## Project Design Phase-II **Technical Architecture**: (Food security)

Date	18 October 2022	
Team ID	PNT2022TMID43603	
Project Name	Project - Project Applied data science	
Maximum Marks	4 Marks	

## **Technical Architecture:**

This helps in a lot of factors, including supply chain management, precision farming, warehouse management and climate-smart agriculture. All of these factors contribute to increasing food security by **decreasing damages during production and post-harvest stages**.



## Climate smart agriculture

**Table-1 : Components & Technologies:** 

S.No	Component	Description	Technology
1.	User Interface	Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript / Angular Js / React Js etc.
2.	Application Logic-1	Email or phone number	Java / Python
3.	Application Logic-2	password	Any service provider
4.	Application Logic-3	Captcha	Assistant
5.	Database	Data Type, Configurations etc.	MySQL, NoSQL, etc.
6.	Cloud Database	Database Service on Cloud	MySQL etc.
7.	File Storage	File storage requirements	Any online storage or Local Filesystem
8.	External API-1	Purpose of External API used in the application	Weather API, etc.
9.	External API-2	Purpose of External API used in the application	Aadhar API, etc.
10.	Machine Learning Model	Purpose of Machine Learning Model	Object Recognition Model, Google Assistance etc.
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration:	Local, Cloud Foundry, Kubernetes, etc.

## **Table-2: Application Characteristics:**

S.No Cha	aracteristics	Description	Technology
1. Ope	en-Source Frameworks	List the open-source frameworks used	Technology of Opensource framework
2. Sec	curity Implementations	I	e.g. SHA-256, Encryptions, IAM
2. 360	curity implementations	use of firewalls etc.	Controls, OWASP etc.

S.No	Characteristics	Description	Technology
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Technology used
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Technology used
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Technology used