

PHASE II: PROJECT PLANNING

Date	06 November 2025
Team ID	NM2025TMID08097
Project Name	To supply Leftover Food to Poor
Maximum Marks	4 Marks

Title: Project Planning for “ FoodConnect – To Supply Leftover Food To Poor”

1. Objective

The **Project Planning Phase** establishes the foundation for designing and developing the FoodConnect system.

Its purpose is to **analyze requirements, define data entities, plan security configurations, and design user access** to ensure a stable and efficient Salesforce implementation.

This phase also identifies the **logical structure, relationships, and user hierarchy** necessary for smooth operations in the Salesforce Developer Edition.

2. Overview of the Planning Process

The planning phase involves four key components:

1. **Defining Core Entities and Relationships**
2. **Designing Security and Data Sharing Models**

3. User Creation and Role Assignment
4. Establishing the Development Timeline and Tools

This ensures the entire system aligns with both the **technical feasibility** and the **social objectives** of minimizing food wastage through automation.



3. Core Entity Identification

The FoodConnect application is structured around **five main custom objects**, each representing a key component of the food redistribution process:

Object Name	Description	Relationships
Venue	Represents the food donor (restaurants, grocery stores)	Linked to Drop-Off Point

Object	Description	Relationships
Name		
	event halls, caterers).	and Task
Drop-Off Point	Represents the delivery location (NGO, shelter, etc.).	Linked to Venue and Volunteer
Volunteer	Represents individuals who collect and deliver food.	Linked to Task and Execution Details
Task	Represents specific donation and delivery actions.	Master-Detail with Execution Details
Execution Details	Represents records of completed deliveries.	Child of Task

Each object corresponds to real-world entities and ensures that food movement can be tracked from **donor** → **volunteer** → **recipient** with complete transparency.

4. Relationship Strategy

The relationships among these entities were designed to maintain **referential integrity** and **data security**:

Relationship Type	Object Pair	Purpose
Master-Detail	Task → Execution Details	To automatically delete related child records when the parent is deleted.
Lookup	Volunteer → Drop-Off Point	To allow flexible volunteer assignment.

Relationship Type	Object Pair	Purpose
Formula	Drop-Off Point →	To calculate real-time distance between donor and recipient.
	Venue	

This structure supports **data consistency** and allows the use of **automation tools (Flows, Triggers)** effectively.

5. Security and Profile Planning

The **Salesforce Security Model** was implemented to ensure that data access is role-based and adheres to the principle of least privilege.

5.1 Custom Profiles Created

Profile Name	Description	Access Level
Volunteer Profile	Used by field volunteers who collect food.	Read, Create, and Edit permissions on specific objects.
NGO Admin Profile	Used by organization administrators.	Full CRUD access to all objects and setup features.

Each profile was cloned from the standard Salesforce profiles and customized to restrict unnecessary privileges.

5.2 Public Groups

To streamline record visibility and sharing:

Public Group	Members	Purpose
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Public Group	Members	Purpose
Isha Volunteers	Active volunteer users	Handles local food collection.
NGO Coordinators	Admin-level NGO users	Oversee entire operations and reporting.

6. Data Access and Sharing Rules

To maintain control over who sees what data, **Criteria-Based Sharing Rules** were applied:

If **Distance < 15 km**, record is shared with **Isha Volunteers** group.

If **Distance > 30 km**, record is shared with **NGO Coordinators** group.

This ensures that:

Volunteers only access nearby delivery points.

NGO Admins view organization-wide data for reporting.

Rationale: This configuration avoids data clutter, maintains efficiency, and provides users with only the relevant records.

7. User Creation and Role Assignment

User creation followed a systematic process within the Salesforce setup:

7.1 Procedure

1. Navigate to **Setup** → **Users** → **New User**.
2. Enter details like First Name, Last Name, Email, and Username.
3. Assign a **Salesforce Platform License** to Volunteers.

4. Assign a **Salesforce License** to NGO Admins.
5. Allocate profiles and public groups accordingly.

7.2 User Hierarchy

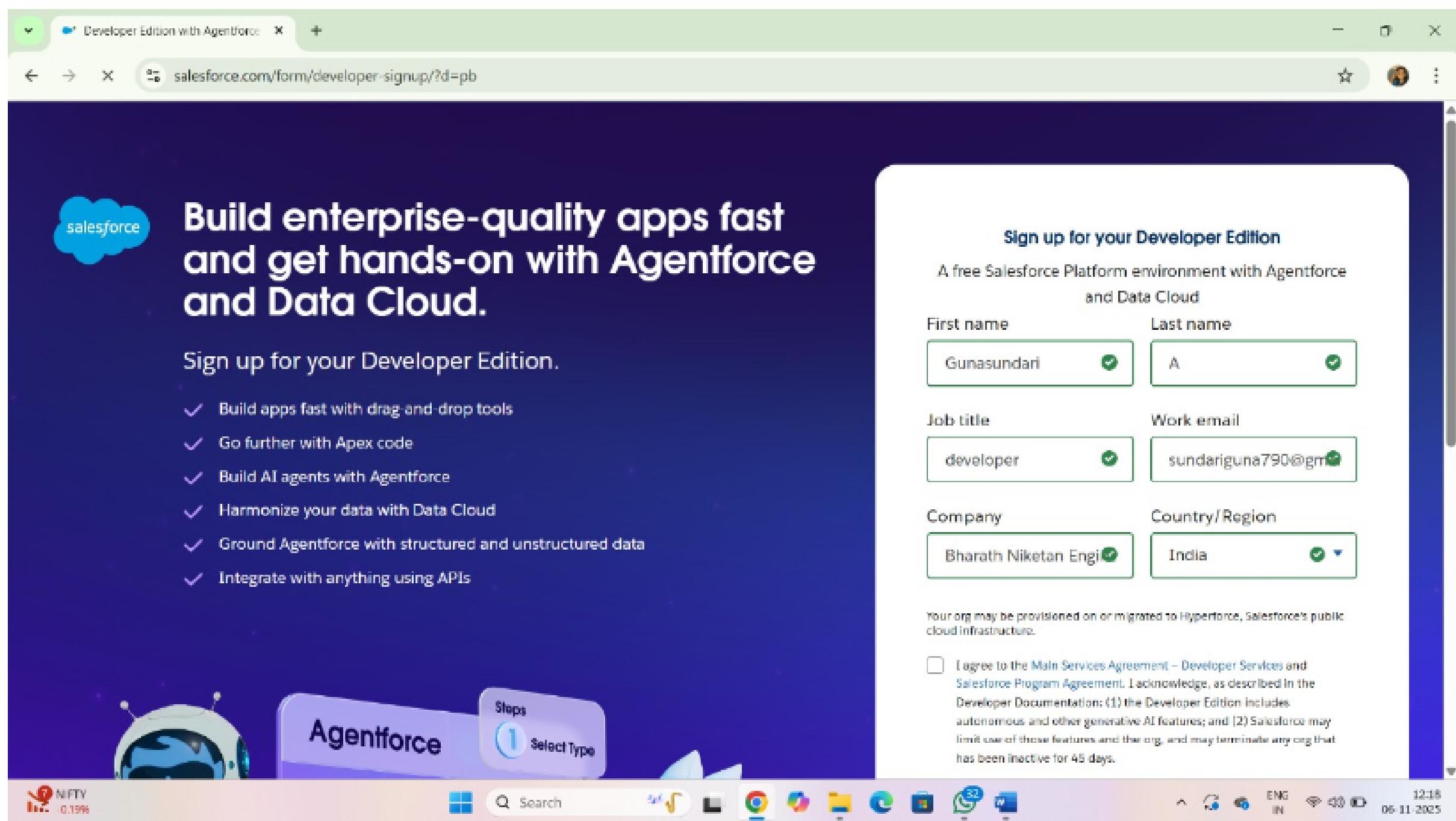
Role	Assigned Profile	Group	Privileges
NGO Coordinator	NGO Admin	NGO Coordinators	Full Access
Volunteer	Volunteer Profile	Isha Volunteers	Limited Access
System Admin	Standard Admin	N/A	Full Setup Access

8. Environment Setup and Configuration

This part ensures a consistent working environment for testing and future scalability.

Steps:

1. Developer Edition account created from developer.salesforce.com/signup.
2. Verified access and enabled Salesforce Lightning Experience.
3. Set organization branding (App Name: *FoodConnect*).
4. Installed essential tools like **Flow Builder**, **App Manager**, and **Schema Builder**.
5. Created **Custom Tabs** for easy navigation to all entities.



9. Project Timeline and Resource Plan

Phase	Duration	Key Deliverables
Ideation	2 Days	Problem Definition, Brainstorming
Planning	3 Days	ERD, Security Model, User Creation
Requirement Analysis	4 Days	Object and Field Configuration
Design & Implementation	5 Days	App, Flow, Dashboard
Testing & Deployment	2 Days	Validation, Reporting

10. Tools and Resources Used

Tool	Purpose
Salesforce Lightning App Builder	UI and App Design
Flow Builder	Automation of Data Entry

Tool	Purpose
Apex Trigger	Distance Calculation
Dashboard Builder	Data Visualization
Schema Builder	Object Relationship Design
SmartInternz Platform	Project Mentorship and Submission

11. Expected Outcomes of the Planning Phase

At the end of the Project Planning Phase:

- Data models and relationships were finalized.
- User profiles and permissions configured.
- The technical environment was fully prepared.
- Clear workflow and access strategy established.

This ensures a **solid foundation** for the upcoming **Requirement Analysis** and **Implementation Phases**.

[Figure 2.7: Planning Workflow Diagram – Setup to Implementation]

12. Summary

The **Project Planning Phase** serves as the blueprint for the successful execution of the FoodConnect project.

By organizing the development environment, defining roles, and establishing data relationships, it transforms the initial concept into a **structured, scalable framework**.

Salesforce's flexibility enables FoodConnect to adapt as the project grows – making this phase not just a preparation stage, but a roadmap for sustainable impact.