**CAPSTONE PROJECT PRPARATION 3 PART 2:**

**Q1. What is the difference between Brainstorming and JAD Sessions?**

**Answer:**

|  |  |
| --- | --- |
| Brainstorming | JAD Sessions |
| Brainstorming is the elicitation technique to generate ideas and solutions on a specific issuesCan be done either individually or in group of stakeholdersInformal and open ended discussionIdeas, concepts, and potential solutionsIt is most effective with groups of 8-12 people and should be performed in a relaxed environment. | The joint application development (JAD) technique is an extended, facilitated workshop which involves collaboration between stakeholders in gathering requirements.Typically includes project team members, stakeholders, and facilitator.Documented requirements, user stories, and use cases.Structured sessions with preferred agenda.This technique allows for simultaneous gathering and consolidating of large amounts of data. |

**Q2. Why Document Analysis is one of the compulsory techniques we use in a Project? Justify**

**Answer:**

Document Analysis is a crucial technique used in project management because it provides valuable insights, information, and context that are essential for project success.

Document analysis is done through reading a document and understanding the product process and project.

Understanding requirements: contain valuable information about project objectives, scope, and expectations.

Quality assurance: documents include quality standards, guidelines, and procedures that define expectations for project deliverables.

Advantages: could be a lot of information and easy to transfer to a new system requirements document.

Disadvantages: existing documentation may often be old and out of date. Systems, interfaces, processes and reports may have changed out of all recognition. Care needs to be taken, as it may not reflect what you need from your system.

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

Prepare for document analysis: evaluate which existing system and business documentation are relevant and appropriate to be studies.

Analyse the documents: study the material and identify relevant business details. Document the business details as well as questions for follow-up with subject matter experts.

Post document analysis wrap-up: review and confirm the selected details with subject matter experts.

Obtain answers to follow-up questions.

**Q3. In Which Context we will use Reverse Engineering?**

**Answer:**

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

The process involves dis assembling something and analysing its components and workings in detail. Majorly used in migration projects.

In situations where the software for an existing system has little or out dated documentation and it is necessary to understand what the system actually does, reverse engineering is an elicitation technique that can extracted implemented requirements from the software code.

The two general categories of reverse engineering are:

1. Black box reverse engineering: the system/product is studied without examining its internal structure.
2. White box engineering: the inner workings of the system/product are studies.

**Q4. What is the difference between Brainstorming and Focus Groups?**

**Answer:**

|  |  |
| --- | --- |
|  Brainstorming |  Focus Groups |
| Brainstorming is the elicitation technique to generate ideas and solutions on a specific issuesCan be done either individually or in group of stakeholdersInformal and open ended discussionIdeas, concepts, and potential solutionsIt is most effective with groups of 8-12 people and should be performed in a relaxed environment. | Focus group is the technique which aims and gathers feedback and insights.Representative sample of target audience or stakeholders.Semi structured decisions with moderatorDetailed feedback, observations, and suggestionsMost effective with the group of 5-10 people. |

**Q5. Observation Technique – Explain both Active and Passive approaches?**

**Answer:**

Observation technique is defined as the process of observing, shadowing the users or doing a part of their job, can provide information of existing processes, inputs and outputs.

Advantages: it is useful if the user is not able to clearly explain what they do or their requirements for the new system. Can see ideas for improving processes or removing un necessary activities from the system.

There are two types of observation techniques are there:

1. Passive/Invisible: in this approach the BA observes the subject matter expert working through the business routine but does not ask questions. The BA writes notes about what he/she was invisible. The BA waits until the entire process has been completed before asking any questions.
2. Active/visible: in this approach while the BA observes the current process and takes notes. He/she may dialog with the worker. When the business analyst has questions to ask why something is being done as it is. He/she asks the questions right away; even it breaks the routine of the person being observed.

**Q6. How do you conduct the Requirements Workshop?**

**Answer:**

A Requirements workshop is a structured approach to capture requirements. A workshop may be used to scope, discover, define, prioritize and reach closure on requirements for the target system.

It is conducted and compromises 6-10 more users/stakeholders, working together to identify requirements. Workshops tend to be of defined duration, rather than outcome and need to be briefly repeated in order to clarify or obtain further details.

Prepare for the requirements workshop:

* Clarify the stakeholder’s needs, and the purpose of the workshops.
* Identify critical stakeholders who should participate in the workshop.
* Define the workshop’s agenda.
* Determine what means will be used to document the output of the workshop.
* Schedule the sessions.
* Arrange room logistics and equipment.
* Send materials in advance to prepare the attendees and increase productivity at the meeting.
* Conduct pre-workshop interviews with attendees.

Run the requirements workshop:

Elicit and analyse the document requirements

Obtain consensus on conflicting views

Maintain focus by frequently validating the session’s activities with the workshop’s stated objectivities

The facilitator has the responsibility to:

Establish a professional and objective tone for the meeting.

Enforce discipline, structure and ground rules for the meeting.

Introduce the goals and agenda for the meeting.

Manage the meeting and keep the team on track.

Post requirements workshop wrap-up done by facilitator:

Follow up on any open action items that were recorded at the workshop.

Complete the documentation and distribute it to the workshop attendees and the sponsor.

**Q7. In which context, Interview Technique can be conducted by a BA, How may approaches are there in conducting Interviews? (Structured – Unstructured) Explain them. Explain the difference between Open Ended Questions and Closed ended Questions?**

**Answer:**

An interview is a systematic approach where interviewee is going to ask relevant questions related to software and documenting the responses.

Interview Technique can be used to verify the facts, clarify ambiguity, trigger enthusiasm, engage end users, and identify requirements, and the opinions and ideas. It is used to get more information from the people in a formal or informal setting by asking questions and documenting the responses. It involves direct communication with the individuals or a group of people who are part of an initiative. There are two basic types of interviews. They are

 **Structured Interview:**

Which the interviewer has the predefined set of questions. It is a structured way of interview.

**Unstructured Interview**

 Which the interviewer does not have the predetermined set of questions and it may vary based on the stakeholder responses and interactions.

**Open Ended Questions**

Open-ended questions are those that provide respondents with a question prompt and provide them a space in which to construct their own response.

**Closed-ended questions**

Often the answer is a single word (e.g. Yes or No) or less commonly a short phrase.

**Q8. Questionnaire Technique – Where we will use? Give one example**

Answer:

A questionnaire is a research instrument that consists of a set of questions or other types of prompts that aims to collect information from a respondent. A research questionnaire is typically a mix of close-ended questions and open-ended questions. Open-ended, long-form questions over the respondent the ability to elaborate on their thoughts. The data collected from a data collection questionnaire can be both qualitative and quantitative in nature. A questionnaire may or may not be delivered in the form of a [survey](https://www.questionpro.com/blog/surveys/), but a survey always consists of a questionnaire. A survey or questionnaire is used to elicit business analysis information including information about the customers, products, work practices, and attitudes from a group of people in a structured way and in relatively short period of time. Surveys are the preferred elicitation technique when faced with a large number of stakeholders or when stakeholders are geographically dispersed and you need to gather the same information from them.

**Examples:**

1. How many times have you visited [website] in the past month?

None

Once

More than once

1. What is the primary reason for your visit to [website]?

To make a purchase

To find more information before making a purchase in-store

To contact customer service

 3. Who did you purchase these products for?

Self

  Family member

  Friend

  Colleague

  On behalf of a business

  Other

**Q9: How to Sort the Requirements – Where we will use? Give one example**

**Answer:**

Requirements definition:

It is the process in which the scattered requirements are put together and redundancy is removed, the interrelated requirements are linked.

When all the requirements are gathered there are chances of redundancy in those requirements so basically all the scattered requirements are put together and the repetition of requirements are removed which is known as sorting of requirements. The process for sorting is:

Key tasks:

1. Identification of requirements.

2. Dividing the identified requirements into functional and non-functional requirements

3. If identified requirements are similar then they are put together and removed. We will sort the requirements in two ways such as functional requirements and Non-Functional requirements.

Functional requirements define a function that a system or system element must be qualified to perform and must be documented in different forms. The functional requirements describe the behaviour of the system as it correlates to the system's functionality.

Examples of functional requirements are authentication, business rules, audit tracking, certification requirements, transaction corrections, etc.

Non-functional requirements are not related to the software's functional aspect. They can be the necessities that specify the criteria that can be used to decide the operation instead of specific behaviours of the system.

**Q10. Prioritise the Requirements – –Where we will use? Give one example**

**Answer:**

Prioritize Requirements:

The technique for queuing the requirements for development process by using different techniques.

Factors that influence

Importance, risk, cost, benefit, time and strategy

3 main actors

Customers

Developers

MOSCOW: The technique used in business analysis and software development to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement also known as Moscow prioritization or Moscow analysis.

The Moscow stands for must, should, could and would:

M- Must have this requirement to meet the business needs.

S- Should have this requirement if possible, but project requirement success does not rely on it.

C- Could have this requirement if it does not affect anything else in the project.

W- Would like to have this requirement later, but it won’t be delivered this time.

Validating Requirements:

FURPS:

Functionality, Usability, Reliability, Performance, Supportability

CUCV:

Clarity, Understandable, Consistent, Verifiable

CAE:

Complete, Accurate, Executable

SMART:

Specific, Measurable, Attainable, Realistic, and Traceable/Tine bound

**Q11. Weekly status reporting – How we will drive?**

**Answer:**

Weekly status report is a summary of all work done during a week and how these activities contributed to the completion of a task or project, or how each one brings the team closer to the achievements of the target.

Typically, weekly reports are brief and concise and only one page long. Most professionals send weekly reports on Friday afternoons to establish consistent communication with team members and supervisors. Additionally, a weekly report can benefit both you and your employer by providing insight into important aspects of the work you complete.

Questions that can be asked in a weekly status report include:

* What have you been working on recently?
* What have you accomplished this week?
* What are your top priorities?
* What are your challenges going in to next week?



**Q12. Meeting Minutes Document – prepare one Sample?**

**Answer:**

Minutes are to create an official record of the actions taken at a Meeting. Minutes serve to both memorialize the actions taken for those attending the Meeting as well as for those who were unable to attend the Meeting.

Meeting minutes are notes that are recorded during a meeting. They highlight the key issues that are discussed, motions proposed or voted on, and activities to be undertaken

Meeting of minutes (MOM) is a formal written document that summarizes the discussions, decisions, and actions taken during a meeting.

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

|  |
| --- |
| Meeting title: |
| Date and time |  |
| Location |  |
| Attendees |  |
| Agenda |  |
| Discussion summary |  |
| Decisions made |  |
| Action items |  |
| Owner |  |
| Due date |  |
| Agenda summary |  |
|  | Next meeting |
| Meeting title |  |
| Date and time |  |
| Location |  |
| Expected attendees |  |

**Q13. Change Tracker – Document - – prepare one Sample?**

**Answer:**

Change tracker document is used by the project team to log and track the change requests made throughout the life of the project.

The role of BA in change request is very important as the change requests differ in number and complexity across business projects and may come in before, during or after implementation of a solution.

Below are the steps to follow:

-->Understand the reason for the change

-->Understand the impact of the change

-->Understand the effort required to implement the change

-->Ensure that the change request follows the predetermined approval process

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | Version number | Document changes | Name  | Title  | Signature  | Approved by |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Q14. Difference between Traditional Development Model and Agile Development Models**

**Answer:**

**Traditional model:**

* Used to develop Simple Software
* In this testing is done once the development phase is totally completed It provides less security
* It provides less functionality in the software
* It supports fixed development model
* Development cost is less
* Linear and sequential approach
* Less adaptable to changes after project initiation; changes can be costly
* Entire system developed and delivered at the end of the project
* Limited involvement during development; more at the beginning and end
* It consists of five phases
* Product delivered at the end of the project
* Models based on the traditional software development-spiral, waterfall, V model, incremental model.

**Agile model:**

* It is used to develop complicated software
* In this testing phase and development process are done concurrently
* It supports changeable development model
* Development cost is higher
* Consists only three phases
* Product delivered frequently within couple of weeks to month
* Iterative and incremental
* Embraces changes throughout the development process; flexibility is a key principle
* Incremental planning; welcomes and accommodates changes; planning revisited regularly
* Software delivered in small, functional increments(iterations)
* Frequent client collaboration throughout the development process

**Q15. Explain Brainstorming Technique – Where to use?**

**Answer:**

Brainstorming is the elicitation technique to generate ideas and solutions on specific issues; it can be done either individually or in groups.

The ideas collected can then be reviewed/analysed and where relevant included within the system requirements. Ideas can come from what users/stakeholders have seen (at software solutions) or experienced elsewhere (before they joined the present organization).

Advantages: can come up with very innovative ideas and requirements. It can be an efficient way for users / stakeholders to define their requirements.

Disadvantages: people can’t easily brainstorm ideas when required to do so. Some people find brainstorming much harder than others.

Brainstorming can be an effective way to generate lots of ideas on a specific issue and then determine which idea- or ideas – is the best solution. Brainstorming is most effective with groups of 8-12 people and should be performed in a relaxed environment.

It is utilized in requirements elicitation to gather good number of ideas from a group of people.

1. Prepare for brainstorming:
* Develop a clear and concise definition of the area of interest.
* Determine a time limit for the group to generate ideas, the larger the group, the more time required.
* Decide who will be included in the session and their role- participant or facilitator. Aim for participants (ideally 6 to 8) who represent a range of background and expensive with the topic.
* Establish criteria for evaluating and rating the ideas.
1. Conduct Brainstorming:
* Share new ideas without any discussion, criticism or evaluation.
* Visibly record all ideas.
* Encourage participants to be creative, share exaggerated ideas, and build on the ideas of others.
* Don’t limit the number of ideas as the goal is to elicit as many ideas as possible within the time period.
1. Wrap-up the brainstorming:
* Once the limit is reached, using the pre-determined evaluation criteria, discuss and evaluate the ideas.
* Create a condensed list of ideas, combine ideas where appropriate, and eliminate duplicates.
* Rate the ideas; there are many techniques that can be used to prioritize the ideas, e.g. multi voting.
* Distribute the final list of ideas to appropriate parties.

Case study:

**Q16. What reports Accounts Departments will generate?**

**Answer:**

The Accounts Department in TTS Company's Employee Loan Management System would be responsible for managing the financial aspect of the loan approval and repayment process. Therefore, they would be generating reports related to the financial transactions of the loans. Some of the reports they might generate include:

**Loan applications received report**:

This report would provide an overview of all the loan applications received by the company, including the employee's name, requested loan amount, and the date of the application.

**Loan Approval report:**

 This report would list all the loans that have been approved along with details of the loan amount, repayment schedule, and interest rates.

**Loan Rejection report:**

 This report would list all the loans that have been rejected. The most common reasons for rejection include a low credit score or bad credit history, a high debt-to-income ratio, unstable employment history, too low of income for the desired loan amount, or missing important information or paperwork within your application.

**Loan Approval terms & conditions:**

 “Loan terms” refers to the terms and conditions involved when borrowing money. This can include the loan's repayment period, the interest rate and fees associated with the loan, penalty fees borrowers might be charged, and any other special conditions that may apply.

**Loan Repayment:**

This report would provide information on the repayment schedule for all the approved loans, including the due dates, the amount to be repaid, and the interest charged.

**Q17. What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is rejected?**

**Answer:**

The mail communicated from the HR department to the employee in case the loan is rejected should be informative and courageous while clearly conveying the reason for the loan rejection. The structure of the message/mail could be as follows:

Dear [Employee Name],

We regret to inform you that your loan application has been rejected. After careful consideration, we have determined that your application did not meet our lending criteria. The reason(s) for your loan rejection is as follows:

Low Credit Score

Low Income

Job Instability

Too Many Pending Loans

Please note that we understand the importance of this matter and we have reviewed your application thoroughly. However, we must adhere to our lending policies and criteria to ensure the financial stability of our organization

We encourage you to review your financial situation and reapply for a loan in the future, as our lending criteria may change from time to time. If you have any further questions or concerns, please do not hesitate to contact us.

**Best regards,**

**[HR Department]**

**Q18. What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is approved?**

**Answer:**

We are pleased to inform you that your loan application has been approved. Congratulations!

The loan amount that has been approved for you is [Loan Amount].

Please review the following loan other terms and conditions and the repayment schedule:

Loan Offer Terms and Conditions:

Interest rate: [Interest Rate]

Loan Term: [Loan Term]

Processing fee: [Processing fee]

Other terms and conditions: [Other terms and conditions]

Repayment Schedule:

Monthly Instalment Amount: [Monthly Instalment Amount]

Loan start date: [Loan Start Date]

Loan End date: [Loan End Date]

Total Amount to be paid: [Total Amount to be paid]

We would like to remind you that the loan repayment will be automatically deducted from your salary on a monthly basis as per the repayment schedule. Please make sure that you have sufficient funds in your account to avoid any missed payments.

If you have any questions or concerns about the loan offer terms and conditions, please feel free to contact us [HR Department contact email or phone number] or [Accounts Department contact email or phone number]. If you are happy with the terms and conditions, kindly reply to this emails accepting the offer.

Congratulations again and we wish you all the best in your financial goals.

**Best regards,**

**[HR Department]**

**Q19. Design a sample report on the Loans applications Received by the accounts department?**

**Answer:**

[Date]

[Accounts Department]

Company Name – TTS Company

Loan Applications Received by the Accounts Department

Introduction:

This report provides a detailed analysis of the loan applications received by the Accounts Department of TTS Company during [time period]. The report presents an overview of the loan application process, the types of loans received, and the approval rate. The report also highlights key insights and recommendations for improving the loan application process.

Loan Application Process:

The loan application process at TTS Company involves the following steps:

Application Submission:

Prospective borrowers submit loan applications to the Accounts Department.

Initial Review:

The Accounts Department conducts an initial review of the loan application to ensure that it meets the eligibility criteria.

Credit Check:

The Accounts Department performs a credit check to assess the borrower's credit worthiness and ability to repay the loan.

Loan Approval:

The Accounts Department approves or rejects the loan application based on the eligibility criteria and credit check.

Disbursement:

If the loan is approved, the Accounts Department disburses the loan amount to the borrower.

Types of loan received:

During time period, the Accounts department received [number] loan applications. The following table provides a breakdown of the types of loan received:

Loan types:

Personal loan [number]

Business loan [number]

Home loan [number]

Car loan [number]

Key Insights Based on the analysis of the loan applications received by the Accounts Department, the following key insights has been identified:

[Insight 1]

[Insight 2]

[Insight 3]

Recommendations to improve the loan application process, the following recommendations are suggested:

[Recommendation 1]

[Recommendation 2]

[Recommendation 3]

**Conclusion**

The Accounts Department plays a critical role in managing the loan application process at TTS Company. This report provides valuable insights into the types of loans received, the approval rate, and key recommendations for improving the loan application process. By implementing these recommendations, the Accounts Department can streamline the loan application process and improve the overall customer experience.

**Q20. Which reporting Tools we will use for generating reports?**

**Answer:**

There are several reporting tools available in the market that can be used for generating reports, including:

Tableau: Tableau is a data visualization tool that can be used for creating interactive and visually appealing reports. It provides drag-and-drop functionality and can connect to various data sources.

Power BI: Power BI is a business analytics service that can be used for creating and sharing reports and dashboards. It allows users to connect to various data sources, visualize data, and share insights with others.