**QUESTION – 1 BPM :**

**Project Idea :** To develop a website devoted to Purchase of fertilizers, pesticides and seed by the farmers without any hustle .

**Inputs :**  Create Web based Application , Easy to Navigate , Where buyers will be able to search products from across the globe with detailed information about the product. From search of product and adding the product to wish list or adding the product to cart , buying product, making a payment or returning the product , queries regarding the product , customer support will be on a single click .

**Over View of the Project :** Its is e commerce base project. The main theme is to sale the fertilizers , pesticides and seeds to farmers with user friendly access.

**Resources:**  The team consists of Business Analysis , Java Developers, Tester, Network Admin DB Admin.

**Outputs :**  Successful implementation of application with eases of access to the farmers, efficiency .

**Activities:** Excellent customer support, Partnership with leading brand for supply of fertilizers, pesticides and seeds.

**Value :**  Customer satisfaction and customer feedback .

**QUESTION – 2 SWOT**

**Strengths :**  Brand recognizeation, reputation of application using the platform, quality and quantity .

**Weakness:**  vendors, supply chain management, inventory management.

**Opportunities** : Advertisements in different modes, expansions on different platforms like market ,digital market and markets.

**Threats:**  Change of customer to other websites due to competitor companies change in rate of product, quality or quantity .

**QUESTION – 3 FEASIBILITY STUDY :**

**Technology:**  . Based on data base servers, payment gateways, security .

**Software :**  application opening, search engine, shopping cart, payment gateways.

**Hardware :**  Based on Backup ,Depends on storage, network infrastructure.

**Budget :**  Rs. 1croer.

**Time Frame :**  18 Months.

**Trained Resources :**  Project Management Team, Business analyst , Software developer, Marketing team.

**QUESTION – 4 GAP ANALYSIS:**

Current State :

* Establishment of online agricultural, farming requirements platforms with a wide range of products and seamless shopping experience.
* Dependence on external vendors for product supply and limited control over product quantity and quality
* High operating expenses due to investments in technology and marketing.

Desired State :

* Increased control over product quality through strategic partnership with select brands and manufacturers.
* Expansion into new product categories and market.
* Continued investment in emerging technologies enhance the customer experience .
* Improved operational efficiency and probability through cost reduction measures.

**QUESTION -5 RISK ANALYSIS**

Internal Risk: Dependence on external vendors for supply , high operating expenses due to investment in technology and market.

External Risk: High Competition from other online platforms.

BA Risk : Incomplete knowledge in requirement of project, domain, change in requirements.

Project Based Risk: scope risks, stakeholder risks.

**QUESTION – 6 STAKE HOLDER ANALYSIS (RACI MATRIX)**

|  |  |  |  |
| --- | --- | --- | --- |
| **RACI** | **NAME** | **DESIGNATION** | **DETAILS** |
| **RESPONSIBLE** | Mr. Karthik | Delivery Head | cont no-543028reach-9-1ist, mail-123@gmail.com |
| Mr. Jason , Ms Alkeya | Tester | cont no-978,reach-9-1ist, mail-123@gmail.com |
| Mr. Jushi | Senior Java Developer | cont no-543218,reach-9-1ist,mail-123@gmail.com |
| **ACCOUNTABLE** | Mrs. Bhavana Merugu | BA | cont no-543008,reach-9-1ist,mail-123@gmail.com |
| Mr. Vandanam | Project Manager | cont no-5123028,reach-9-1ist,mail-123@gmail.com |
| Mr.Lucke, Mr. Tukcer,Mr. Baravo | Java Developer | cont no-654028,reach-9-1ist,mail-123@gmail.com |
| Mr. Peter , kevin, Ben | stakeholders | cont no-2356896,reach-9-1ist,mail-123@gmail.com |
| **CONSULTED** | Mr. Mike | Network Admin | cont no-125487525,reach-9-1ist,mail-123@gmail.com |
| John | DB Domain | cont no-25874632,reach-9-1ist,mail-123@gmail.com |
| **INFORMED** | Mr. Henrey | sponser | cont no-8523698,reach-9-1ist,mail-123@gmail.com |
| Mr. pandu | Financial Head | cont no-25689785,reach-9-1ist,mail-123@gmail.com |
| Mr. Dooku | Project Co-ordinator | cont no-58659861,reach-9-1ist,mail-123@gmail.com |

**QUESTION-7 BUSINESS CASE DOCUMENT:**

1. Why is the project Initiated ?

The whole purpose of this project is to help farmers to buy agricultural products on just one click. To have them a hassle free experience and to save their time, as they will search the required products from N number of sellers across the country and will be able to place the order in seconds , also the product will be delivered at there door step. All these activities will be done, right from there home. They wont have to step out of the home.

1. What are the current Problems?

Budget could be increased along with the time frame, as this project is demanding in terms of resources. lack of domain knowledge and lack of education of stakeholders could be hindrance in gathering requirement properly and implementing them correctly.

1. With the project, How many problems could be solved ?

Online plat form for farmers to fulfill there needs at one platform &With the help of the APP, farmers will get all the varieties of the agricultural project on one platform, it will save a lot of time, and orders will be delivered to their doorstep.

1. What are the resources required ?

Balsmiq, Visio, Java, Azure, Power BI In the this business case documents. MR. Karthik needs to analyze the things like- A business case is a package of information, analysis and recommendations. A business case is prepared by Sr BA, Business Architect & Pre-sales team. A business case also helps in identifying key stakeholders who are affected by the problem. 14-15 people of dedicated team is required. To complete this project we need PM , BA, Software developers, testers, technical team, DB.

1. What is the time frame to recover ROI?

As project is for 18 months. This app would be beneficial for all the farmers, fertilizers and pesticides companies. This time frame for return on investment is possibly after 1 year.

1. How to identify stakeholders.

The best way to identify the stakeholders is to prepare RACI matrix based on the functionality of the every individual.

**QUESTION – 8 FOUR SDLC METHODOLGIES:**

**Sequential:** The entire project will be delivered at the end of the time frame i.e18 months. { in this project all the application will be developed and testing will be done after that the same will be delivered to the client }

**Iterative:** The project will be split into multiple modules and module wise will keep delivering back to the client . { in this case Like finding the suppliers, creating the blog, adding the list of pesticides , pricing and final stage selling through cart }.

**Evolutionary:**  The look and frame of the project first given to the client and then slowly we will keep adding the functionalities to the project. { i.e in this project within 6 months we will provide the overall app development to the client and then like trial and error method we will add the functionalities like seeling through the same platform }.

**Agile :** It is Continuousness deliverable of the executives of software . The frequency of deliverable will be 2 weeks to maximum 2 months. Continues deliveries of software will happens only in agile that’s why agile is preferred in present way.

**QUESTION-9 WATERFALL RUP SPIRAL AND SCRUM MODELS :**

**WATERFALL MODEL:**  The Traditional Waterfall model is sequential design process in which the process is seen steadily one after the other like waterfall ( i.e Waterfalls flows from top to bottom , it cannot go back to the same way ) through the phases of Requirements Gathering , Requirement Analysis, Design, Development – coding, testing Deployment and Implementation.

In each phase the resources( BA, PM. Tech team – Dessign arch, DB arch, Programmers, Developers, Testers, Release Engineers ) will participate and in result they prepare the documentation parts like ( BRD, FS/FRS, SSD , SRS, RTM, HDD/ADD, Solution document, LDD/CDD , text document etc ).

**RUP (RATIONAL UNIFIED PROCESS) :** In this process where phases / module wise application is developed . Hence we can track the defects in early stages. In RUP a software engineering and development process focused on using the unified modeling language to design and build software. In RUP effectiveness and efficiency would be high.

**SPIRAL MODEL:** The spiral model is used for risk management that combines the iterative development process model with elements of the waterfall model . Spiral indicates the increase in time frame and budget.

**SCRUM MODEL:** Scrum is an Agile project management framework that enables teams to work together in a efficient, organized way. It is divided into five distinct phases – Initiation, planning and estimates, Implementation, Review and Retrospective , Release phase.

**QUESTION 10- WATERFALL VS V- MODEL:**

|  |  |  |
| --- | --- | --- |
| **ASPECT** | **WATERFALL MODEL** | **V-MODEL** |
| **COST** | The cost of waterfall model is low. | V- Model is expensive |
| **SIMPLICITY** | It is Simple | It is Intermediate |
| **FLEXIBILITY** | Waterfall model is Rigid | It is Little Flexible |
| **PHASES** | There is no way to return to the earlier phase | There is no such constraint in v-m model |
| **EXECUTION PROCESS** | It is sequential execution process. | It is Sequential execution process |
| **LINEAR MOVEMENT OF STEPS** | It Moves in Linear way | It doesn’t moves in linear way |
| **REUSABILITY** | It is limited | It can be re-use for some extent |
| **USER INVOLVEMENT** | User involvement in waterfall model is only in beginning | User involvement in V- model is only in beginning |
| **TESTING ACTIVITES START** | In this model start after the development activities are over | In this model testing activities start with the first stage |

**QUESTION 11- JUSTIFY YOUR CHOCIE :**

I Choose V- Model Because it may be costlier but it is easier to use and project can be completed faster and in V- Model testing activities start with the first stage . Ther is possibility to test a software during its initial stages of development and identification of defects can be done . It can be re-used , Guarantee of Success through V- Model is high. Debugging can be done in between phases . V- model is widely used in software engineering.

**QUESTION – 12 GNATT CHART:**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **RESOURCES** | **Week 1-10** | **Week 10-20** | **week 20-30** | **week 30-40** | **week 40-50** | **week 50- 60** | **week -60-70** | **week 70-77** | **week 78** |
| **Project Manager** |  |  |  |  |  |  |  |  |  |
| **Business Analyst** |  |  |  |  |  |  |  |  |  |
| **Developers** |  |  |  |  |  |  |  |  |  |
| **Operations/ Support Head** |  |  |  |  |  |  |  |  |  |
| **Testers** |  |  |  |  |  |  |  |  |  |
| **Network Engineers** |  |  |  |  |  |  |  |  |  |

**QUESTION 13- FIXED BID VS BILLING :**

**Fixed Bid :** In Fixed Bid In regular functionality time and budget is fixed. All the domestic projects are working in Fixed Bid . For Example ( The projects needs to be completed in time frame of 18 months with a budget of 2 corers, then in that time frame and with in the cost project needs to be submitted to the client at the end of the day).

**Billing Project:** There will be no time frame and fixed payment . It can be completed in 18 months or it cannot be completed in 18 months . Billing will be given to client per resources / Hrs bases.

**QUESTIONS 14 PREPARE TIMESHEETS OF A BA IN VARIOUS STAGES OF SDLC:**

* **Design Timesheet of a BA:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Time Started** | **Time Stopped** | **Total Time** | **Remarks** |
| Had a meeting with technical team | 10:45 AM | 11:45 AM | 60 min | Completed |
| Detailed analysis on the progress of the application | 12:00 PM | 01:30 | 90 min | Completed |
| The risk and challenges faced in the design phase are covered | 2:15 PM | 3:45 PM | 90min | Completed |
| High level design document is prepared and analyzed | 4:15 PM | 5:15 PM | 60 min | Completed |

* **Development Timesheet of a BA:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Time Started** | **Time Stopped** | **Total Time** | **Remark** |
| Morning meeting with programmers and developers | 10:45 AM | 11:45 AM | 60 min | Completed |
| Thorough analysis on the coding part of the software | 12:00 PM | 01:30 | 90 min | Completed |
| Reporting the development of the | 2:15 PM | 3:45 PM | 90min | Completed |
| Low level design document is prepared by developers and studied | 4:15 PM | 5:15 PM | 60 min | Completed |

* **Testing Timesheet of a BA:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Time Started** | **Time Stopped** | **Total Time** | **Remark** |
| Meeting with testers and responsible stakeholders | 10:45 AM | 11:45 AM | 60 min | Completed |
| Comprehensive assessment of a software as per the client needs | 12:00 PM | 01:30 | 90 min | Completed |
| Defects are analyzed and errors are minimized | 2:15 PM | 3:45 PM | 90min | Completed |
| Test document is prepared | 4:15 PM | 5:15 PM | 60 min | Completed |

* **UAT Timesheet of BA:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Time Started** | **Time Stopped** | **Total Time** | **Remark** |
| Morning meeting with the concerned team | 10:45 AM | 11:45 AM | 60 min | Completed |
| Genuine change request are put under consideration | 12:00 PM | 01:30 | 90 min | Completed |
| Functionalities are added as per the given change request | 2:15 PM | 3:45 PM | 90min | Completed |
| Reporting the possible outcome to the PM | 4:15 PM | 5:15 PM | 60 min | Completed |

* **Deployment and Implementation Timesheet of BA :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task Description** | **Time Started** | **Time Stopped** | **Total Time** | **Remark** |
| Team meeting to analyze the user readiness of the software | 10:45 AM | 11:45 AM | 60 min | Completed |
| Running the code for the first time | 12:00 PM | 01:30 | 90 min | Completed |
| Risk analysis of the given code from the release engineers' perspective | 2:15 PM | 3:45 PM | 90min | Completed |
| Reporting the possible outcome to the PM | 4:15 PM | 5:15 PM | 60 min | Completed |