Capstone prep1 part 3

Q1) Functional Requirement.

1. These define the specific behavior, functions or operations of a system. They describe the system should do outlining the necessary tasks, actions or activities, it must perform to achieve its objective.

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| --- | --- | --- |
| Req ID | Req Name | Req Description |
| FR001 | User Registration | Users should be able to register with the specification. |
| FR002 | Search for the products | Users should be able to search for the available products. |
| FR003 | Adding products to the cart | Users should be able to add the products to the cart. |
| FR004 | Adding products to the wishlist | Users should be able to add the products to the wishlist. |
| FR005 | Payment  | Users should be able to make a payment with different modes. |
| FR006 | Notification | Users should be able to get a notification of their product. |
| FR007 | Delivery | Users product should be delivered to their desired location. |
| FR008 | Adding products to the product catalogue | Manufacturers should be able to add their products to the product catalogue. |
| FR009 | Login | Users should be able to login. |
| FR010 | User request detail products | Users should be able to request the details of the product |

Non-Functional Requirements:

These will describe the qualities and attributes of a system focusing on how the system performs rather than specific behavior or functions.

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| --- | --- | --- |
| Req ID | Req Name | Req Description |
| NFR001 | Usability | The application should have an initiative and user friendly. |
| NFR002 | Performance | The application must load page within 3 seconds |
| NFR003 | Security | The application must ensure secure user authentication. |
| NFR004 | Compatibility | The application should be compatible with major web browser. |
| NFR005 | Response Time | The application should respond to user inputs within 2 seconds. |
| NFR006 | Performance | The application home page should be uploaded in 3 seconds |
| NFR007 | Response | The user should get delivery notification with in 5 seconds. |
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Q2) Wireframes and prototypes.

Q3)Tools

MS-VISIO- Microsoft Visio is a software for drawing a variety of diagrams. These include flowcharts, org charts, building plans, floor plans, data flow diagrams, process flow diagrams, business process modelling, swimlane diagrams, 3D maps, and many more. We  can use Visio for the web without a license to view basic Visio files. Sign in to your Microsoft 365 account, upload the Visio file to OneDrive, and then select the file there to open it.

Microsoft Visio is a powerful diagram creation and editing tool, but it's challenging enough to set up that it's best suited for bigger businesses with the IT resources to handle the process. It is a Diagrammimg and Vector graphics application used to create diagrams , flowcharts,and other visual representation of complex information.

Balsamiq: Balsamiq is a rapid wireframing tool used to create mockups and prototypes of user interfaces. Balsamiq Cloud is a web-based user interface design tool for creating wireframes (sometimes called mockups or low-fidelity prototypes). You can use it to generate digital sketches of your idea or concept for an application or website, and to facilitate discussion and understanding before any code is written. Balsamiq lacks the advanced features of other wireframing and UX development platforms. The reason for this is simple: it is a wireframe development tool, nothing more. While it offers useful collaboration and sharing options, Balsamiq is not attempting to be anything other than a go-to tool for wireframes.

Axure: Axure is a more advanced prototyping tool used to create high fidelity ,interactive wireframes and prototypes for web and mobile applications. Axure is a fully integrated application that eliminates the need to use different design tools. For example, after creating user flows, customer journey maps, personas, storyboards, sitemaps, information architecture, and wireframes, designers can easily continue to complex prototypes—right inside Axure. Axure RP has a learning curve, especially for beginners, due to its extensive feature set and complexity. Pixel-Level Detail: Axure RP may lack precision and fine-grained control over pixel-level design details compared to other tools.

Q4) RTM- Requirements traceable Matrix

It is a document to track the requirements throughout the project lifecycle, ensuring that they are met and that no requirements are overlooked.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Req id | Req Name | Req Description | Design | Code | UI | CI | ST | SIT | UAT |
| FR001 | User Registration | Users should be able to register with the Specification | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR002 | Search for the products | Users should be able to search for the available products. | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR003 | Adding products to the cart | Users should be able to add the products to the cart. | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR003 | Payment | Users should be able to make a payment with different modes. | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR004 | Notification | Users should be able to get a notification of their product. | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR005 | Delivery | Users product should be delivered to their desired location. | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR006 | Login | Users should be able to login | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FROO7 | Adding products to the product catalogue | Manufacturers should be able to add their products to the product catalogue | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |
| FR008 | User request detail products | Users should be able to request the details of the product | Complete | Complete | Complete | Complete | Incomplete | Incomplete | Incomplete |

Q5) Test Case Documents

1. A Test Case Document is a detailed outline used by testers to ensure that a software application or a system is working as expected.

Test case Document for Product search.

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| --- | --- | --- | --- | --- | --- |
| Test Case ID  | PQ786TS003 | Test Case Name | Search Querey |  |  |
| Project Id | PQ786 | Project Name | Online Agricultural product Store |  |  |
| PM ID | 4869 | Tester ID |  |  |  |
| Test Strategy ID | PQ786TS001 | Tester Name |  |  |  |
| Test Plan ID | PQ786TS001 | Date of Test |  |  |  |
| Test Schedule ID | PQ786TS001 |  |  |  |  |
| Scenario | Search for product |  |  |  |  |
| Link to Page |  |  |  |  |  |
| Input Data | Set 1Seeds NameTypeCategory/BrandCompany | Set 2Fertilizer NameTypeCategoryCompany | Set 3 PesticideTypeCategoryCompany | Set 4Vegetable seedsTypeBrandCompany | Set 5Fruit SeedsTypeBrandCompany |
| Expected Behaviour |  |  |  |  |  |
| Actual Behaviour |  |  |  |  |  |
| Comments |  |  |  |  |  |
| ResultPass/Fail |  |  |  |  |  |

Test Case Document for Payment.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID  | PQ786TS003 | Test Case Name | Search Querey |  |  |
| Project Id | PQ786 | Project Name | Online Agricultural product Store |  |  |
| PM ID | 4869 | Tester ID |  |  |  |
| Test Strategy ID | PQ786TS001 | Tester Name |  |  |  |
| Test Plan ID | PQ786TS001 | Date of Test |  |  |  |
| Test Schedule ID | PQ786TS001 |  |  |  |  |
| Scenario | Payment Deatils |  |  |  |  |
| Link to Page |  |  |  |  |  |
| Input Data | Set 1NameSort CodeAcct NameAmount | Set 1NameSort CodeAcct NameAmount | Set 1NameSort CodeAcct NameAmount | Set 1NameSort CodeAcct NameAmount | Set 1NameSort CodeAcct NameAmount |
| Expected Behaviour |  |  |  |  |  |
| Actual Behaviour |  |  |  |  |  |
| Comments |  |  |  |  |  |
| ResultPass/Fail |  |  |  |  |  |

Test Case Document for Delivery

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID  | PQ786TS003 | Test Case Name | Search Querey |  |  |
| Project Id | PQ786 | Project Name | Online Agricultural product Store |  |  |
| PM ID | 4869 | Tester ID |  |  |  |
| Test Strategy ID | PQ786TS001 | Tester Name |  |  |  |
| Test Plan ID | PQ786TS001 | Date of Test |  |  |  |
| Test Schedule ID | PQ786TS001 |  |  |  |  |
| Scenario | Product Delivery |  |  |  |  |
| Link to Page |  |  |  |  |  |
| Input Data | Set 1Name Address | Set 1Name Address | Set 1Name Address | Set 1Name Address | Set 1Name Address |
| Expected Behaviour |  |  |  |  |  |
| Actual Behaviour |  |  |  |  |  |
| Comments |  |  |  |  |  |
| ResultPass/Fail |  |  |  |  |  |

Test Case Document for Registration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID  | PQ786TS003 | Test Case Name | Search Querey |  |  |
| Project Id | PQ786 | Project Name | Online Agricultural product Store |  |  |
| PM ID | 4869 | Tester ID |  |  |  |
| Test Strategy ID | PQ786TS001 | Tester Name |  |  |  |
| Test Plan ID | PQ786TS001 | Date of Test |  |  |  |
| Test Schedule ID | PQ786TS001 |  |  |  |  |
| Scenario | Registration process |  |  |  |  |
| Link to Page |  |  |  |  |  |
| Input Data | Set 1UsernamePasswordEmailMobile |  |  |  |  |
| Expected Behaviour |  |  |  |  |  |
| Actual Behaviour |  |  |  |  |  |
| Comments |  |  |  |  |  |
| ResultPass/Fail |  |  |  |  |  |

Test CASE Document for Login

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Case ID  | PQ786TS003 | Test Case Name | Search Querey |  |  |
| Project Id | PQ786 | Project Name | Online Agricultural product Store |  |  |
| PM ID | 4869 | Tester ID |  |  |  |
| Test Strategy ID | PQ786TS001 | Tester Name |  |  |  |
| Test Plan ID | PQ786TS001 | Date of Test |  |  |  |
| Test Schedule ID | PQ786TS001 |  |  |  |  |
| Scenario |  |  |  |  |  |
| Link to Page |  |  |  |  |  |
| Input Data |  |  |  |  |  |
| Expected Behaviour |  |  |  |  |  |
| Actual Behaviour |  |  |  |  |  |
| Comments |  |  |  |  |  |
| ResultPass/Fail |  |  |  |  |  |

Q6) Draw DB schema and Entity relationship diagram

1. DB Schema is a blue print that outlines the structure of a database, including its tables, fields, relationships, constraints and other characteristics.
2. An Entity relationship diagram is a visual representation of the relationships between entities in a database. It depicts the entities (such as tables), attributes(properties or fields) and relationships between them.



Q7) Data flow diagram

1. A Data diagram is a graphical representation of the flow od data within a system. It virtually shows how the data moves from one process to another, how its stored and where it ends up.
2. It helps analysts and designers understand the flow of data within a system, identify potential bottlenecks or inefficiencies and communicate system requirements to stakeholders.



Q8) BA should handle change requests

1. A change request is a formal proposal to alter a system, product or a project.
* Understand the scope of change request and document the change request.
* Do the impact analysis- project scope, schedule, budget, resources and risks.
* Prioritise change requests based on its urgency, importance, impact on project.
* Seek approval from the project sponsor for the change request.
* Communicate the change request and its potential impacts to all relevant stakeholders, including the project team.

Q9) Change request Vs enhancement

1. In this case, adding auction to the application would be considered an enhancement as it involves adding new features to the system.

As a business analyst, you should document the requirements and work with the development team to determine the feasibility and impact of the new features. You should also consider the potential benefits, risks and costs associated with the enhancements before making any recommendations to the client.

Q10) Man Hours

1. Man hours are the required effort of the resources to complete a project. There are 3 types of projects.
* Small: upto 500 hours.
* Medium: upto 1000 hours.
* Large: upto 1500 hours.

Analysis

* As per the case study, the duration of the project is 18 m0nths and the current team size is around 15. This will come under medium project.
* As the trained resources are available, trainers are not required.
* As the structure of the project is available, new and enhanced infrastructure is not required.

Q11) UAT Process

1. Planning : In this step, Blue prints are made to implement UAT testing for every feature that needs to be test and minimum standards for accepting the test.
2. Designing : Here the test cases are designed to hide all the possibilities of software packages in a real world environment.
3. UAT Testers: A Testing team consists of a end users that meet the criteria for implementing testing. They should know the test cases to run and understand the functionalities.
4. Bug Fixing: Whatever Bugs are found in the UAT Testing, the development team should work on them and make it software error free.
5. Sign Off : After removing all the bugs, the testing team indicates acceptance of the completion of the bugs, In this phase, all the stakeholders come to a conclusion that the software is ready to GO LIVE and sign it off.

Q12) Project Closure Document

1. A Project closure document also known as a project closure report. It is a formal document that summarizes the key outcomes, lessons learned and final details of a completed project.
2. It serves as a comprehensive record of the project’s accomplishments, challenges, and overall performance providing valuable insights for stakeholders and future projects.
3. Points to be included in the project closure are:
* Project overview
* Achievements.
* Lessons learned.
* Quality assurance
* Resource utilization
* Risk management
* Challenges.