# **Phase 1: Problem Understanding & Industry Analysis**

# **Objective:**

To analyze the challenges in learning Salesforce Apex, automation, and Lightning Web Components (LWC) development, and to define clear project goals.

#### **Activities:**

## 1. Industry & Technology Research:

- Studied Salesforce developer best practices and declarative vs programmatic automation.
- Identified key areas for Apex learning: Triggers, Batch, Queueable, Future methods, Flows, and LWC dashboards.

#### 2. Problem Definition:

- Developers often struggle to combine declarative (Flows, Process Builder) and programmatic (Apex) approaches.
- Difficulty in managing asynchronous processes and writing test classes for deployment.
- Limited practical examples for interactive Lightning Web Components.

### 3. Project Goals:

- Build a comprehensive **Apex Recipes project** with declarative and programmatic solutions.
- Include ready-to-use examples for triggers, batch jobs, scheduled jobs, future methods, and LWCs.
- Provide a reference for **unit tests**, asynchronous processing, and integration scenarios.

#### **Deliverables:**

- Project Scope Document
- Use Case Definitions
- Learning Objectives for each Apex recipe