Capstone Project 6 Answer Sheet

**Question 1- What is the difference between Brainstorming and JAD Sessions? Answer=**

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|  | **Brainstorming** | **JAD session** |
| 1 | Definition: Brainstorming is a group creativity technique where participants generate a list of ideas spontaneously to find solutions for a specific problem. | Definition: JAD sessions bring stakeholders with different perspectives together to understand business requirements and brainstorm the best technical approach formeeting customer needs. |
| 2 | Objective: The goal is to quickly gather a variety of ideas and reach an approved solution as soon as possible | Objective: The focus is on gathering detailed requirements, understanding business processes, and designing solutionscollaboratively |
| 3 | Brainstorming is commonly used in creative projects, problem-solving, andidea generation | JAD sessions are commonly used in software development, system analysis,and project planning. |

**Question 2- Why is Document Analysis one of the compulsory techniques we use in a Project?**

**Answer=** Analyzing documents give project managers a good sense of what the project is all about. It is a compulsory technique used in projects to gather valuable insights and make informed decisions. Document analysis can help the BA learn about a new business unit they are working with or a new feature of a business unit they have already worked with. This is especially valuable if there are no business resources available to the BA. The Document Analysis technique is normally undertaken in three stages.

1. **Preparation:** Determining what documentation is available. Determining which of the available documents is relevant. Out of the relevant documents, which are the most appropriate for study given the objectives you are trying to achieve
2. **Review:** Extract information that meets your needs or may be valuable later. Take note of questions after reviewing the documents so that you can follow up with SMEs later. Look for references to other documentation that you may not have come across in your initial search that may be relevant to your effort.
3. **Wrap-Up:** Organizing and analyzing the information you extracted from the documents. This may include restating the information in the form of preliminary requirements for later review. Review any questions you capture with the appropriate subject-matter experts to elicit answers and identify further questions.

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

**Answer=** Reverse Engineering is usually used to review existing documents, projects, systems etc. to understand how they work.

1. **Understanding Legacy Systems:** Business analysts often encounter these legacy systems, which lack up-to-date documentation. Reverse engineering helps find how these systems function, including their data processing, business rules, and decision-making processes.
2. **Examining Software Components:** When you’re not sure what’s happening within your code or need to understand how an old computer system calculates a certain field, reverse engineering comes into play.
3. **Outdated Documentation:** Sometimes software documentation is outdated or nonexistent. In such cases, business analysts must trace the code logic to understand why certain calculations or processes occur. Reverse engineering helps bridge the gap when official documentation is lacking.
4. **Data Correctness in System Interfaces:** When interfacing systems or performing data migrations, ensuring data correctness is crucial. Reverse engineering helps verify that old and new settings align.

**Question 4- What is the difference between Brainstorming and Focus Groups? Answer=**

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|  | **Brainstorming** | **Focus Groups** |
| 1 | Purpose: Brainstorming is used to generateideas and enhance creativity | Purpose: Focus groups go beyondbrainstorming |
| 2 | Condition: Brainstorming occurs when aproblem exists. | Condition: Focus groups occur when anidea, solution, or process already exists. |
| 3 | Type of question: Progressive closed-ended questions to generate and build on ideas | Type of question: Can be open-ended for qualitative data or closed-ended forquantitative data. |
| 4 | Participants are heterogeneous | Participants can be homogeneous orheterogeneous. |

**Question 5- Observation Technique – Explain both Active and Passive approaches**

**Answer=** As a business analyst, observation techniques play a crucial role in gathering valuable insights and understanding workplace activities. Observation techniques involve systematically observing and documenting behaviors, interactions, or events in real-time.

* **Active Approach:** Active observation in simple words means we have a collaborative meeting where we sit with the stakeholder and discuss the requirements. Active observation is commonly used by business analysts to understand workplace activities, identify needs, assess solution performance, and facilitate training. While observing an activity, the observer can **ask questions** as they occur. This means that the workflow may be interrupted, but it allows the observer to quickly understand the reasoning behind actions.
* **Real time clarification**: Any doubts or uncertainties can be addressed immediately.
* **Insights**: By interacting with the user during observation, the observer gains deeper insights into the activity.
* **Passive Approach:** If any stakeholder does not have time due to his schedule, we take notes without disturbing him while they are doing their task, this is passive observation. Researchers use passive observation to analyze work processes, efficiency, and time spent on specific tasks.

**Question 6- How do you conduct the Requirements Workshop**

**Answer=** To conduct a requirement workshop, we need to follow 5 phases.

1. **Planning phase:** Clearly define the purpose of the workshop. Understand the scope and establish a clear goal. Identify the key stakeholders who should participate. Consider their roles and perspectives. Create an agenda or a vision for the workshop.
2. **Opening Phase:** At the start of the workshop, clearly introduce the purpose, vision, and agenda. Allow participants to introduce themselves in an engaging manner. Set a positive tone for the session.
3. **Execution Phase:** As the facilitator, keep attendees focused on the purpose and vision. Involve stakeholders in eliciting and documenting requirements. Incorporate various activities to keep participants engaged.
4. **Closing Phase:** Recap the key points discussed during the workshop. Discuss follow-up actions and responsibilities. Gather feedback from participants to improve future workshops.
5. **Follow-Up Phase:** Reflect on what worked well and areas for improvement. Use feedback to enhance your facilitation skills and adapt to future workshops.

**Question 7- In which context, can Interview Technique 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=** As a **Business Analyst (BA)**, conducting interviews is a crucial part of your role

1. **Requirements Gathering:** Interviews are a widely used and highly effective elicitation technique in business analysis. They involve one-on-one conversations between the BA and stakeholders, subject matter experts, or potential end-users.
2. **Stakeholder Analysis:** Conduct interviews to understand stakeholder perspectives, build rapport, and align expectations.
3. **Change Impact Assessment:** Interview key stakeholders to identify areas of impact, potential challenges, and mitigation strategies. Understand how changes will affect different stakeholders and processes.
4. **User Acceptance Testing (UAT):** Interview end-users during UAT to gather feedback, identify defects, and improve the solution. Validate that the solution meets user needs.

When it comes to conducting interviews, there are **several approaches** that can be effective.

1. **Structured Interviews:** In a structured interview, every candidate is asked the **exact same set of predetermined questions**. This approach ensures consistency and allows for easier comparison between candidates.
2. **Unstructured Interviews:** Unstructured interviews are **open-ended** and allow for free- flowing conversations. The interviewer explores various aspects in dept without a fixed script.
3. **Semi-Structured Interviews:** Semi-structured interviews combine **predetermined questions** with the flexibility to explore additional topics based on the candidate’s responses.

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|  | **Open Ended Questions** | **Close Ended Questions** |
| 1. | An open-ended question allows the respondent to provide a **detailed answer** that can fully address various elements of thequestion | A close-ended question restricts respondents to a limited set of answer options |
| 2. | Respondents are not restricted to predefined answer options | Requires choosing from pre-defined categories. Provides specific answer options (e.g., multiple-choice, yes/no,ranked order). |

**Question 8- Questionnaire Technique – Where will we use it? Give one example Answer=** The questionnaire technique is a valuable tool used in various contexts. A

Questionnaire is a **research tool or survey instrument** that consists of a set of questions or prompts designed to gather information from individuals or groups of people. It is a standardized way of collecting data from many people by asking them a series of questions related to a specific topic or research objective.

Questionnaire technique is used in Customer Feedback and Satisfaction. Understand customer experiences and identify areas for improvement. Retailers, service providers, and restaurants use questionnaires to gather feedback on service quality and product offerings.

It is also used in Market Research. Understand consumer preferences, behavior, and market trends. Companies use questionnaires to gather feedback on products, measure customer satisfaction, and assess brand perception.

**Question 9- How to Sort the Requirements – Where will we use? Give one example**

**Answer=** Sorting requirements is essential for effective project management and clear communication

**Categorization:** Group requirements based on their nature (e.g., technical, functional, business) or stakeholder needs. Sorting requirement is used in:

**Software Development Projects:** Sort requirements to create a clear roadmap for development phases. Prioritize features and functionalities for each software release.

**User Experience Design:** Arrange user stories to create a coherent user journey. Sort features based on their impact on user satisfaction.

**Question 10- Prioritize the Requirements –Where will we use? Give one example**

**Answer=** Prioritizing requirements is a critical activity in various contexts. Assign priority levels (e.g., high, medium, low) to each requirement.

**MoSCoW Technique:**

1. **Must-Have**: Identify critical requirements that are essential for project success.
2. **Should-Have**: Include requirements that significantly enhance the product but are not mandatory.
3. **Could-Have**: Consider requirements that add value but are not critical.
4. **Won't have**[: Exclude requirements that are nice-to-have but not feasible within](https://fibery.io/blog/product-management/prioritize-requirements/) [constraints](https://fibery.io/blog/product-management/prioritize-requirements/)

**Project Management and Software Development:** Prioritize requirements to create a clear roadmap for development phases. Arrange features and functionalities based on their importance and impact.

**Product Development:** Prioritize features according to customer needs and market demand

**Question 11- Weekly status reporting – How will we drive?**

**Answer=** A weekly status is a management tool that represents how an employee has invested his or her time at work during the last five to six working days. Here are few points to drive the weekly reports

1. Project Overview: Briefly summarize the project or tasks you’re working on. Mention

any significant milestones achieved during the week.

1. Accomplishments: Highlight specific tasks or goals completed during the week. Include

quantitative metrics if possible (e.g., “Resolved 20 customer tickets”).

1. Challenges and Roadblocks: Describe any obstacles you encountered. Mention how you plan to address them.
2. Upcoming Tasks: List the tasks you’ll be working on next week. Prioritize them based on

importance and deadlines.

1. Team Collaboration: Mention any collaboration with team members or stakeholders. Highlight positive interactions or areas for improvement.

**Question 12- Meeting Minutes Document – prepare one Sample**

**Answer=** Meeting minutes are essential for documenting the proceedings of a meeting. They serve as an official record of discussions, decisions made, and action items assigned during the meeting.

1. Title and Date: Begin with the title of the meeting (e.g., “Weekly Team Meeting”).

Include the date and time of the meeting.

1. Attendees: List the names of participants present at the meeting
2. Agenda: Summarize the meeting agenda. Highlight the topics discussed.
3. Key Points: Record decisions made during the meeting
4. Challenges and Action Items: Describe any challenges or roadblocks discussed. Include deadlines for completion
5. Next Steps: Outline the tasks planned for the upcoming week.

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| **MOM meeting** |
| Date | 29 March 2024 |
| Time | 3.00 PM |
| Location | Lonavala |
| Attendees | ABC |
| XYZ |
| PQR |
| LMN |
| Agenda | Item 1 |
| Item 2 |
| Item 3 |
| Discussion | Item 1 |
| Discussion |
| Summary |
| **Next Meeting** |
| Date | 30 March 2024 |
| Time | 3.00 PM |
| Location | Lonavala |
| Agenda | Project Planning |

**Question 13- Change Tracker Document – prepare one Sample**

**Answer=** A Change Log is a crucial tool in project management that helps track and manage changes throughout the project lifecycle

1. Change Log Template: A change log (also known as a change management log) is a document that captures and records changes as they occur during a project.

Here’s a common format for a change log

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Change****type** | **Description** | **Request****by** | **Submitted****date** | **Status** | **Comments** | **Date****Approved** |
| 1 | Scope | Add feature | ABC | 1 March2024 | Approved | Awaiting stakeholderfeedback | 5 March2024 |
| 2 | Design | Update UIfeature | PQR | 10 March2024 | Pending | UI team toimplement | 15 March2024 |

The change log ensures that changes are prioritized, tracked, and resolved efficiently.

1. Why You Need a Change Log:

**Effort Tracking**: The change log helps project managers track the effort required to resolve each change. It assigns team members, sets timelines, and ensures timely resolution

**Impact on Time and Cost**: Change directly impacts project time and cost. Managing it intelligently is essential for project success.

**Question 14- Difference between Traditional Development Model and Agile Development Models**

**Answer=**

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|  | **Traditional Development Model** | **Agile Development Models** |
| 1 | **Life Cycle**: Waterfall follows a linear sequential model to develop and test asoftware product | **Life Cycle**: Agile is a **continuous iteration life cycle model** to develop and test asoftware product. |
| 2 | **Phases:**1. Requirements analysis2. Design 3.Implementation4. Coding and Testing5. Maintenance **(**Post-release support and updates) | **Phases:**1. Planning1. Requirement Analysis: Detailed requirements gathering
2. Designing
3. Implementation
4. Testing
 |

|  |  |  |
| --- | --- | --- |
|  |  | 6. Deployment |
| 3 | **Flexibility**: Making changes after one phase is difficult and costly | **Flexibility**: Agile development model is flexible to make changes at any point inthe process. |
| 4 | **Delivery Time**: Waterfall has a long delivery time, as the entire project must becompleted before delivery. | **Delivery Time**: Agile delivers functional software quickly in short cycles |
| 5 | There is limited client involvement, andfeedback is minimal. | Encourages continuous client interactionand feedback. |

**Question 15- Explain Brainstorming Technique – Where to use?**

Answer= Brainstorming is to try to solve a problem or come up with new ideas by having a discussion that includes all members of group. The primary goal of a brainstorming session is to generate and document many ideas, regardless of how unconventional they may seem.

Brainstorming typically takes place in a **group**, where participants come together to creatively address problems and generate ideas. However, individuals can also brainstorm alone. Sitting down and writing down potential solutions to a defined problem allows for creative exploration.

1. Business Meetings and Strategy Sessions:

**Product Development**: Brainstorming helps generate ideas for new products, features, or improvements.

**Marketing Campaigns**: Teams brainstorm creative marketing strategies, slogans, and promotional ideas.

1. Problem-Solving:

**Challenges and Obstacles**: Brainstorming helps identify solutions to challenges, bottlenecks, or obstacles.

**Root Cause Analysis**: Teams can brainstorm to uncover underlying issues causing problems.

1. Project Planning.

**Question 16- What reports Accounts Departments will generate (minimum 5 reports)**

**Answer=** Accounting departments play a crucial role in maintaining a company’s financial health. They generate various reports that provide insights into the organization’s financial status, transactions, and operations

1. **Balance Sheet:** This report offers a snapshot of the company’s financial position at a specific point in time. It shows the ending balances of assets, liabilities, and equity. The balance sheet helps measure financial reserves and liquidity.
2. **Income Statement (Profit and Loss Report):** The income statement details the revenue earned over a specific period. It provides information about the company’s profitability by analyzing revenues, expenses, and net income.
3. **Cash Flow Statement:** As the name suggests, this statement tracks the flows of cash both in and out of the business. It outlines the sources and uses of cash related to operations, investments, and financing. The cash flow statement is a reliable indicator of a firm’s cash generation capacity.

**Question 17- What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is rejected?**

**Answer=**

Subject: Loan Application Rejection Dear XYZ,

We regret to inform you that your recent loan application, dated [1 March 2024], has been rejected. After careful consideration, we have determined that your application does not meet our lending criteria. The specific reasons for the rejection are as follows:

1. Incomplete Paperwork:
	* Some required documents were missing from your application. These documents include bank account statements, personal/business tax returns, financial statements, and personal/business credit reports.
2. Credit Score:
	* Your loan application faced rejection due to a **low credit score**. We recommend taking steps to improve your credit score or exploring alternative financing options.

While we understand that this decision may be disappointing, we encourage you to explore other avenues or address the issues mentioned above. You are welcome to reapply for a loan once you meet the necessary conditions.

Thank you for your understanding. If you have any further questions or need clarification, please feel free to reach out to us.

Yours sincerely,

[Branch Manager’s Name] [TTS Company]

**Question 18- What is the structure of the message/mail communicated from the HR department to the employee in case the Loan is approved?**

Answer=

Subject: Loan Application Approval Dear XYZ,

We are pleased to inform you that your recent loan application, dated [29 March 2024], has been approved. After careful consideration, we have reviewed your application and found it to be following our lending criteria. The specific details of your approved loan are as follows:

1. **Loan Amount**: You have been approved for a loan of 3,00,000/-.
2. **Interest Rate**: The interest rate applicable to your loan is 15**%**.
3. **Repayment Terms**: The loan will be repaid over a period of 60 months and an automatic deduction from salary will be made.
4. **Purpose**: The loan is intended for education loan.

Please review the terms and conditions outlined in the attached loan agreement. If you have any questions or require further clarification, feel free to reach out to our loan officer.

Next Steps:

1. **Sign the Agreement**: Kindly sign the loan agreement and return it to the HR department by 30 March 2024.
2. **Disbursement**: Once we receive the signed agreement, the loan amount will be disbursed to your designated bank account within 24 hours.

We appreciate your prompt attention to this matter. Congratulations on your loan approval! Yours sincerely,

[HR Manager’s Name] [TTS Company]

**Question 19- Design a sample report on the Loans applications Received by the accounts department**

**Answer=** Loans applications Received Report involves presenting relevant information in a structured format.

1. Report Overview: Provide a brief introduction to the purpose of the report. Explain that this report summarizes the loan applications received by the accounts department.
2. Date Range: Specify the time frame covered by the report (e.g., “Month of March 2024”).
3. Summary: Include the following summary statistics- Total number of loan applications received

Breakdown by loan type (e.g., personal loans, business loans, mortgage loans)

Total loan amount requested

1. Application details:

**Applicant Name**: Full name of the applicant **Application ID**: Unique identifier for each application **Loan Type**: Type of loan applied for

**Requested Amount**: Amount requested by the applicant

**Status**: Status of the application (e.g., pending, approved, rejected)

1. Recommendation: Provide recommendations Suggestions for streamlining the application process Areas for improvement in handling applications

Opportunities to enhance customer experience

1. Conclusion: Summarize the report and emphasize any actions needed based on the findings

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| Introduction: This report summarizes the loan applications received by the accounts department | Date: 29th March2024 |
| Total number of loan applications:5 |
| Total loan amount requested: 12,000/- |
| **Applicant****Name** | **Application ID** | **Loan Type** | **Requested****Amount** | **Status** |
| A | 1111 | Personal | Rs.1,000/- | Approved |
| B | 2222 | Business | Rs.2000/- | Pending |
| C | 3333 | Education | Rs.3000/- | Approved |
| D | 4444 | Personal | Rs.1000/- | Rejected |
| E | 5555 | Education | Rs.5000/- | Pending |
| Recommendation: Rejected applications please check with the accountdepartment. |
| Conclusion: Approved application has met the loan criteria and is eligible for loan. For any inquiries, please contact our account department. |

**Question 20- Which reporting Tools we will use for generating reports**

**Answer=** As a business analyst, you’ll want reporting tools that provide insightful data

visualization, facilitate decision-making, and enhance project visibility

1. **Tableau (Best for Data Visualization):** Tableau specializes in creating interactive and visually appealing reports. It allows you to explore data trends, patterns and insights effectively.
2. **Power BI:** Power BI is an invaluable tool for generating insightful reports and visualizing data. Power BI allows you to collect and transform data from multiple sources using the extract, transform, and load method. Aggregate structured and unstructured data, remodel it, and store it centrally for easy analysis. Present your findings using data visualizations. Power BI offers interactive dashboards, charts, graphs, and maps.
3. **Microsoft Excel:** Organize large data sets using tables. Summarize data and extract key insights. Arrange fields in rows, columns and values areas to create informative reports. There are different formulas for generating reports such as SUM, AVERAGE, IF FORMULA, etc.