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

|  |  |  |
| --- | --- | --- |
| **Aspects** | **Brain Storming** | **JAD (Joint Application Development) Session** |
| **Definition** | We get lots of requirements from the client and not always we find functional requirement from the given business requirements, in case if we find difficulties identifying functional requirements from the given business requirements then we can conduct brainstorming session. | As a BA we may be required to work on technical project like networking project, DB project, testing project and we may not aware about these, in such a case we can take help from the technical team, we discuss with the client about technical requirements, that session we called as a JAD session |
| **Goal** | Brainstorming session means aim to solve particular problem and experts will give their suggestions or ides how to solve the problem. | Aim at generating large number of ideas, solutions or creative options in a short period |
| **Participants /group members** | The domain expert, SME’s (Subject Matter Experts), they assemble and for the given challenges they start giving ideas how to solve the problem. | It involves collaboration between stakeholders and system analysis |
| **Type of discussion** | Informal and open-ended questions | Predefined agenda and structured session |
| **Outcome** | Usually, brainstorming is used in identifying all possible solutions to problems, ideas, concepts | Documented requirements, use case and Use stories. |
| **Advantage** | Can come up with vary innovation ides and requirement | This technique allows for the simultaneous gathering and consolidating of large amounts of information |
| **Disadvantage** | Some people find brainstorming much harder than others | Requires significant planning scheduling efforts |

**Q 2. Why Document Analysis is one of the compulsory techniques we use in a Project? Justify**

Document analysis involves the systematic examination and evaluation of various types of documents to extract valuable insight or information. These documents can take form of reports, contracts, emails, survey media post pr another written materials relevant to a particular business context. When we read any document and understand about process, project and product it’s known as Document analysis. Document Analysis is done through reading a document & understanding the product process and project.

Document Analysis technique is compulsory we use in a Project because generally, when BA join project, concerning stakeholder will share process documents, functionality documents or features documents or the requirements documents, as a BA we read those documents and we understand about particular project that we call Document Analysis.

One key instance where document analysis comes into play is during the initial stage of a project/ When gathering requirements, business analysis may need to review existing document such as user manuals, process flows or technical specifications. By analysing these documents, they can gain insights into current processes and identify areas for improvements.

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

Disadvantage- Existing documentation may often be old and out of date.

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

Reverse Engineering we also called back engineering, is the process of extracting knowledge or design information from anything man made and re producing anything based on the extracted information.

There are 2 categories of Reverse Engineering-

Black box- The system or product is studied without examining its internal structure.

White Box- The inner working of the system or product is studied.

**Reverse engineering is generally use for**

1. **Migration or Reperforming Projects-** When transitioning an application or system to a new platform, reverse engineering can help identify critical components and ensure nothing is missed.

E.g Migrating a desktop application to a web based platform.

2**. Documentation Recovery-** When system documentation is lost, incomplete or outdated and there is a need to recreate accurate and up to date documentation.

E.g. Reconstructing the database schema for a system where the original design documents are unavailable.

3. **Defect identification and debugging**- When there are issues or defects in a system that require in depth understanding and analysis of the coder or design

E.g- Debugging a malfunctioning software module where the original development team is no longer available.

4. **Knowledge Transfer**- When new team take over maintenance of a system, and they need to quickly understand its architecture and design.

E.g A newly onboards team using reverse engineering to learn to architecture of a system, they are task to maintain.

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

|  |  |  |
| --- | --- | --- |
| **Aspects** | **Brain Storming** | **Focus Group** |
| **Definition** | We get lots of requirements from the client and not always we find functional requirement from the given business requirements, in case if we find difficulties identifying functional requirements from the given business requirements then we can conduct brainstorming session. | A focus group typically has 6-12 attendees. It’s discussion with a small group of users to understand their concern, expectations and requirements |
| **Goal** | Brainstorming session means aim to solve particular problem and experts will give their suggestions or ides how to solve the problem. | It aim and helps to understand customer preference, opinions and concern for better decision making. |
| **Participants /group members** | The domain expert, SME’s (Subject Matter Experts), they assemble and for the given challenges they start giving ideas how to solve the problem. | Participant in focus group will be, these people going to use project in future. It has two participant group Focus group. (Homogenous) Individuals with similar characteristics, differing perspectives will not be shared. (Heterogeneous) individual with diverse backgrounds, perspectives. |
| **Type of discussion** | Informal and open-ended questions | Semi structure questions / sessions |
| **Outcome** | Usually, brainstorming is used in identifying all possible solutions to problems, ideas, concepts | Detailed feedback, observation and suggestions |
| **Advantage** | Can come up with vary innovation ides and requirement | People share more ideas as compare to survey, can get input several people at once. |
| **Disadvantage** | Some people find brainstorming much harder than others | A small group will not reflect everyone’s opinion |

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

In Observation technique, observing, shadowing users or even doing part of their job can provide information of existing processes, inputs and outputs.

There are two basic approaches for the observation technique

**Passive /Invisible** - BA will do observation without disturbing work which is called passive observation most of time BA do passive observation. In this approach, the business analyst observes the subject matter experts working through the business routine but does not ask questions and wait until the entire process has been completed before asking any questions, BA observes multiple time and understand the process.

**Active /Visible-** BA will observes the current process and take notes and may dialog with the workers. When BA has questions as to why something is being done as it is he or she asks the questions right away, even if it breaks the routine of the person being observed.

Advantage- This technique is useful if the user is not able to explain what they do or their requirements.

Disadvantage- Relatively slow, relatively slow focused on existing processes rather than new system processes.

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

A requirement workshop is a meeting where a group of people, like business analyst, stakeholders and team members, come together to discuss ad gather what is needed for a project. It’s team efforts to ensure the project starts with clear and shared understanding.

A requirements workshop is a structured meeting where stakeholders gather to define, analyse and prioritize the requirements for a project or product. It’s a crucial step in ensuring that everyone is on the same page and the final product meets the need of the users and the business.

**The goal is to:**

Understand the problem or need.

Identify what the solution should do (requirements)

Make sure everyone is agrees on the projects and priorities.

Kay Stages of a Requirements Workshop as per below.

**A well structured requirements workshop typically consists of the following key stages.**

Preparation

Workshop Execution

Post workshop activities

**As a Business Analyst before conducting requirement workshop below important points will be considered.**

1. Plan the Workshop- Identify the purpose, scope and goals. Invite the right stakeholders such as Users, Sponsors, developers.
2. Start with introduction- Explain the purpose, agenda and workshop rules.
3. Understand the problems- Discuss the current process, pain points or challenges.
4. Gather Requirements- Use brainstorming Q&A. or can Use case discussion to collect ideas. Prioritize and clarify requirements as they come up.
5. Validate and documents- Confirm with stakeholder if the requirements are clear and accurate. Record all outcome for future reference.
6. Follow up Promptly- Adress any issues or question which arrived after the workshop.
7. Close the Workshop- Summarize key points and next steps and thank everyone for their participants

**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** –

Any interaction with client known as an interview. Interview means understanding the other person view and particular concept we called as a interview. Interviews is one of the importance techniques where interviews of users and stakeholders will be helpful for creating wonderful software.

As BA where we will use after gathering requirements, we are going to sort the requirements and we realize that conflict in these requirements, in such case we have to take an appointment of the stakeholder & then we will ask them our observed conflict and clarify on that.

**In these techniques there are two approaches structured and unstructured.**

Structed means – Follows a preferment set of questions, 1-10 structured questions will be asked during requirement gathering. Which is pre prepared questions.

Unstructured means – Questions are not predetermined, allowing for flexibility. based on answer we ask next questions.

**Difference between Open Ended and Close ended questions**

Here we ask open ended (answer should be explanation). E.g – Could you elaborate requirement throughout this project?

Close ended questions (Yes/No)- Do you frequently use this application for online shopping? Yes/No

Advantage- Generally easy, because it can be done with minimal preparation.

Disadvantage- The questions used in the interview may reflect the interviewers’ preconceived ideas.

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

The questionnaire technique is a set of written questions used to collect information from the stakeholder. It helps gather requirements in structured way. The questionnaire technique is a method of data collection commonly used in research, surveys and assessments.

Questionnaire elicitation technique we use for to interact with more numbers of stakeholder in single group. Generally interacting with 1000 stakeholder we can not interact with one to one, instead that we use Questionnaire elicitation technique. Survey form is just like a feedback form, it has multiple questions and each questions has multiple choice answers, mostly it will be like rating, stakeholder answer it and we use statistic tool to measure it and understand what stakeholder are trying to tell.

Advantage- Can be sent to many hundreds of users at low cost and good gathering input who are log distance.

Disadvantage- Questionnaire can be slow to create, we may not get good response.

It involves presenting a set of written questions to respondents and collecting their responses. Questionnaire can be administrated in various ways, including paper and pencil, online survey, face to face interviews where the questions are read to the participant.

**Where is used?**

It is use when we need feedback from multiple people, especially in large project, remote teams or when time is limited.

**Example-**

As business analyst if I am working on a hotel booking app sends a questionnaire to customer asking,

1. What feature do you want in hotel booking app?
2. How often do you book hotels online?
3. What problems have you faced while booking hotels?

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

**Definition**

Sorting requirements means organising them based on priority, importance, category to make sure the project focuses on the most importance need first.

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

**Where we will use?**

Sorting often done during the requirements elicitation & documentation phase of a project. Based on Functional and Non Functional Requirements, Priority Sorting, User Role Sorting, Time Dependency Sorting.

**Give one example**

As a business Analyst suppose I am working for Online shopping application (Farmers can buy farming item online) app and I have collected many requirements such as per below and sorting will be done based on functional and non functional requirements.

1. Users should be able to do sign up, log in & log out.
2. The application should be user friendly and easy to navigate
3. The application should respond to user inputs within 2 second, it should not exceed 2 seconds.
4. Manufacturing companies should be able refill stock
5. Users should be able to add the products to the Wishlist
6. The application must handle up to 10,000 users simultaneously.

Functional Requirements

1. Users should be able to do sign up, log in & log out.
2. Users should be able to add the products to the Wishlist
3. Manufacturing companies should be able refill stock

Non Functional Requirements

1. The application should be user friendly and easy to navigate
2. The application must handle up to 10,000 users simultaneously.
3. The application should respond to user inputs within 2 second, it should not exceed 2 seconds.

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

Prioritizing requirements means deciding which needs are most important in a project. It helps the team focus on what should be done first to deliver best results.

**Where we will use?**

Prioritization is typically done based on factors such as value, impact and dependencies.

There are many prioritization requirements techniques such as

1. MoSCow
2. 100 dollar test
3. Top 10 requirements
4. Numerical Assignment- Mandatory, Very Important, rater important, not important, does not matter.

One of the most important prioritization technique is MoSCow is used in Business Analysis and software development to reach a common understanding with stakeholder on the importance they place on the delivery of each requirements also known as MoSCow prioritization technique or MoSCow analysis.

M Must have – Must has which is mandatory and critical, without these requirements being fulfilled the project is actually failure

S Should have- Should have, these are important but not necessary requirements.

C Could have - These requirements are good to have but its ok to not to have.

W Won’t have- Not necessary now, would lie to have these requirements later.

As BA I have place online mobile application project and I would like to use MoSCoW prioritization technique with **Example**

M Must have – Users can add item in cart and make payment

S Should have- User can save fedorites product for later.

C Could have – Dark mode feature for the website.

W Won’t have- Virtually try on clothes may be in future.

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

A weekly status reports helps track progress, highlights issues and keep everyone informed about the project. Weekly status reports is a summary of all work done during a week and how these activities contributed to the completion of a task or a project or how each one bring the teams closer to the achievement of their targets.

As a Business Analyst, drive weekly status reporting by collecting updates from the team, tracking progress, identifying issues. Structure the report with completed tasks, ongoing work, upcoming tasks and risk. Share it with stakeholder and discuss key points in meeting to ensure the project stays on track.

Quartinos that can be asked in a weekly status reports include.

**Examples**

1. What tasks were completed this project?
2. What task are still in progress?
3. What are the next step for the coming week?
4. Are there any dependencies for the upcoming tasks?
5. Do week need additional support or resources?
6. Are we meeting our project goals and deadlines?
7. Any feedback or concern from the team

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

Minutes of Meeting (MOM) is a formal written documents that summarized and actions taken during a meeting. It serves as an official record for what transcripts during the meeting and helps to ensure that everyone is on the same page regarding key points and action items.

MOM is particularly important for tracking project progress, documenting decision and assessing responsibilities.

**MOM Sample**

|  |  |
| --- | --- |
| **Meeting Title** | |
| Date and Time | January 29 2025, 03.00 pm -04.00p pm |
| Location | Conference Room A |
| Attendees | PM, BA, Development team, stakeholder |
| Agenda | Project status update |
| Review on requirements documents |
| Discussion summary | Project status update- Overview of the current progress, highlighting milestone achieved and pending task |
| Review on requirements documents- Finalized requirements documents and discussed about feature prioritization |
| Decisions Made | Feature prioritization will be adjust based on stakeholder feedback |
| Action Item | Update on feature prioritization and requirements documents |
| Owner | PM, BA |
| Due Date | February 07 2025 |
| Agenda Summary | Discussion on project update, review on requirements and feature prioritization |
| **Next Meeting** | |
| Meeting Title | Review on requirements documents |
| Date and Time | February 09 2025 |
| Location | Conference Room A |
| Expected Attendees | PM, BA, Development team, stakeholder |

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

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

A change tracker document is used to record and track changes made to project, document, system, or process over time. It helps maintain a clear history of modification, including details such as what was changed, who made the changes, when it was made and why, This especially useful in project management, software development and business analysis.

**Sample-**

Project Name- XYZ System Enhancement

Project Team:

XYZ System Enhancement (Client)

Business Analyst- Ms. Anayta Nikam

Project Manager – Mr. Shankaran

Developers- Mr. Shivam, Mr. Ganesh, Ms. Gayatri, Ms. Pooja

Q.A Lead- Ms. Aarti, Mr. Vignesh

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Date** | **Version Number** | **Document Changes** | **Name** | **Title** | **Signature** | **Approved by** |
| 22-01-2025 | CHG001 | Added stakeholder requirements | Ms. Anayta Nikam | Business Analyst | Yes | Mr. Shankaran |
| 24-01-2025 | CHG002 | Added Risk Assessment details | Ms. Aarti | QA Lead | Yes | Mr. Shankaran |
| 28-01-2025 | CHG003 | Revised workflow diagram | Mr. Shankaran | Project Manager | Yes | Discuss with client and get approve |
| 30-01-2025 | CHG004 | Updated Project scope section | Ms. Anayta Nikam | Business Analyst | Yes | Mr. Shankaran |

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

The Sequential Waterfall Model is aa step by step approach to software development where each phase must be completed before moving on to the nixed one. It is called Waterfalled because progress flows downwards, like a waterfall. This model is common and classic of life cycle models, also referred to as a linear sequential life cycle model.

Agile Scrum is a Project Management framework that’s part of Agile methodology. It’s popular way for teams to work together to deliver high quality products on time. This methodology use for prioritization, can be implemented where faster delivery is required.

In Agile Scrum Model client directly interact with the developers, client share requirement through use case story and developers develop users story as per client requirements. In this model, documentation is very less and proof of documents is, if software is working as per client requirements.

In this model strictly freshers can’t work, in Agile we required skills people, expert, motivational, self-awareness, committed, continuous learning people should be there. In Agile individual interaction is given more importance.

Difference between Traditional Development Model and Agile Development Models as per below.

|  |  |  |
| --- | --- | --- |
| **Aspects** | **Traditional Development Model** | **Agile Development Models** |
| **Process Flow** | Follows a step by step process, like waterfall (Linear) | Works in small cycles (iteration) and adapts as needed. |
| **Flexibility** | Changes are difficult once the project starts. | Changes can be made anytime during development |
| **Delivery** | The final product is delivered at the end of the project | The product is delivered in small parts |
| **Customer Involvement** | Customer are involved only at the beginning and end | Customer give feedback regularly throughout the projects |
| **Testing** | Testing happens only after the development phase is completed | Testing happens continuously along with development |
| **Risk Handling** | High risk if mistakes are found late in the process. | Lower risk because issues are fixed |
| **Documentation** | Requires detailed documentation before development starts | Focuses more on working software than documentation |
| **Team structure** | Team work in separate phase (Developer tester etc) | Team works together, collaborating closely |
| **Speed of Development** | Slower, as all steps must be completed before moving forward | Faster as small parts are released quickly |
| **Business Analyst Role** | BA play Business Analyst Role | BA Play Scrum Master role |
| **Best Used for** | Suitable for projects with clear, fixed requirements | Suitable for projects with changing or unclear requirements. |

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

We get lots of requirements from the client and not always we find functional requirement from the given business requirements, in case if we find difficulties identifying functional requirements from the given business requirements then we can conduct brainstorming session.

The domain expert, SME’s (Subject Matter Experts), they assemble and for the given challenges they start giving ideas how to solve the problem.

Before conducting brainstorming session, BA will identify what is the problems, they approval from the project manager for the brainstorming session & then identify brainstorming participant (domain expert /SME’S) & then sent invitation at least 12-13 people for the brainstorming session, for that we have to block the calendars and concerning meeting room before 8-10 days so participant will be pre prepared on particular problem. BA will facilitate the session with refreshment start with particular problems. While these session experts giving ideas here, we can use 5W 1H tool we can segregate these ides in this section, rate these ideas prepare MOM about this particular brain storming session.

Brainstorming session means aim to solve particular problem and experts will give their suggestions or ides how to solve the problem.

Here there is no guarantee that problem will be solved, it is the only thing we will make step forward to solving the problem.

Brainstorming is a way to come up with lots of ides in a group. These ideas are then reviewed and analyse to find the best ones. Its useful method when we need creative solution or fresh perspective on a problem.

**When we User Brainstorming**

1. **When we need ideas quickly-** If short in time, brainstorming helps gather many ideas fast without worrying.

e.g- In business analysis or project management, brainstorming helps collect different ideas from stakeholders quickly, without long discussion.

1. **When as a Business Analyst we want ideas without bias-** Brainstorming creates an open space where everyone can share ideas without fear of judgment. This encourages creativity and input from all team members, no matter their experience.

e.g When developing new products, brainstorming ensures that ideas come from everyone, Junior employees, senior managers, or even customers.

1. **When as a Business Analyst we need lots of ideas**- The focus is on quantity rather than quality a first, the more ideas we gather the better chances of finding great ones later. E.g Collecting wide range of ideas allows later to pick the most effective ones.
2. **When we have many options and need clarity**- Brainstorming helps compare different ideas. Allowing team to discuss and decides the best approach together.

e.g- If team is choosing between multiple marketing strategies, brainstorming helps them weigh the pros and cons before making a decision.

Advantage – Can come up with vary innovation ides and requirements.

Disadvantage – People can’t easily brainstorm ideas when required to do so

Challenges- Participant may not spend quality time due to busy schedule

BA may not understand their vocabulary or ideas due to lack of domain knowledge.

Ba may face ego problem of the participant.

**Where to use with Example-**

Brainstorming elicitation technique use when project need creative solution, the teams need to identify risks or improvements.

As a business analyst working on E Commerce website, gather team to brainstorms ideas on improving customer experience. The team suggest features like faster check out, faster booking, discounts for regular customers.

**Q16. What reports Accounts Departments will generate (minimum 5 reports).**

Below five report will be generated from account department for the employee loan management system.

**Loan Approval Report:** The account department, along with HR, will create this report, it includes details of an employee’s approved loan, such as the loan amount, interest rate and terms. It also confirms whether the loan is approved, helping the employee understand their eligibility and loan conditions.

**Loan Rejection Report:** If an employee’s loan request is denied, this report will explain the reasons for the rejection. It will be shared with the employee to ensure clarity and transparency in the loan approval process.

**Loan approval Terms and Condition Report:** After a loan is approved, this report will outline the terms the employees must follow. It will include details like the repayment period, interest rate, late payment penalties and other importance rules. This ensure both the employees and the company understand the loan agreement clearly.

**Loan Repayment Schedule Report:** This report will give the employee a clear breakdown of the loan repayment plan. It will include the loan duration, monthly EMI, interest rate and total amount to be repaid. This helps the employee understand their financial responsibilities.

**Loan Offer Report:** This report will detail the amount of loan sanction by the HR department, the loan’s tenure and the monthly EMI the employee will need to repay This reports will serve as the formal offer for the loan, ensuring the employees is informed of the financial terms and conditions before agreeing to the loan, these reports helps ensure clear communication between the accounts department, HR and employee, facilitating smooth loan management and transparency throughout the loan approval process.

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

Subject- Loan Application Status – Rejection Notification

Dear Shivam,

Good Day,

We regret to inform you that after reviewing your loan application, it has been rejected. The reason for this decision is that as per our company’s loan policy, employee must have completed a minimum of 1 years of services with the company to be eligible for a loan. Since you current tenure with the company is below this requirements, we are unable to process your loan request at this time.

We understand this may be disappointed and we encourage you to apply for the loan once you have met the required service duration. For further clarification feel free to reach out to the HR department.

Best regards,

Mr. Shivprasad

HR Manager

HR Department

TTS Company

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

Subject- Loan Approval Notification

Dear Shivam,

Good Day,

We are pleased to inform you that your loan request has been approved by the HR and Accounts department. Below are the details of your loan approval.

Loan Amount: 8 Lakhs

Loan type: Personal/Home/Other

If you have nay questions or need further clarification, feel free to reach out to us.

Best regards,

Mr. Shivprasad

HR Manager

HR Department

TTS Company

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

**Department.**



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

For generating reports for the employee loan management system, Excel, power BI and Tableau are excellent choices, depending on the specific needs of the organisation, here is an overview of how these can be utilized.

**Powe BI :**

Data Transformation- Power BI allows for more advanced data cleaning and transformation using power Query, filter ,sorting and merge data before creating visualization.

Reat Time Data: It’s great for dashboard, that need to update in real time from sources like Excel, Google Analytics or SQL Database.

Collaboration: Reports in Powe BI can be shared with others for collaboration.

Cloud based: Power BI has cloud features that allows to access and share reports online, making it easier to collaborate.

**Tableau:**

Ease of Visualization: Tableau is known for its advanced data visualization capabilities. Though this tool we can create interactive graphs, maps, charts that helps tell compelling story with data.

Scalability- It handles large dataset more efficiently than Excel and its visualization are highly interactive, making it useful for combining different datasets for richer insights.

Drag and Drop Interface- No need for coding skills to use Tableau effectively, we can simply drag and drag field into the workplace to create reports.

**Excel:**

Data Manipulation: Excel provides powerful functions (SUM, AVERAGE, VLOOKUP, etc) to clean and manipulate data.

Customization- We can customize reports and design them to specific needs using various style, formatting and templates.

Cost Effective- Have easy access through Microsoft office or office 365