Project Title: Organ Donation & Transplant Registry

Phase 1: Problem Understanding & Industry Analysis

1. Requirement Gathering

The project aims to build a **Salesforce-based Organ Donation & Transplant Registry** to streamline donor–recipient matching and automate transplant coordination.

Key Requirements:

- Maintain records of **Donors, Recipients, Organs, and Match Records**.
- Automate **compatibility checks** (e.g., blood group, organ type).
- Notify doctors when a **match is found**.
- Provide **dashboards** showing organ availability, pending requests, and success rates.
- Ensure **secure access control** for different stakeholders (doctors, coordinators, admins).
- Enable **reports** for government and healthcare analysis.

2. Stakeholder Analysis

Primary Stakeholders:

- **Doctors:** Need real-time notifications of donor–recipient matches.
- **Hospital Coordinators:** Manage donor and recipient records.
- **Patients/Recipients:** Waiting for organ matches.
- **Donors & Families:** Provide organ donation consent.
- **System Admins:** Manage users, permissions, and system settings.
- **Healthcare Authorities:** Require reports for compliance and monitoring.

3. Business Process Mapping

Current Challenges (Manual Process):

- Donor data stored in scattered hospital records.
- Matching process slow and error-prone.
- No centralized view of available vs. requested organs.
- Poor communication between coordinators and doctors.

Proposed Process with Salesforce:

1. Donor/Recipient data is entered into Salesforce.

2. System checks compatibility (blood group, organ type, urgency).
3. If match found → **Match Record created automatically**.
4. Doctors notified via **Email Alerts / Custom Notification**.
5. Coordinator updates transplant status in the system.
6. Reports & Dashboards provide real-time insights.

4. Industry-Specific Use Case Analysis

- **Healthcare Industry Needs:**
    - Centralized organ registry accessible by hospitals.
    - Real-time match detection for life-saving decisions.
    - Compliance with health data privacy regulations.
- **Use Case Example:**
    - *A new kidney donor is registered with blood group O+. A patient with O+ in urgent need is already in the system. The flow automatically creates a match record and notifies the assigned doctor, reducing delays in the transplant process.*

5. AppExchange Exploration

Relevant Salesforce AppExchange tools that can be leveraged:

- **Health Cloud (Salesforce Industry Cloud):** Pre-built healthcare objects (Patients, Care Plans, etc.).
- **DocuSign for Salesforce:** For digital consent forms from donors/families.
- **Conga Composer:** For generating donor/recipient reports.
- **Survey Tools:** To collect donor/recipient feedback after transplant.