# **Business Analyst Roles and Responsibilities in Software Development**

## **Overview**

A Business Analyst (BA) acts as a bridge between business stakeholders and the technical team, ensuring that the software product (e.g., POST /api/users endpoint) meets business needs and delivers value. In the context of the Spring Boot application, the BA focuses on defining, analyzing, and validating requirements for the user creation feature.

## **Detailed Responsibilities**

### **1. Requirement Elicitation and Analysis**

* **Activities**:
  + Conduct interviews, workshops, or brainstorming sessions with stakeholders to gather business needs.
  + Example: Identify that the system needs an endpoint to create users with fields: name, email, age, address, phone.
  + Analyze stakeholder inputs to clarify ambiguous or conflicting requirements.
* **Deliverables**:
  + Business Requirements Document (BRD) or user stories.

Example User Story:  
As an admin, I want to create a new user with valid information to manage the user list.

Acceptance Criteria:

- Email must be unique and valid.

- Age must be between 18 and 120.

* + - Phone must follow +84 or 0 + 9-10 digits format.
* **In Project**: Ensure POST /api/users supports business goals like efficient user management.

### **2. Scope Definition**

* **Activities**:
  + Define the scope of the POST /api/users endpoint, excluding unnecessary features (e.g., user retrieval, update, deletion).
  + Prioritize features to focus on minimum viable product (MVP).
* **Deliverables**:
  + Scope Document outlining included/excluded features.
* **In Project**: Limit development to user creation to optimize time and resources.

### **3. Translating Business Requirements to Technical Requirements**

* **Activities**:
  + Collaborate with developers to convert business needs into technical specifications.
  + Example: Define that POST /api/users accepts JSON, validates input, and returns 201 status.
* **Deliverables**:
  + Functional Specification or backlog items.
  + Example: Ensure User.java includes validation annotations (@NotBlank, @Email, @Min, @Pattern).
* **In Project**: Specify that email field requires @Column(unique = true) in the database.

### **4. Communication and Coordination**

* **Activities**:
  + Facilitate meetings between stakeholders, developers, and testers to align on requirements.
  + Example: Clarify why unique email is a business requirement.
  + Act as a liaison to resolve misunderstandings.
* **Deliverables**:
  + Meeting notes, clarified requirements.
* **In Project**: Ensure developers understand validation rules and testers know acceptance criteria.

### **5. Validation and Process Standardization**

* **Activities**:
  + Review deliverables (e.g., API response, database schema) to ensure alignment with business needs.
  + Approve user stories before development.
* **Deliverables**:
  + Signed-off requirements or user stories.
* **In Project**: Verify that POST /api/users returns correct user data and status 201.

### **6. Support Throughout Project Lifecycle**

* **Activities**:
  + Address issues raised during development or testing, e.g., validation errors.
  + Example: Confirm that age < 18 should fail as per business rules.
  + Support testers in defining test cases based on requirements.
* **Deliverables**:
  + Updated requirements or clarifications.
* **In Project**: Assist testers in validating that all User.java constraints are enforced.

### **7. Market and Business Value Analysis**

* **Activities**:
  + Evaluate if POST /api/users meets market needs (e.g., user management in a CRM system).
  + Assess business value, such as improved user onboarding.
* **Deliverables**:
  + Business case or ROI report.
* **In Project**: Justify the endpoint’s role in achieving business objectives.

## **Required Skills**

* **Analytical Skills**: Ability to analyze complex requirements and identify solutions.
* **Communication Skills**: Clear articulation of needs between business and technical teams.
* **Technical Knowledge**: Understanding of REST APIs, JSON, database (H2), and validation.
* **Tools**: JIRA, Confluence, Visio, Excel, Postman.
* **Methodologies**: Agile, Waterfall, BABOK guidelines.

## **References**

* International Institute of Business Analysis (IIBA) BABOK