Phase 1: Problem Understanding & Industry Analysis

1. Requirement Gathering

- Identified key needs for blood banks, hospitals, and donors:
  - Donor registration
  - Donation history tracking
  - Blood inventory management
  - Urgent hospital requests
  - Automated donor engagement

2. Stakeholder Analysis

- Donors: Individuals willing to donate blood
- Blood Bank Staff: Manage donor information, inventory, and coordinate donations
- Hospital Staff: Request blood during emergencies and routine cases
- Administrators: Oversee compliance, quality, and inventory levels
- Volunteers/NGOs: Assist organizing donor drives and awareness

3. Business Process Mapping

- Current State:
  - Manual donor tracking
  - Telephonic requests
  - Paper inventory causing delays and shortages
- Proposed Flow:
  - Donor registration → Eligibility verification → Scheduled donation
  - Donation completion → Inventory update
  - Hospital request → Automated matching → Donor/stock allocation

- Automated donor reminders and feedback collection

4. Industry-Specific Use Case Analysis

- Challenges in Healthcare:
  - Ensuring safe and timely blood availability
  - Rapid response to emergencies
  - Maintaining compliant donor history
  - Minimizing wastage due to expiry
- Relevant Use Case:
  - Real-time inventory tracking and urgent donor mobilization
  - Address seasonal shortages and disaster scenarios

5. AppExchange Exploration

- Explored existing Salesforce healthcare and donor management apps
- Most lack custom blood inventory, real-time emergency matching, and integrated donor engagement for repeat donations
- Validated the need for a dedicated, extensible solution