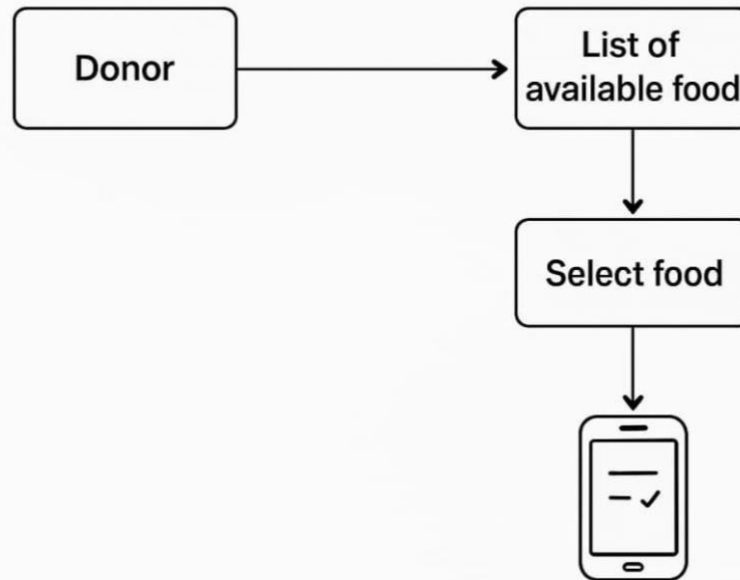


## **Project Design Phase-II Technology Stack (Architecture & Stack)**

Date	02 November 2025
Team ID	NM2025TMID02364
Project Name	To Supply Leftover Food to Poor
Maximum Marks	4 Marks

**Technical architecture:**

## Leftover Food Donation App



### System Overview:

This architecture describes the backend and frontend components of a ServiceNow-based solution that ensures users cannot be deleted if they are linked to any active incident or assignment. The design emphasizes cloud scalability, secure access, and process automation using ServiceNow native tools.

### Process Flow Description

1. The **Admin** requests a user deletion via the **ServiceNow Web UI**.

2.The **Flow Designer** script (App Logic-1) intercepts the request.

3.A **GlideRecord** query checks active incidents or assignments (App Logic-2).

4.If the user is linked to any incident, the system:

- Blocks deletion.
- Sends a **notification** to the admin (App Logic-3).
- Logs the attempt.

5.If no link exists, deletion proceeds.

6.(Optional) The system calls an **HRMS REST API** to verify employment status before deletion.

7.All activities are logged in **ServiceNow system logs**.

**Infrastructural Demarcation:**

Layer	Components	Description
Local Layer	Web UI	Admin interface to trigger deletion actions
Cloud Layer (SaaS)	Application logic, Database, Notifications	Entire processing hosted on ServiceNow Cloud
External Layer (Optional)	HRMS REST API	Third-party system to verify user employment

### Components & Technologies:

<b>S.No</b>	<b>Component</b>	<b>Description</b>	<b>Technology</b>
<b>1.</b>	User Interface	Admin interacts via Web dashboard	ServiceNow Web UI / Service Portal
<b>2.</b>	Application Logic-1	Checks if user is linked to an incident before allowing deletion	ServiceNow Flow Designer, Server Scripts
<b>3.</b>	Application Logic-2	Validates user status from incident table	GlideRecord in Server Script

<b>4.</b>	Application Logic-3	Sends notification if deletion is blocked	ServiceNow Notifications / Email Engine
<b>5.</b>	Database	Stores user, incident,	ServiceNow CMDB,

		and assignment data	Incident Tables
<b>6.</b>	Cloud Database	Managed by ServiceNow backend	ServiceNow Cloud Database (SaaS)

<b>7.</b>	File Storage	Logs and attachments	ServiceNow System Logs / Attachments Table
<b>8.</b>	External API-1 (Optional)	HRMS integration for verification	REST API (Integration Hub / RESTMessage)
<b>9.</b>	External API-2	Not applicable	-
<b>10.</b>	Machine Learning Model	Not applicable for current use case	-
<b>11.</b>	Infrastructure	Hosted on	ServiceNow

	re	ServiceNow Cloud	w Cloud (SaaS)
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## Application Characteristics:

S.No	Characteri stic	Descriptio n	Technolog y
1.	Open-Sour ce Framework s	Not applicable (ServiceNo w is proprietary	—
2.	Security Implementa tions	Role-based access control, ACLs, and secure scripts	ServiceNo w ACLs, Scoped Apps

3.	Scalable Architecture	SaaS-based and horizontally scalable	ServiceNow Multi-tenant Cloud
4.	Availability	Highly available	ServiceNow Cloud
		via cloud redundancy	Architecture
5.	Performance	Optimized via async flows and indexed tables	GlideRecord, Background Scripts