# **Requirement Elicitation Techniques**

## **1. Introduction**

Describe the methods and techniques used to gather, analyze, and document the requirements for the **Teacher Assistant Management System (TAMS)**.  
 Since TAMS involves multiple users — including Teaching Assistants (TAs), Instructors, and University Administrators — it is crucial to use appropriate elicitation techniques to ensure that all functional and non-functional requirements are clearly understood and validated.

## **2. Objectives of Requirement Elicitation**

* Identify the key needs and expectations of all stakeholders (TAs, instructors, and administrators).
* Understand the current issues with manual TA task management.
* Define accurate system functionalities and constraints.
* Ensure that requirements are consistent, complete, and traceable.

## **3. Elicitation Techniques Used**

### **3.1. Interviews**

**Description:** Face-to-face or online interviews were conducted with Teaching Assistants, Instructors, and Administrative Staff to understand their current workflow, challenges, and desired features.

**Purpose:**

* Gather detailed insights into how TAs currently manage tasks and grading.
* Identify pain points and inefficiencies in the current manual system.
* Clarify functional expectations from the new system.

**Stakeholders Interviewed:**

* 3 Teaching Assistants
* 2 Course Instructors
* 1 Department Administrator

**Expected Outcome:** A clear understanding of the specific user needs, such as dashboard design preferences, task management flow, and grading automation.

### **3.2. Questionnaires / Surveys**

**Description:** Online surveys were distributed to a larger group of TAs and instructors to collect quantitative data about the most common challenges and priorities.

**Purpose:**

* Reach a larger number of potential users quickly.
* Prioritize system features based on frequency of user needs (e.g., deadline reminders, grade automation).

**Sample Questions:**

* How do you currently track grading deadlines?
* What causes the most stress in your TA duties?
* Which of the following features would be most useful (task tracking, grading automation, report generation, etc.)?

**Expected Outcome:** A ranked list of most desired features to guide system design priorities.

### **3.3. Observation**

**Description:** Direct observation of TAs during lab sessions and grading activities was conducted to understand their workflow and challenges in real-time.

**Purpose:**

* Identify unspoken needs or challenges that may not appear in interviews.
* Observe time management, communication methods, and grading flow.

**Expected Outcome:** Accurate mapping of the TA workflow and discovery of hidden inefficiencies (e.g., repetitive manual grade entry, communication delays).

### **3.4. Document Analysis**

**Description:** Review of existing resources such as current grading spreadsheets, TA guidelines, and course schedules.

**Purpose:**

* Understand existing documentation and current procedures.
* Identify missing or inconsistent processes that the system can automate.

**Expected Outcome:** List of data types and structures that should be included in the new system (e.g., student grades, assignment deadlines, task lists).

### **3.5. Brainstorming Sessions**

**Description:** Collaborative sessions with a small group of TAs and instructors to discuss ideas for system features and improvements.

**Purpose:**

* Encourage creative solutions.
* Combine multiple perspectives to shape system design.

**Expected Outcome:** Refined list of innovative features such as automated reminders, progress tracking visualization, and performance reports.

## **4. Tools and Resources Used**

* Google Forms for surveys
* MS Teams / Zoom for interviews and brainstorming
* University TA Guidelines and Course Syllabi for document analysis
* Observation logs and field notes

## **5. Conclusion**

The requirement elicitation process provided valuable insights into the challenges faced by Teaching Assistants and the expectations of instructors and administrators.  
 By using multiple techniques — interviews, surveys, observation, document analysis, and brainstorming — the project team ensured that all system requirements for the **Teacher Assistant Management System (TAMS)** are well-defined, accurate, and aligned with stakeholder needs.