Project 3- part 2

Ques 1:

|  |  |  |
| --- | --- | --- |
| Aspect | Brainstorming | JAD sessions |
| Purpose | Generate ideas and solutions | Collaboratively gather requirements |
| Participants | Usually, a diverse group of stakeholders | Typically includes project team members, stakeholders and facilitator |
| Format | informal and open-ended discussion | Structured sessions with predefined agenda |
| Output | Ideas, concepts and potential solutions | Documented requirements, user stories, and use cases |
| Structure | Unstructured or semi-structured; encourages free-flowing ideas without criticism. | Highly structured with predefined agendas, roles, and outputs. |
| Focus | Quantity of ideas over immediate feasibility | Consensus-building and detailed documentation. |

Question 2

Document analysis is one of the compulsory elicitation techniques for any project.

It provides valuable insights, information, and context that are essential for project success.

It contains valuable information about project objectives, scope and expectations.

Quality assurance-Documents include quality standards, guidelines, and procedures that define expectations for project deliverable

Documentation of the system could provide lot of information which may include interface details, user manuals and software vendor manuals. It would be easy to transfer lot of information to a new system requirement document.

We have documentation about the current system which could provide some of the input for the new system requirements. Such documentation could include interface details, user manuals and software vendor manuals.

Could be a lot of information and easy to transfer to a new system requirements document.

Document analysis is an important gathering technique. Evaluating the documentation of present system can assist when making AS IS process documents and also when driving the gap analysis for scoping of migration projects.

Ques 3:

Reverse engineering is the process of extracting knowledge or design information from anything man made and re-producing it or reproducing anything based on the extracted information.

There are 2 categories:

**black box** refers to analyzing a system's inputs and outputs without any knowledge of its internal workings. The focus is on observing how the system behaves under different conditions to infer its functionality or design.

**white box** refers to analyzing a system with full knowledge of its internal structure, logic, and code. This approach involves examining the system's components, algorithms, and interconnections to understand its functionality.

Reverse engineering is a process that is designed to extract enough data from a product and then to be able to reproduce that product. It may involve moving to creating a product from scratch or from pre developed components. It can be applied to any products such as computer technology, manufactured products, biological products, chemical products etc. to determine how the components are put together and how it works.

Reverse engineering is a useful design and development technique with many potential applications, however it is always important to get legal advice prior to conducting reverse engineering exercises and doubly so if you intend the outputs of your reverse engineering to become commercially available. There is no single process across industries for reverse engineering it is a simply a process by which you take an end product and deduce how it is made and works

Question- 4

|  |  |  |
| --- | --- | --- |
|  | Brainstorming | focus groups |
| Purpose | Generate ideas | improve existing ideas |
| condition | a need to solve a problem | a need to study an existing ideas, solutions or process |
| no of participants | approx. 8 people | approx. 12 people |
| participant types | heterogenous | can be homogenous or heterogenous |
| person running the show | facilitators | skilled moderator |
| Knowledge of topic of discussion | Not necessary | in depth knowledge |
| guide | develop criteria for evaluating and rating ideas | create a discussion guide and moderator scripts |
| game time |  |  |
| ground rules | must have | nice to have |
| duration | Restrict time to produce ideas 1-2 hrs. | 1-2 hrs. and sometimes over several days |
| type of questions to ask | progressive closed ended to generate and build on ideas | can be open ended to generate qualittaive data |

Question 5

Business analysts use observation techniques to gather information by watching and understanding workplace activities

It is used to identify needs and opportunities understand business processes, create performance standards, assess solution performance and facilitate training and development

Observation of activities or job shadowing is the act of studying a work activity as it is being performed. it can be performed in either the user work environment or in a recreated test environment.

2 approaches.

1. Active/noticeable- while observing an activity the observer can ask any questions as they occur despite this interruption to the workflow, the observer can quickly understand the reasoning and any undocumented processes within the activity.
2. Passive/ unnoticeable- in this approach, the observer does not interrupt the work while the user is performing the work activity. Any questions would be asked once the observation is over. This allows the natural flow of events to be observed without interference by the observer, as well as the measurement of the time and quality of work.

Question 6:

A **requirement workshop** is a collaborative session where stakeholders, business analysts, and team members gather to define, analyze, and prioritize project requirements. It aims to ensure clear understanding and agreement on project needs, typically involving discussions, brainstorming, and documentation.

**Key Features:**

1. **Collaboration:** Encourages active participation from all stakeholders to ensure diverse perspectives are considered.
2. **Facilitation:** Often led by a business analyst or facilitator who guides discussions and ensures alignment.
3. **Structured Approach:** May include brainstorming, use case modeling, or prototyping to elicit and document requirements.
4. **Outcome-Oriented:** Aims to produce a well-defined and agreed-upon set of requirements, often documented in a requirements specification or user stories.

**Benefits:**

* Reduces misunderstandings and rework.
* Enhances stakeholder buy-in and clarity.
* Accelerates the requirements gathering process.

|  |  |  |
| --- | --- | --- |
| Step 1 prepare | Step 2 conduct | Step 3 follow up |
| Clairfy the initial scope | Reviw the goal, agenda abd ground rules for the meeting | Follow up on any open action items |
| Define the workshop agenda | Maintain the proffesional and objective tone | Distribute completed documentation to appropriate stakeholders |
| Determine appropriate session tools, templates and outputs | elicit , analyze and document requirements using agreed tools and templates | schedule final walkthrough with the intent of gaining approval |
| Conduct pre workshop interview, job shadowing, document review | occasionally validate the activities within the workshop stated objective to stay on track |  |
| send material in advance to attendes | Ensure all stakeholders are heard and obtain consensus on conflicimg views |  |

Question 7:

The **interview technique** in requirements gathering involves direct, one-on-one or group conversations with stakeholders to collect information about their needs, expectations, and preferences for a project. This technique is widely used to understand the requirements in detail.

The purpose of interview technique is to extract invaluable insights, expectations, and needs from individuals involved in or affected by the project

Interviews can be conducted in various contexts such as during requirement gathering, stakeholder analysis, or process analysis.

**Types of Interviews:**

1. **Structured:** Predefined questions with a clear format.
2. **Unstructured:** Open-ended, free-flowing discussions, allowing for flexibility
3. **Closed-Ended:** Multiple-choice, Yes/No, or rating scale questions for quantitative data.
4. **Open-Ended:** Free-text responses for qualitative insights.

Question 8:

The **questionnaire technique** in requirements gathering involves using a set of predefined questions to collect information from stakeholders or users. It is typically used when data needs to be collected from a large group efficiently.

**Types of Questions:**

1. **Closed-Ended:** Multiple-choice, Yes/No, or rating scale questions for quantitative data.
2. **Open-Ended:** Free-text responses for qualitative insights.

It is a method of data collection commonly used in research, surveys, and assessments.

It involves presenting a set of written questions to respondents and collecting their responses

It can be administered in any way:

1. Paper pencil
2. Online surveys
3. Face to face interviews where the questions are read to the participants.

Question 9:

Sorting requirements is a crucial step in the requirement management process, helping to organize, prioritize, and categorize them for effective analysis and implementation.

Sorting is often done during the requirements elicitation, and documentation phase of a project

Sorting is:

* 1. Identification of requirements
  2. Dividing the identified requirements into functional and nonfunctional requirements
  3. If identified requirements are similar then they are put together and removed

Based on functional and nonfunctional requirements, priority sorting, user role sorting , time dependency sorting we can sort the requirements.

**Functional Requirements**

* **Definition**: Specify what the system must do or the tasks it should perform.
* **Focus**: Features, behavior, and capabilities of the system.
* **Examples**:
  + User authentication and authorization.
  + Data processing (e.g., calculate sales tax).
  + Allow users to upload and download files.
  + Generate reports.

**Non-Functional Requirements**

* **Definition**: Define how the system should perform or its operational characteristics.
* **Focus**: Quality attributes, performance, and usability.
* **Examples**:
  + Performance: System must handle 1000 transactions per second.
  + Scalability: Must support 10,000 concurrent users.
  + Security: Data must be encrypted during transmission.
  + Usability: Interface should be user-friendly and responsive.

In short, **functional requirements** are about what the system does, and **non-functional requirements** are about how it does it.

Ques 10;

**Prioritizing requirements** helps focus on the most critical features and ensures efficient resource allocation. One commonly used method for prioritization is **MoSCoW** (Must Have, Should Have, Could Have, Won’t Have).

common techniques to prioritize the requirements effectively:

**Moscow method**

1. **Must-have:** Essential requirements for project success.
2. **Should-have:** Important but not critical; can be delayed if needed.
3. **Could-have:** Desirable but non-essential; optional.
4. **Won't-have (for now):** Deferred for future consideration.

Kano Model:

1)**Basic needs:** Must be fulfilled to avoid dissatisfaction.

2) **Performance needs:** Increase satisfaction as they improve.

3) **Excitement needs:** Unexpected features that delight users

Business value:

Prioritize based on the expected impact on business goals, such as ROI, customer satisfaction, or market demands.

Risk and complexity:

Address high-risk or complex requirements earlier to mitigate challenges

Cost benefit analysis:

Evaluate the cost of implementing a requirement against its expected benefit.

Question 11:

A **weekly status report** is a document or communication tool used to provide updates on the progress of a project, task, or activity over the past week. It typically highlights completed work, ongoing activities, challenges encountered, and plans for the upcoming week.

Questions that can asked during weekly status reporting is:

* 1. What have you been working on recently
  2. What have you accomplished this week
  3. What are your top priorities
  4. What are your challenges going into next week

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| completed items | | | | |
| **project** | **task** | **team members** | **estimation** | **notes** |
| ABC | XYZ | 4 | 4 | 4 |
| XYZ | ABC | 4 | 4 | 4 |
|  |  |  |  |  |
| IN PROGRESS | | | | |
| **project** | **task** | **team members** | **estimation** | **notes** |
| ABC | XYZ | 4 | 4 | 4 |
| XYZ | ABC | 4 | 4 | 4 |
|  |  |  |  |  |
| Assigned but not started | | | | |
| **project** | **task** | **team members** | **estimation** | **notes** |
| ABC | XYZ | 4 | 4 | 4 |
| XYZ | ABC | 4 | 4 | 4 |

Question 12:

A **Minutes of Meeting (MoM)** document records the key points, decisions, and actions discussed during a meeting. It serves as an official record and ensures that all participants and stakeholders have a shared understanding of what was discussed and agreed upon.

It is particularly important for tracking project progress, documenting decisions, and assigning responsibilities.

|  |  |  |  |
| --- | --- | --- | --- |
| Meeting/project name | Sprint review meeting | | |
| Date of meeting(MM/DD/YYYY | 23.01.2024 | Time | 9:30 |
| Meeting facilitator | Business analyst | location | Mumbai |
|  |  |  |  |
|  |  |  |  |
| Meeting objective | | | |
| Discuss status of sprint |  |  |  |
| discuss progress report of project |  |  |  |
| Discuss about impediments if any |  |  |  |
| Suggest solutions |  |  |  |
|  |  |  |  |
| Attendes | | | |
| Name | Department | Email | phone |
| ABC | 123 | ABC | 123 |
| XYZ | 321 | XYZ | 321 |
|  |  |  |  |
| Meeting agendaTopic | owner | time |  |
| decision about the actions and sprints | Department team |  |  |
| Decision on WIP items | Department team |  |  |

Question 13:

A **Change Tracker Document** is used to record, monitor, and manage changes made to a project, system, or product. It ensures that changes are properly documented, evaluated, and approved before being implemented, helping to maintain control over the project scope, budget, and timeline.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | version number | document changes | name | Title | signature | approved by |
| 23.01.2024 | v1 | abc | abc | abc | xyz | xyz |
| 24.01.2024 | v2 | cde | cde | cde | xyz | xyz |
| 26.01.2024 | v3 | efg | efg | efg | xyz | xyz |
| 23.02.2024 | V4 | ghi | ghi | ghi | xyz | xyz |
| 25.03.2024 | V5 | jkl | jkl | jkl | xyz | xyz |
| 28.03.2024 | V6 | mnb | mnb | mnb | xyz | xyz |
| 29.03.2024 | V7 | zxv | zxv | zxv | xyz | xyz |
| 30.03.2024 | V8 | wer | wer | wer | xyz | xyz |

Question 14:

Difference between waterfall and agile methodology:

|  |  |  |
| --- | --- | --- |
| Aspect | waterfall method | Agile methodology |
| Development approach | Liner and sequential | iterative and incremental |
| Flexibility and adaptability | less adaptable to changes after project initiation, changes can be costly | embraces changes throughout the development process, flexibility is a key principle |
| project planning | detailed planning at the project's start changes may be discouraged | incremental planning, welcomes and accommodates changes, planning revisited regularly |
| delivery of software | entire system developed and delivered at the end of the project | Software delivered in small, functional increments(iterations) |
| client involvement | Limited involvement during development more at the beginning and end | Frequent client collaboration throughout the development process |

Ques 15:

Brainstorming Technique: Brainstorming is a creative problem-solving method where individuals or groups generate a wide range of ideas or solutions without immediate judgment or criticism. It encourages free thinking and collaboration to explore multiple perspectives.

Where to Use:

* Problem-Solving: To find innovative solutions for challenges.
* Idea Generation: For developing new products, services, or strategies.
* Decision Making: To analyze and choose the best alternative.
* Team Collaboration: To enhance creativity and participation.
* Marketing: For campaigns, slogans, and brand strategies.
* Business Planning: To explore opportunities or improve processes.

Ques 16:

Financial statements:

The accounts department prepares and provides financial statements, including balance sheets, income statements, and cash flow statements. These statements give an overview of the borrower financial position, profitability and ability to generate cash flow.

Company reserve loan report:

This report will help understand the reserve amount.

Credit report: The account department may obtain a credit report on the borrower from a credit bureau. This report provides information on the borrower credit history, including their repayment track record, outstanding loans and credit score.

Collateral evaluation: if the loan requires collateral, the accounts department may be involved in evaluating the value and marketability of the proposed collateral. Cash flow projections: The account department prepares cash flow projections based on the borrower ‘s financial data

Debt to income ratio analysis: The accounts department calculates the borrower debt to income ratio which compares the borrower total debt obligations to their income

Ques 17:

Subject: loan application rejection notification

Dear Kumar,

We hope this email finds you well. We would like to inform you that after careful consideration and evaluation of your loan application, we regret to inform you that your loan application has been rejected by the company loan approval committee.

We understand that this news may be disappointing but we want to assure that the decision was made after a thorough assessment of various factors and taking into consideration the company lending policies and financial guidelines.

While we cannot provide specific details regarding the reasons for the loan rejections, we encourage you to review your financial situation and consider alternative options that may better align with your current circumstances. Our HR department is available to provide guidance and support if you require assistance in exploring other avenues for financial assistance.

Please note that this decision does not reflect on your value as an employee and it will not have any impact on your employment or benefits with the company. We remain committed to supporting your professional growth and wellbeing within our organization.

If you have any questions or require further clarification, please feel free to reach out to the HR department and we will be more than happy to assist you.

Thank you for your understanding.

Best regards

HR department

XYZ co

Ques 18:

Subject: loan application: Approval notification

Dear Kumar,

We are pleased to inform you that our loan application has been approved by the company loan approval committee. congratulations on this successful outcome.

We have carefully reviewed your application and considered various factors including your financial standing, employment history, and the loan program eligibility criteria. Based on our assessment we are confident that this loan will assist you in achieving your financial goals.

Below are the details regarding your approved loan.

Loan amount: Rs 15 lakh

Loan term- 10 years

Interest rate-8 %

Repayment schedule- pay in the yearly instalments of Rs 150000

Please review the loan agreement and associated terms carefully. If you have any questions or require further assistance, please don’t hesitate to reach out to the HR department, we are here to provide necessary support and guidance throughout the loan process.

We kindly remind you of your responsibility to fulfill the loan repayment obligations as per the agreed upon terms. Timely and consistent repayment will not only help you meet your financial objectives but also demonstrate your reliability and strengthen your creditworthiness.

We appreciate your prompt attention to the loan agreement and adherence to the repayment schedule. Should you require any assistance or encounter any challenges during the repayment period, please feel free to approach the HR department for guidance and support.

Once again, congratulations on your loan approval we wish you every success in achieving your financial aspirations.

Best Regards

HR department

XYZ co

Ques 19:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Loan Application report | | | Date: DD/MM/YY |  |  |  |
| Loan application ID | Applicant Name | Loan amount | Status |  |  |  |
| PL01 | Johnn | 100000 | Approved |  |  |  |
| HL02 | Smith | 500000 | Pending |  |  |  |
| EL03 | Andrew | 1500000 | Rejected |  |  |  |
|  |  |  |  |  |  |  |
| Notes: |  |  |  |  |  |  |
| 1) Approved Applications have met the loan approval criteria and are eligible for loan disbursement | | | | | | |
| 2) Rejected applications do not meet the loan approval criteria and have been declined | | | | | | |
| 3) Pending applications are currently under review and a decision will be communicated soon | | | | | | |
| 4) For any queries or further information, please contacts the accounts department | | | | | | |

Ques 20:

The choice of reporting tool depends on factors such as the nature of data, reporting requirements, user skill, budget and integration capabilities. some of the popular reporting tools commonly used for generating reports:

Microsoft excel; Excel is a widely used spreadsheet software that offers powerful data analysis and reporting capabilities

Tableau: Tableau is a leading data visualization and reporting tool that enables users to create interactive and visually appealing reports and dashboards.

Power BI: Power BI, developed by Microsoft is a business intelligence tool that allows users to connect, transform and visualize data from different sources.