# CAPSTONE PROJECT 3 PART 2

| **Aspect** | **Brainstorming** | **JAD Sessions** | **Focus Groups** |
| --- | --- | --- | --- |
| **Purpose** | - Generate creative ideas and solutions - Encourage free thinking and innovation - Identify multiple possible approaches to a problem | - Collaboratively gather and refine requirements - Ensure stakeholder alignment in system development - Speed up decision-making and reduce rework | - Collect feedback and insights from users - Understand user perceptions, preferences, and behaviors - Identify potential improvements for products or services |
| **Participants** | - Project team members - Stakeholders - Facilitator to guide the session - Subject matter experts (optional) | - Business analysts - Developers - End users - Project stakeholders - Moderator - Decision-makers and technical experts | - Representative sample of target audience - Customers or users - Moderator to facilitate discussion - Sometimes includes marketing or research analysts |
| **Format** | - Informal and open-ended discussion - Encourages free flow of ideas - No strict agenda – Can be done in person or virtually | - Highly structured with a predefined agenda - Uses workshops, discussions, and modeling techniques - Requires active participation - Can include prototyping and system demonstrations | - Semi-structured discussions - Moderator ensures balanced participation - Uses open-ended and follow-up questions - Often recorded for further analysis |
| **Output** | - List of ideas, concepts, and potential solutions - May include innovative or unconventional suggestions - Helps in early-stage problem-solving and creativity | - Documented business and system requirements- User stories, use cases, process models  Identifies gaps in existing processes - Helps streamline software or product development | - Detailed feedback, observations, and suggestions - Insights into user needs, expectations, and pain points - Can help refine marketing strategies and product improvements |

 **2. Why Document Analysis is one of the compulsory technique we use in a Project? Justify – 3 Marks**

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

**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.**

**Justification for Document Analysis**

* Document Analysis is a compulsory technique in a project because:
* Provides Historical Insights – Helps understand past processes, reducing redundancy.
* Ensures Accuracy & Consistency – Acts as a single source of truth for project requirements.
* Aids Compliance & Risk Mitigation – Ensures adherence to legal, regulatory, and business standards.
* This technique enhances decision-making, minimizes risks, and ensures project success.
* Understanding existing documentation and creating a reference baseline

**3.In Which Context we will use Reverse Engineering? - 3 Marks**

**Reverse Engineering** is the process of extracting knowledge or design information from an existing product and reproducing it or creating something new based on the extracted data.

**Contexts of Use:**

1. **Product Development** – Analyzing competitors' products to improve designs.
2. **Software & Security** – Identifying vulnerabilities in applications and systems.
3. **Manufacturing & Maintenance** – Recreating outdated or unavailable parts.

**Categories:**

* **Black Box** – Studies a system without examining its internal structure.
* **White Box** – Analyzes the internal workings of a system or product.

### **Difference Between Brainstorming and Focus Groups**

| **Aspect** | **Brainstorming** | **Focus Groups** |
| --- | --- | --- |
| **Purpose** | - Generating a wide range of ideas and solutions - Encourages creativity and innovation | - Obtaining in-depth insights, opinions, and feedback - Understanding user perceptions and preferences |
| **Structure** | - Open-ended and unstructured - Free-flowing discussion without strict guidelines | - Guided and structured - Moderator leads the discussion with predefined questions |
| **Participants** | - Team members, stakeholders, and facilitators - Typically consists of internal members | - Representative sample of the target audience - Customers or end-users with a moderator |
| **Discussion Style** | - Spontaneous and idea-focused - No right or wrong answers, all ideas are welcomed | - Controlled and insight-driven - Participants share experiences, opinions, and preferences |
| **Output** | - List of creative ideas, potential solutions, and new concepts - Used for brainstorming innovations or problem-solving | - Detailed feedback, observations, and user expectations - Helps refine products, services, and marketing strategies |
| **Use Cases** | - Product development, strategy sessions, innovation planning | - Market research, customer experience evaluation, product testing |

Q5. Observation Technique – Explain both Active and Passive approaches - 3 Marks

**Observation techniques** are commonly used in research, usability testing, and requirements gathering to gather data by directly observing individuals, processes, or systems. There are two main approaches to observation: active and passive.

**Active Observation**: In active observation, the observer actively engages with the participants or the environment being observed. They may interact with participants, ask questions, or guide the observation process.

**Passive Observation**: In passive observation, the observer takes a more non-intrusive and hands-off approach. They simply observe and record the behaviours, activities, or events without directly interacting with the participants or influencing the observed context.

**Q6. How do you conduct the Requirements Workshop- 3 Marks**

* Requirements workshop is a structured approach to capture requirements.
* It may be used to scope, discover, define, prioritize and reach closure on requirements for the target system.
* Define objectives, identify stakeholders, create an agenda, Collaboratively facilitate the workshop with key stakeholders, Summarize findings, validate requirements.

**Q.7 What is Interview Technique? Interviews can be conducted in vanous contexts, such as during requirements gathenng, stakeholder analysis, or process analysis. The purpose is to extract valuable insights, expectations, and needs from individuals involved in or affected by a project. Approaches to Conducting Interviews Structured Interviews Follows a predetermined set of questions Unstructured Interviews - Questions are not predetermined, allowing for flexibility.**

Context in Which a BA Conducts Interviews:

A Business Analyst (BA) uses interviews to gather crucial information in various project phases, such as:

**Requirements Gathering** – Understanding stakeholder needs for project scope.

**Stakeholder Analysis** – Identifying key decision-makers and their expectations.

**Process Analysis** – Examining existing workflows for improvements.

**Structured Interviews –**

* Follows a predetermined set of questions.
* Ensures consistency across multiple interviews.
* Suitable for collecting quantitative data.

**Unstructured Interviews –**

* No predefined set of questions, allowing flexibility.
* Encourages open discussions for deeper insights.
* Best for qualitative exploration.

### **Difference Between Open-Ended & Closed-Ended Questions:**

| **Aspect** | **Open-Ended Questions** | **Closed-Ended Questions** |
| --- | --- | --- |
| **Nature** | Allows detailed and descriptive responses. | Requires a specific, short response (e.g., Yes/No). |
| **Purpose** | To gather insights, opinions, and in-depth explanations. | To collect structured, measurable data. |
| **Example** | "What challenges do you face in your current workflow?" | "Do you use the current system daily?" |

**Open-ended questions help explore ideas, while closed-ended questions provide clear, concise data.**

**Q.8 Questionnaire Technique – Where we will use? Give one example - 6 Marks**

**T**he questionnaire technique is commonly used in research and data collection to gather information from a large number of participants in a structured manner. It involves a series of questions presented to respondents, who provide their answers based on the given options or by providing their own responses

**Example,** the questionnaire technique is used in **patient satisfaction surveys**. Hospitals and clinics often use questionnaires to collect data on patient experiences, treatment effectiveness, and overall satisfaction with healthcare services.

**Q.9 How to Sort the Requirements – Where we will use? Give one example - 5 Marks**
Sorting requirements is a crucial step in the requirements management process, helping to organize, prioritize, and categorize them for effective analysis and implementation.

Sorting is often done during the requirements elicitation and documentation phases of a project.

Based on Functional vs. Non-functional Requirements, Priority Sorting, User Role Sorting, Time Dependency Sorting we can sort the requirements.

For example, in **building construction**, requirements such as structural integrity, material selection, and environmental regulations are sorted to ensure that the most critical aspects, like safety standards and legal compliance, are addressed first before aesthetic or secondary features.

**Q10. Prioritise the Requirements – –Where we will use? Give one example - 5 Marks**

* Prioritizing requirements is a critical step in the requirements management process, helping teams focus on what is most important for the success of a project.
* Prioritization is typically done based on factors such as business value, impact, and dependencies.
* One of the Most important prioritization technique is: MOSCOW - Must-have, Should-have, Could-have, Would-have
* Prioritizing requirements is also commonly used in **mobile app development**, where features are categorized based on their importance to ensure a successful launch.
* For example, when developing a **food delivery app**, essential features like **order placement (Must-have)** and **payment integration (Must-have)** are prioritized over features like **loyalty rewards (Could-have)** or **in-app chat support (Would-have)** to ensure core functionality is delivered first.

**Q11. Weekly status reporting – How we will drive? 5 Marks**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 a project, or how each one brings the team closer to the achievement of their targets.

To effectively drive weekly status reporting, follow these steps:

* Define reporting requirements
* Set reporting frequency and deadline
* Standardize reporting format
* Communicate expectations
* Provide guidance and support
* Remind and follow up
* Review and consolidate reports
* Share and discuss the reports
* Act on the findings

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

* What have you been working on recently?
* What have you accomplished thus week?
* What are your top priorities?
* What are your challenges going into next week?

**Q12. Meeting Minutes Document – prepare one Sample -5 Marks**

* Minutes of Meeting (MoM) is a formal written document that summarizes the discussions, decisions, and actions taken during a meeting.
* It serves as an official record of what transpired 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 decisions, and assigning responsibilities.

|  |
| --- |
| MOM TEMPLATE |
| DATE | 19 FEB 2025 |
| TIME | 13:00:00 |
| LOCATION | PUNE |
| ATTENDEES | STAKEHOLDER, DEVELOPER,BA, PO |
| AGENDA | ADDING FEATURE  |
| DISCUSSION SUMMARY | IMORVEMENT NEEDED |
| ACTION ITEMS |  |
| NEXT MEETING |
| DATE | 27 FEB 2025 |
| TIME | 10:15:00 |
| LOCATION | PUNE |
| AGENDA | UPDATE |

**Q13. Change Tracker – Document - – prepare one Sample -4 Marks**
Change Tracker document is used by the project team to log and track change requests made throughout the life of the project.

* A Change Tracker Document is created at the beginning of the project or as soon as the first change request arises.
* It is maintained throughout the project lifecycle to track modifications in requirements, scope, budget, or timelines.

Purpose of the Change Tracker Document:

* Record Change Requests – Logs all requested changes with details like reason, impact, and priority.
* Ensure Transparency – Provides clear visibility of changes to stakeholders and project teams.
* Evaluate Impact – Assesses how each change affects scope, cost, timeline, and resources.
* Facilitate Decision-Making – Helps project managers and stakeholders approve or reject changes systematically.
* Maintain Project Control – Prevents scope creep and ensures the project stays on track.

| **DATE** | **VERSION NO** | **DOCUMENT CHANGES** | **NAME** | **TITLE** | **SIGNATURE** | **APPROVED BY** |
| --- | --- | --- | --- | --- | --- | --- |
| 10/02/25 | 1.0 | Initial draft created | SHUBHAM | Business Analyst | [Signature] | RAVI |
| 15/02/25 | 1.1 | Updated loan eligibility criteria | VRISHABH | HR Manager | [Signature] | ASHOK |
| 20/02/25 | 1.2 | Added repayment schedule details | BILAL | Accounts Supervisor | [Signature] | HARDIK |
| 25/02/25 | 1.3 | Final approval and implementation | JAVED | Project Manager | [Signature] | ATUL |

### **Q14. Difference between Traditional Development Model and Agile Development Models – 8 Marks**

| **Aspect** | **Traditional Development Model (Waterfall)** | **Agile Development Model (Scrum)** |
| --- | --- | --- |
| **Development Approach** | Linear 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 |

 **Q15. Explain Brainstorming Technique – Where to use? 5 Marks**

**Brainstorming** is a technique used to generate creative ideas and solutions through a group discussion or collaboration. It encourages participants to freely express their thoughts, ideas, and suggestions without criticism or judgment.

**Here are some common scenarios where brainstorming is useful:**

**Idea Generation, Project Planning, Problem-solving, Team Building, Innovation and Product Development,**

**Strategic Planning**

**Case study ( Q16 – Q20 ◊ 33 Marks)
What reports Accounts Departments will generate (minimum 5 reports)**

1. **Employee Loan Summary Report** – Provides an overview of all active, pending, and rejected loan requests, including loan amounts, approval status, and repayment schedules.
2. **Loan Repayment Report** – Tracks monthly deductions from employees' salaries, showing outstanding loan balances, due payments, and late payment penalties.
3. **Loan Approval & Rejection Report** – Details the number of loan approvals and rejections, along with reasons for rejection and department-wise approval trends.
4. **Company Loan Reserve Report** – Displays the total allocated loan funds, available reserves, and disbursed loan amounts, ensuring financial stability for loan disbursement.
5. **Debt-to-Salary Ratio Report** – Analyzes employees’ loan obligations compared to their salary to assess risk and prevent over-lending.

**Q17. What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is rejected? – 5 Marks**

Subject: Update on Your Loan Application

**Dear [Employee’s Name],**

Thank you for applying for a loan through the **Employees Loan Management System**. We have carefully reviewed your application, and unfortunately, we are unable to approve your request at this time due to the following reasons:

* **Insufficient Employment Tenure** – Employees must have completed at least **12 months** of service to be eligible.
* **High Debt-to-Salary Ratio** – Your current financial obligations exceed the company’s approved limit for loan eligibility.
* **Incomplete Documentation** – Some required documents, such as salary slips and ID proof, were missing from your application.

We understand this may be disappointing, and we encourage you to reapply in the future if your situation changes or if you meet the eligibility requirements. If you have any questions or need further clarification, feel free to reach out to us at **hr@ttscompany.com**.

We appreciate your understanding.

**Best Regards,**
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? – 5 Marks**

Subject: Congratulations! Your Loan Application Has Been Approved

**Dear [Employee’s Name],**

We are pleased to inform you that your loan application through the **Employees Loan Management System** has been **approved**. Below are the details of your loan:

**Loan Details:**

* **Loan Amount Approved:** 1500000
* **Interest Rate (if applicable):** 12%
* **Repayment Period:** 25 years
* **Monthly Deduction:** 20000

To proceed with the disbursement, please review the attached **Loan Agreement**, which includes the **terms and conditions** and the **repayment schedule**. If you agree with the terms, kindly sign the document and return it to us by **14 JAN 2057**

Once we receive your confirmation, the loan amount will be credited to your account, and monthly deductions will be automatically adjusted from your salary.

If you have any questions or need further clarification, feel free to reach out to us at **hr@ttscompany.com**.

Congratulations, and thank you for being a valued member of **TTS Company**!

**Best Regards,**

HR Department
TTS Company

**Q19. Design a sample report on the Loans applications Received by the accounts department – 8 Marks**

 **LOAN APPLICATION REPORT Date:** DD/MM/YY

| **Loan Application ID** | **Applicant Name** | **Loan Amount** | **Status** |
| --- | --- | --- | --- |
| PLO1 | Darren barr | 3,00,000 | **Approved** |
| HLO2 | SIAN NOVALOSKI | 7,00,000 | **Pending** |
| ELO3 | NIAMH  | 27,00,000 | **Rejected** |

 **Notes**

 **Approved applications** have met the loan approval criteria and are eligible for loan disbursement.
**Rejected applications** do not meet the loan approval criteria and have been declined.
**Pending applications** are currently under review, and a decision will be communicated soon.

For any inquiries or further information, please contact the **Accounts Department**.

**Q.20 Which reporting Tools we will use for generating reports. - 3 Marks**

**The choice of reporting tool depends on factors such as the nature of data, reporting requirements, user skill level, 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.