



# *Project Features*

With Use-cases and User Workflows

Project version 1.0.0



# *Feature Types (Based on Restriction)*

## **Unrestricted**

- No authentication required to use unrestricted features (Chat application, for example)
- To prioritize convenience of our underserved target users, we will keep features as unrestricted as possible.

## **Restricted**

- Will require proper authentication to use restricted features
- The features that will need to identify the user properly (For example, keeping track of users' current productions)



# *Possible User Types in Project*

## Guest users

- Will not require tedious authentication to use unrestricted features

## Registered users

- Will require authentication **with minimal effort** to use restricted features



# *Possible User Types in Project*

## **Registered Officer**

- Requires proper authentication
- Will be communicating with registered users as experts/conveyers

## **Application Admin**

- For maintenance or updates of the application
- Requires proper authentication



# *Crop Selection*



# Use-case : User selects the crops that he is harvesting

## Restricted

### Workflow from user's point of view:

- User **authenticates** into the application
- Clicks on the **select crops** icon
- A static list of crops are shown in the **dropdown menu**
- User **selects or deselects** some crops
- **Confirms** the selection
- User is **redirected** to homepage



# *Daily Log*



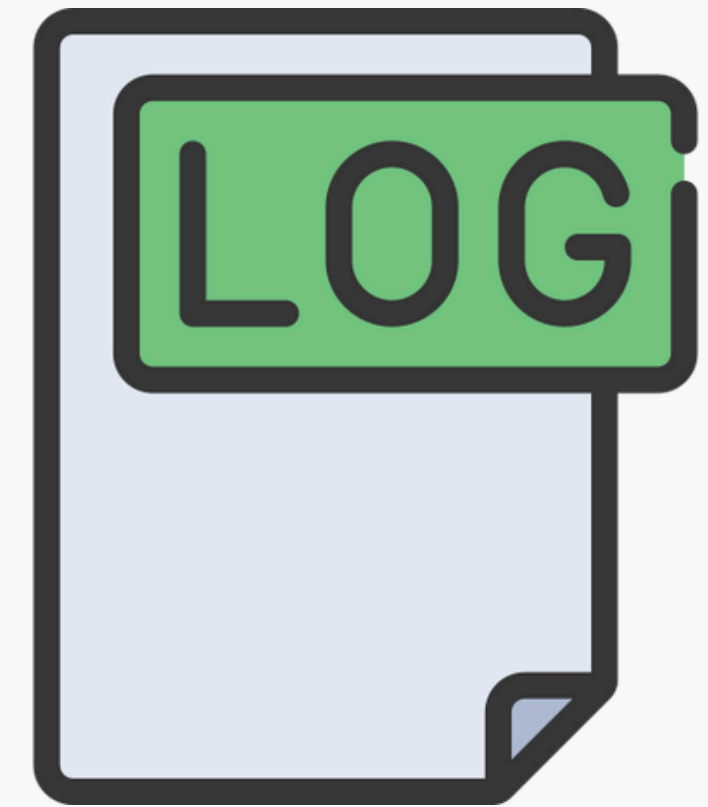
# Use-case : User logs daily activities and conditions

## Restricted

### Workflow from user's point of view:

- User authenticates into the application
- Navigates to Daily Log from menu or a direct link
- Based on his current harvest(s) a predefined set of question is selected reflecting his daily tasks.

This question set is refined with the help of an LLM. Based on user's previous logs and weather data, some questions may be discarded or modified.



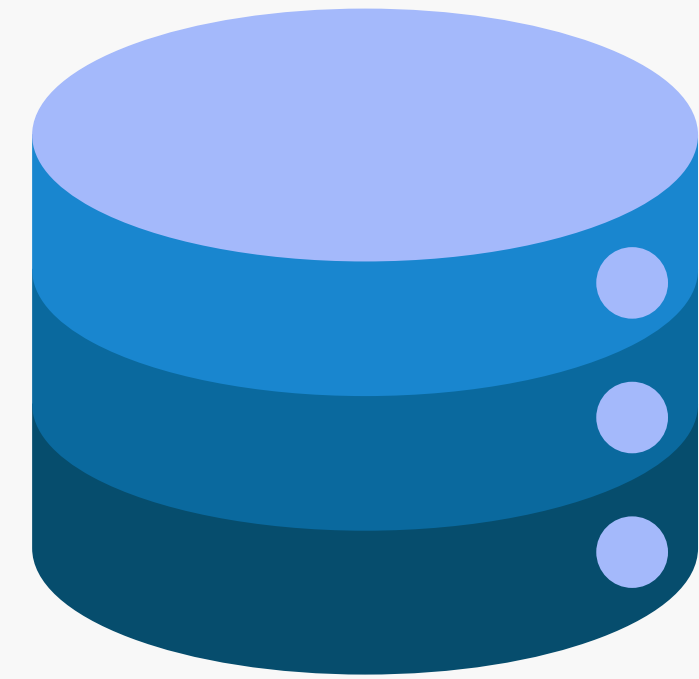


# Use-case : User logs daily activities and conditions Contd..

## Restricted

### Workflow from application's point of view:

- User's response to these questions is converted to JSON
- This JSON will be saved in an Elasticsearch Database



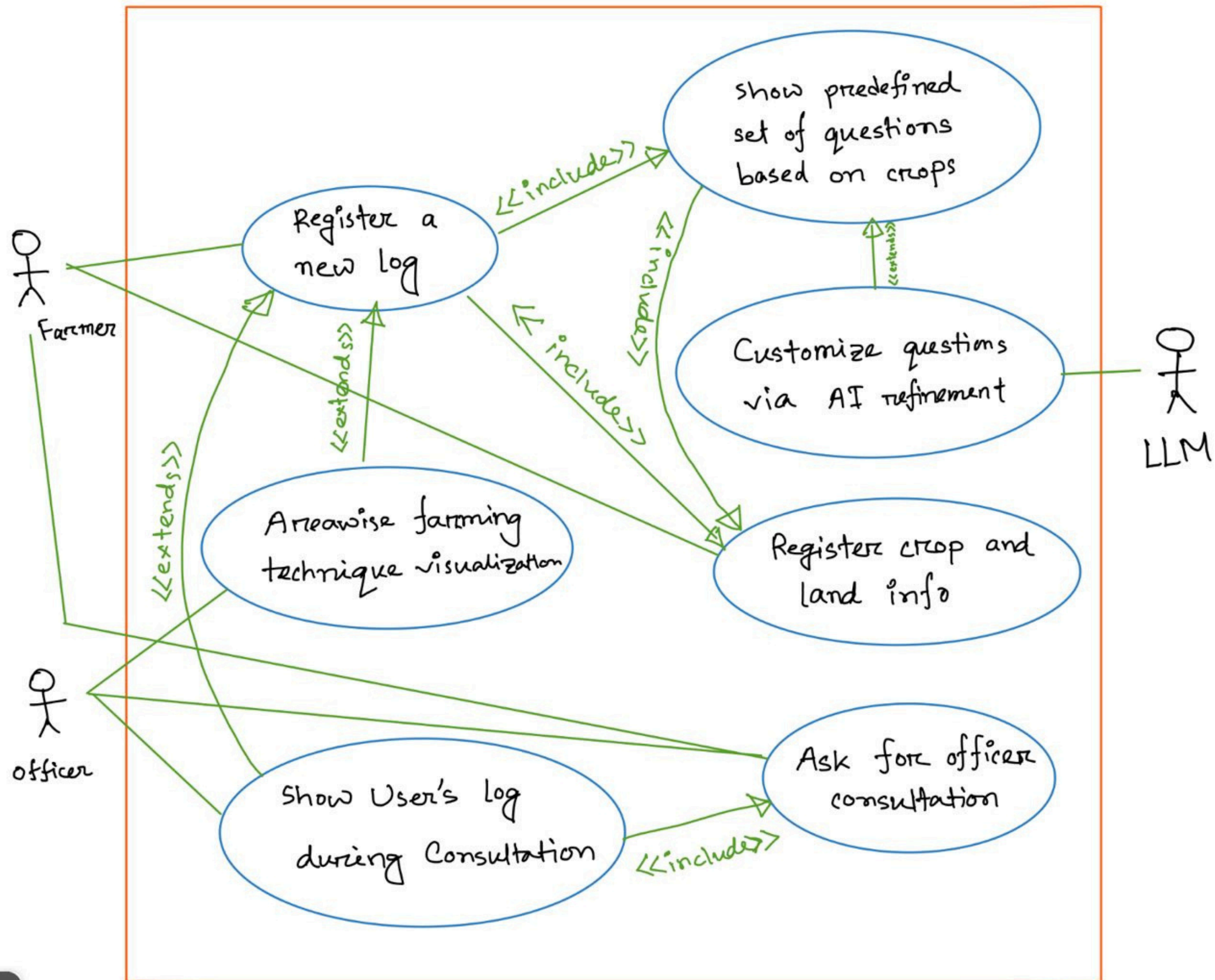
# Use-case : User logs daily activities and conditions Contd..

## Restricted

### Impacts of Daily Log

- Based on user's inputs, application will generate and store records in an organized format.
- An LLM-based disease detection system can be utilized to alert the user about potential crop conditions that require attention.
- These inquiries can also be quite helpful in reminding the farmer of a chore that he may have overlooked.
- These daily logs will help review past activities and crop conditions when required.





# *Broad Data Visualization*



# Use-case : Officers Review Broad Farming Data

## Restricted

### Workflow from officer's point of view:

- Officer **authenticates** into the application
- Navigates to **Farm Data** from menu or a direct link
- Here, **graphs and charts** from daily logs will help **officers review** local farming practices, identify farmer mistakes, and issue potential disease alerts.
- **Filters** by area and crop will be available.



# *Chat Application*



# Use-case : User starts a chat with local officer

## Unrestricted

### Workflow from user's point of view:

- User **enters** the application
- Selects **start chat** from menu or a direct link
- Sends a **text/message** to local officer
- Can **attach file** (images, or documents) to provide additional context
- Receive **fast responses** for quick communication





# Use-case : User starts a chat with local officer    Contd..

## Unrestricted

### Workflow from user's point of view:

- Optionally, utilize pre-filled message templates for common queries to save time
- Can chat anonymously, if preferred





# Use-case : User is directed to chat application while using another feature

## Unrestricted

### Workflow from user's point of view:

- User is using another application feature like daily logging, or support for disease management
- User requires additional information or help
- User is given option to directly navigate to chat
- If user agrees, he is directly navigated to the chat application

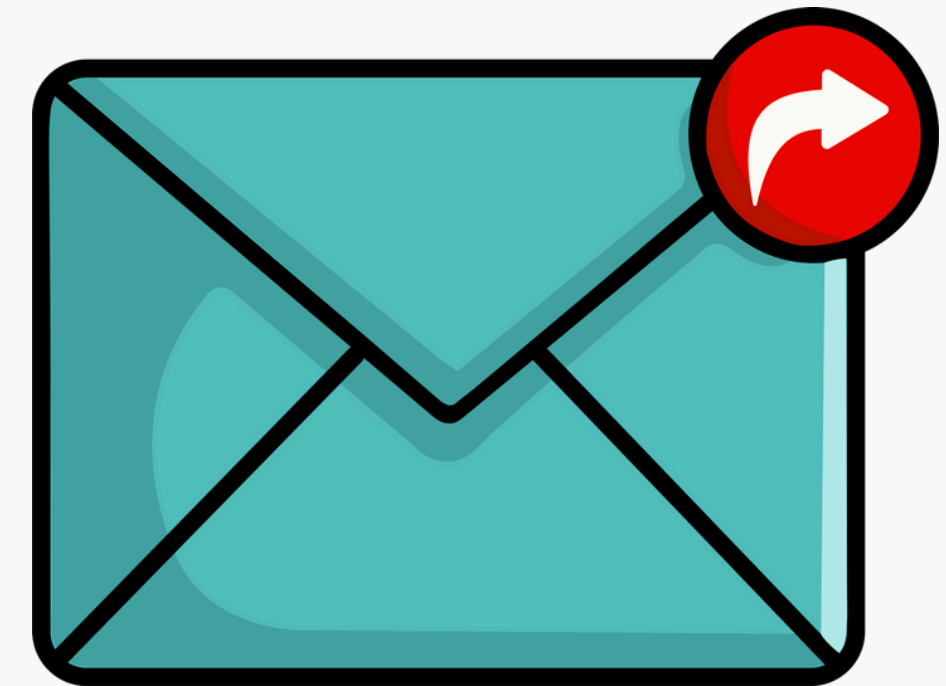


# Use-case : Officer responds to user and can review the user's daily logs for more informed response

## Restricted

### Workflow from officer's point of view:

- Officer **logs in** with proper authentication
- Receives chat review **notification**
- **Navigates** to chat review
- **Opens a chat** based on priority/recency
- **Responds** fast with proper information
- Can **access and review** respective user's previous chats or daily logs for more additional context
- **Logs necessary details** from chat review





*Thank you*

