FORUMS

1. What is business Analysis?

Business analysis is the process of examining and evaluating business demands and identifying solutions to potential challenges. Essentially, companies use this process to help them better understand how to meet their short-term and long-term business goals. This may include connecting company operations to measurable results that demonstrate how the organization is meeting its goals effectively.

2. Who is Business Analyst?

A business analyst (BA) is a person who processes, interprets and documents business processes, products, services and software through analysis of data. The role of a business analyst is to ensure business efficiency increases through their knowledge of both IT and business functions.

3.	Role of Business Analyst.
	Requirement Gathering & Analysis: Understand business needs through stakeholder meetings, interviews, and workshops. Document functional and non-functional requirements.
	Process Analysis & Improvement: Analyze existing business processes and identify areas for improvement. Recommend changes to enhance efficiency and reduce costs.
	Data Analysis & Decision Making: Collect and analyze data to support business decisions. Use data visualization tools (e.g., Excel, Power BI, Tableau) to present insights.
	Stakeholder Communication: Act as a liaison between business teams and IT/development teams. Ensure that business needs are accurately translated into technical requirements.
	Solution Evaluation & Implementation: Assist in evaluating software, tools, and processes to meet business goals. Support testing, user training, and implementation of new solutions.
	Project Management Support: Help define project scope, timelines, and deliverables. Track project progress and ensure alignment with business objectives.

4. Types of requirement

Business Requirement: Business requirements are the high-level statements of the goals, objectives, or need of the enterprise. Business Requirement describes needs of the organization as a whole and not groups or stakeholders within it.

Stakeholder Requirement: Stakeholder requirements are statements of the needs of a particular stakeholder or class of stakeholders.

Solution Requirement: Solution requirement describes the characteristics of a solution that meet business requirement and stakeholder requirement.

a. Functional Requirement Functional requirement describe capabilities the system will be able to perform in terms of behavior or operations.

b. Non- Functional Requirement Non-functional requirement don't directly relate to the behavior or functionality of the solution, but rather describes environmental conditions under which the solution must remain effective like capacity, speed, security etc.

Transition Requirement: It describes the capabilities that the solution must have in order to facilitate transition from the current state of the enterprise to a desired future state.

5. Skills Required for business analyst.

- Data analysis and visualization: Business analysts leverage data analysis to extract meaningful insights, enabling informed and data-driven decision-making.
- Proficiency in business intelligence tools: Business intelligence tools are powerful
 assets for creating interactive and visually compelling dashboards and reports.
 Business analysts use BI tools like Power BI and Tableau to convey insights in a
 digestible format, making complex data analyses accessible to a broader audience.
- Communication and presentation skills: Business analysts are the bridge between technical and non-technical stakeholders, requiring clear and concise communication. Translating complex data findings into actionable insights is a crucial skill.
- Problem-solving and critical thinking: Business analysts need to have the skills necessary to communicate well and negotiate effectively so that discussions around project scope, resource allocation, and conflict resolution lead to mutually beneficial outcomes.
- Adaptability and continuous learning: Business analysts operate in a dynamic environment where technologies, methodologies, and industry best practices constantly evolve. Thus, a vital aspect of the role involves staying updated with emerging trends, tools, and methodologies to remain relevant and practical.

6. SDLC Methodologies:

The Software Development Life Cycle (SDLC) is a systematic, multistep, iterative process for building and delivering software applications. Development teams rely on a system development life cycle to create reliable software with as few issues as possible.

7. Waterfall Methodology:

Waterfall model is a traditional model. Waterfall model follows a structured approach with each phase having specific deliverables. At the end of each phase a review takes place to determine if the project is running fine. Waterfall model works well for smaller projects where requirements are very well understood.

8. V Model:

V- model means Verification and Validation model. Each phase must be completed before the next phase begins. Product testing is planned in parallel with a corresponding phase of development in V-model. Proactive defect tracking – that is defects are found at early stage. Works well for small projects where requirements are easily understood. If any changes happen in midway, then the test documents along with requirement documents has to be updated.

9. RUP – Rational Unified Process:

RUP stands for Rational Unified Process, where phase/ module wise (long term project) application is developed. Hence, we can track the defects at early stages. This avoids the downward flow of the defects. Change request is welcomed in every phase of development. This model is called heavy weight process model. This model has multiple stages which requires more resources and more budget.

10. Spiral Model:

The spiral model is a risk-driven process model generator for software projects. The spiral model has four phases: Planning, Risk Analysis, Engineering and Evaluation. A software project repeatedly passes through these phases in iterations (called Spirals in this model). The baseline spiral, starting in the planning phase, requirements are gathered and risk is assessed. Each subsequent spiral build on the baseline spiral.

11. Agile Manifesto:

The Agile BA approach is a methodology that combines the principles of Agile development with the role of a Business Analyst (BA). It is a methodology that focuses on being flexible and responsive to change in order to deliver value to clients. It is a collaborative approach that involves constant communication and feedback between the BA, project team, and stakeholders. The Agile BA approach is based on the principles of the Agile Manifesto, which emphasizes individuals and interactions over processes and tools, working software over comprehensive documentation, customer collaboration over contract negotiation, and responding to change over following a plan.

12. Scrum:

Scrum is a way of managing projects, especially in software development. It's like a playbook that teams use to work together more effectively. Instead of doing everything at once, Scrum breaks work into smaller parts called "sprints." Each sprint focuses on completing a specific piece of the project, allowing teams to adapt and improve as they go. It's all about teamwork, communication, and getting things done step by step.

13. Object Oriented Approach:

The object-oriented approach is a programming paradigm that focuses on capturing the structure and behavior of information systems into small modules that combine both data and processes. This approach is widely used in software development due to its ability to improve the quality and productivity of system analysis and design by making it more reusable.

14. Use Case Diagram:

A Use case is a high-level diagram. The main purpose of the diagram is to identify the requirement. A use case diagram is an actor specific. A use case diagrams are designed to explain how an external user are interacting with the system.

15. Activity Diagram:

Activity diagram is basically a flow chart to represent the flow form one activity to another activity. The activity can be described as an operation of the system. So, the control flow is drawn from one operation to another. Activity diagrams are not only used for visualizing dynamic nature of a system but they are also used to construct the executable system by using forward and reverse engineering techniques.

16. Requirement Engineering:

Requirements Engineering starts from

- identify the sources of Requirements i.e. stakeholders.
- Elicit Requirements, Document,
- Model and Confirm the Requirements,
- Prioritize and Validate the requirements,
- Communicate and Manage the Requirements and
- Facilitate solution Assessment and Implementation

17. Reverse Engineering:

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

18. Focus Group:

A focus group is a means to elicit ideas and attitudes about a specific product, service or opportunity in an interactive group environment.

19. Workshop:

A requirement 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.

20. Business Requirement Management:

Requirements Management is all about processing the elicited requirements to implement the most suited solution. Requirements tracing, a process of documenting the links between the requirements and the work products developed to implement and verify those requirements.