversely, multiple people can share the same role. Here are some of the roles in an Agile project:

**Product Owner**: He/she defines the product vision based on all insights, feedback, and ideas gathered. He/she is the owner of the product requirements and works closely with the development team to communicate the vision by documenting it in short narratives called

**User Stories:** User Stories typically include a name, description, reference to any external documents, and an explanation of how to test the implementation. Product Owners often maintain a backlog of User Stories if there are too many to be executed concurrently.

**Scrum Master:** This role is all about making sure the team is following Agile principles, values, and processes.

**Team Member**: All members of the development team have different skills and collaborate to build functional software. Teams would include Developers, QA engineers, business analysts, database engineers, etc and more depending on the project scope.

**Advantages of Agile Methodology**

* Deliver software well-tailored to the understanding of customer demands.
* Software is deployed more quickly and improved more regularly.
* Better code hygiene including style, readability, and structuring.
* Flexible and adaptable process enables pivots or changes mid-project.
* Doesn’t require a complete list of requirements upfront.
* Makes room to act on organizational learning as the project progresses.
* Transparency and continuous communication with involved stakeholders.

**Agile Frameworks**

Organizations can choose to adopt a single Agile framework, or they can combine elements of multiple frameworks to suit the needs of the project and characteristics of the team.

Scrum is a very popular Agile framework characterized by continuous collaboration, frequent deliveries, and special development cycles called ‘Sprints’. Scrum revolves around the following checkpoints:

* Planning meetings- in which the team identifies and discusses the Sprint priorities.
* Commitment meetings- in which the team reviews the backlog of user stories to determine how much effort it involves and how much work can be done during the upcoming Sprint.
* Daily standup meetings- which are notably short meetings that ensure everyone is aligned. In this regard, each team member communicates updates on story status, blockers, or concerns.
* Demo meetings- which the team attends at the end of each Sprint to show the functionalities implemented during the current sprint to the Product Owner.
* Retrospective meetings- which are also hosted at the end of each Sprint to discuss lessons learned, what went well, and what needs improvement.

Scrum introduces the Scrum Master role to the Agile method. The Scrum Master’s job is to manage and improve processes, help the team stay authentic to Agile values, and focus on maximizing productivity. A good Scrum Master ensures that the process and progress are transparent to all stakeholders.

**Question 9 – Waterfall RUP Spiral and Scrum Models**

**They discussed models in SDLC like waterfall RUP Spiral and Scrum . You put forth your understanding on these models.**

**When the APT IT SOLUTIONS company got the project to make this online agriculture product store, there is a difference of opinion between a couple of SMEs and the project team regarding which methodology would be more suitable for this project. SMEs are stressing on using the V model and the project team is leaning more onto the side of waterfall model. As a business analyst, which methodology do you think would be better for this project?**

**Answer**

As a BA I would be choosing Waterfall methodology because:

It is a simple & easy to understand model. The complete process is divided into several phases. One phase should be completed to reach the next phase.

The first phase is requirement gathering and analysis. The requirements are then documented. It is called the Software Requirement Specification (SRS). The next is the swot system design phase. It is to design the entire software architecture. Next phase is the implementation phase. It is to start coding the small units. These units are combined to form the complete system and tested in the integration and testing phase. After the testing is

completed, the software is distributed to the market. The activities such as maintenance of the software and adding new features come under deployment and maintenance.

**Question 10 – Waterfall Vs V-Model**

**Write down the Similar to Waterfall but with a stronger emphasis on testing and validationAnswer**

|  |  |
| --- | --- |
| **Waterfall model** | **V model** |
| The waterfall model is a relatively linear sequential design approach to develop software projects. | The V model is a model in which the execution of the phases happens in a sequential manner in a v shape. |
| The waterfall model is a continuous process. | The V model is a simultaneous process. |
| In waterfall model, the total defects in the developed software are higher | In V model, the total defects in the developed software are lower |
| In waterfall model, the defects are identified in the  testing phase | In v model, the defects are identified from the  initial phase |
| Testing is done after the development phase, which means that errors or bugs are typically discovered late in the process | Testing is planned alongside development. Each phase of development has a corresponding testing phase |
| Follows a strict linear sequence where each phase must be completed before moving on to the next one | Similar to Waterfall but with a stronger emphasis on testing and validation |
| Very rigid and difficult to go back to previous phases once they are completed. Changes are costly and time-consuming because the project typically progresses in one direction | While still sequential, the V-Model’s testing phases make it somewhat more adaptable to identifying problems earlier, although, like Waterfall, it still assumes a structured, sequential process with less flexibility for changes once a phase is completed |
| Best suited for projects with well-defined, stable requirements where the scope is unlikely to change. | More suitable for projects where the focus is on validation and testing and where a clear and well-understood development process is required |
| Risk management is typically delayed until the testing phase, which can result in higher costs if issues arise late in the process | The risk of errors is reduced because testing is an integral part of the development process, and problems can be identified and addressed earlier, potentially lowering costs |
| Difficult to go back to previous phases | Less flexibility, but testing is integrated early |

**Question 11 – Justify your choice**

**As a BA, state your reason for choosing one model for this project**

**Answer**

As a BA I would be choosing Waterfall methodology

Waterfall model is an easy to understand and simple model. The complete process is divided into several phases. One phase should be completed to reach the next phase.

The first phase is requirement gathering and analysis. The requirements are then documented. It is called the Software Requirement Specification (SRS).

The next is the system design phase. It is to design the entire software architecture.

Next phase is the implementation phase. It is to start coding the small units. These units are combined to form the complete system and tested in the integration and testing phase. After the testing is completed, the software is distributed to the market. The activities such as maintenance of the software and adding new features come under deployment and maintenance.

This model is appropriate for small projects and when the requirements are very clear.

**Question 12 – Gantt Chart**

**The Committee of Mr. Henry, Mr Pandu, and Mr Dooku discussed with Mr Karthik and finalised on the V Model approach (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT) Mr Vandanam is mapped as a PM to this project. He studies this Project and Prepares a Gantt chart with V Model (RG, RA, Design, D1, T1, D2, T2, D3, T3, D4, T4 and UAT) as development process and the Resources are PM, BA, Java Developers, testers, DB Admin, NW Admin.**

**Answer**

Client wants to Finish this project in the Span of 2 Years so accordingly Making a Project Gantt Chart.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Months | J | F | M | A | M | J | J | A | S | O | N | D | J | F | M | A | M | J | J | A | S | O | N | D |
| Requirement  Gathering |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Requirement  Analysis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Design |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Test Plan &  Test Cases |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QA Testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Test Plan &  Test Cases |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QA Testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Test Plan &  Test Cases |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QA Testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Development 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Test Plan &  Test Cases |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| QA Testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| UAT |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| UAT Sign Off |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Production  Deployment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Training |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Question 13 – Fixed Bid Vs Billing**

**Explain the difference between Fixed Bid and Billing projects**

**Answer**

**Fixed Bid:** The Requirements are frozen at the start of the project and estimates are made based on those requirements. The Resource estimation for the entire project is done beforehand. Based on the project requirement the number of resources required at each stage is decided. The cost of developing the entire product is estimated once the requirements are discussed. Cost can increase or decrease when a change is introduced, each change would involve a plan realignment. In a few cases, iterations are introduced to improve software quality. Each stage is executed with defined timelines. A change cannot be accommodated here. Some organizations initially agree on the price of each Change that will be introduced, and a Change Request is created for it to be executed. The timelines for the development of the entire software are predefined and the development firm should adhere to it as it is contractually bound.

**Billing:** The requirements are defined at the beginning here. These requirements may increase while software development. The resource requirements vary based on the user stories and changes introduced. Budget may increase in case of a complex feature-intensive delivery and can reduce when the changes are simple. Work is estimated, based on the resources required to develop each User Story. The combination of these deliverables can be used for the budget estimation. Hence, as each User Story is taken up, (parallelly or sequentially) the resources and utilities on each can be defined. Here change requests can be easily accommodated. Resources and timelines are flexible and can be adjusted based on the revised course. Timelines for individual iterations are defined. The timelines for delivery are defined considering no dynamic changes in the requirements.

**Question 14 – Preparer Timesheets of a BA in various stages of SDLC**

**Answers:**

**Timesheets** are records used to track the amount of time an employee, contractor, or team member spends on specific tasks, projects, or activities during a given period, such as a day, week, or month. Timesheets help organizations monitor work hours, manage resources, and ensure accurate payroll, billing, or project tracking.

**Design Timesheet of a BA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Tasks** | **Actionable Items** | **Start Time** | **End Time** | **Duration** |
| 1 | Identify stakeholders | To develop project plan with stakeholders | 10:00 AM | 11:00 AM | 1 Hour |
| 2 | Planning of stakeholder engagement | Stakeholder Engagement section of the Project Plan | 11:00 AM | 01:00 PM | 2 Hours |
| 3 | Defining project outcome | Monitoring success of project | 02:00 PM | 03:00 PM | 1 Hour |
| 4 | Planning project timeline  and cost | Calculate the budget and costing of project | 03:30 PM | 04:30 PM | 1 Hour |
| 5 | Planning risk management of project/Informing stakeholders of project plan | Discussion on the day inputs and informing respective stakeholders | 04:30 PM | 07:00 PM | 2.5 Hours |
| **Total** | | | | | **7.5**  **Hours** |

**Development Timesheet of a BA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Tasks** | **Actionable Items** | **Start Time** | **End Time** | **Duration** |
| 1 | Develop a project charter | outline project constraints, goals, roles and responsibilities of all stakeholders involved, budget, the expected timeline, etc | 10:00 AM | 11:00 AM | 1 Hour |
| 2 | Project planning | creating plan to allocate tasks to each team members | 11:00 AM | 01:00 PM | 2 Hours |
| 3 | Execution of Project plan | meeting with project manager to ensure deliverables are being worked upon | 02:00 PM | 03:00 PM | 1 Hour |
| 4 | Controlling/quality assurance | meeting with project development team | 03:30 PM | 04:30 PM | 1 Hour |
| 5 | Closure | collecting feedback from stakeholders | 04:30 PM | 07:00 PM | 2.5 Hours |
| **Total** | | | | | **7.5**  **Hours** |

**Testing Timesheet of a BA**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Tasks** | **Actionable Items** | **Start Time** | **End Time** | **Duration** |
| 1 | Requirement Analysis | Meeting with testers to check on possible outcome | 10:00 AM | 11:00 AM | 1 Hour |
| 2 | Test Planning | zoom call with testers to review testing scenarios | 11:00 AM | 12:00 PM | 1 Hours |
| 3 | Test case development | In person discussion with QA to discuss on the details such as automation code, where to store  the automation code and who will need access to it, who's running the tests; and writing test cases | 01:00 PM | 03:30 PM | 2.5 Hours |
| 4 | Test environment setup | Meeting with QA team to identify where the tests will run | 04:00 PM | 05:00 PM | 1 Hour |
| 5 | Test execution & Test reporting | Meeting QA, testers OR stakeholders to check if the application works as expected | 05:00 PM | 07:00 PM | 2 Hours |
| **Total** | | | | | **7.5**  **Hours** |

**UAT Timesheet of a BA**

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| **Sr. No.** | **Tasks** | **Actionable Items** | **Start Time** | **End Time** | **Duration** |
| 1 | UAT Planning & Preparation | Review test objectives & identify test scenarios | 10:00 AM | 11:00 AM | 1 Hour |
| 2 | UAT Test Script Development | Create UAT test script | 11:00 AM | 12:30 PM | 1.5 Hours |
| 3 | UAT Test Execution | Execute test script, record the results and defects | 01:30 PM | 04:00 PM | 2.5 Hours |
| 4 | Defect Management | Document records & UAT Defects | 04:30 PM | 05:30 PM | 1 Hour |
| 5 | UAT Test Closure | Evaluate the result and prepare UAT closure report | 05:30 PM | 07:00 PM | 1.5 Hours |
| **Total** | | | | | **7.5**  **Hours** |

**Deployment n Implementation Timesheet of a BA**

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| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Tasks** | **Actionable Items** | **Start Time** | **End Time** | **Duration** |
| 1 | Solution Design | Collaborate with Development team | 10:00 AM | 12:00 PM | 2 Hours |
| 2 | Functional Specifications | Document detailed function specification | 01:00 PM | 04:00 PM | 3 Hours |
| 3 | User Interface Design | Work with UI/UX designer | 04:30 PM | 07:00 PM | 2.5 Hours |
| 4 | Data Mapping | Analyse data requirements & map data elements | 10:00 AM | 12:00 PM | 2 Hours |
| 5 | Test Planning | Collaborate with testing team | 12:00 PM | 01:00 PM | 1 Hour |
| 6 | UAT | Coordinate UAT with stakeholders | 02:00 PM | 07:00 PM | 5 Hour |
| 7 | Training and Documentation | Prepare training materials and User guides | 10:00 AM | 01:00 PM | 3 Hour |
| 8 | Deployment | Collaborate with IT team for system deployment | 02:00 PM | 04:00 PM | 2 Hour |