**Use Cases Scenario**

**Scenario: Check Water System**

Allow user interaction and display system status using GUI

1. Display table entries for each sensor, reading and system status collected from drones.
2. Organize the readings into separate tables for water pumps, flow control sensors, gravity feeds and reservoirs.
3. Provide emergency shut off to stop all water system process.
4. Whenever values outside of predetermined parameters appear in table data, print an error message to the screen box.
5. Provide maintenance schedule editing window to allow modify maintenance table declared previously.
6. Provide the window across multiple tabs of dashboard.
7. Enables edit and/or delete of entries when selected.

Possible Alternatives:

* Open the window to print error message if the error reason is known. (e.g., pipe leakage)

**Scenario: Check Drone Status**

1. Display drone status tables; highlight any readings outside of normal parameters.
2. Provide drone maintenance history in a non-interactive format.
3. Provide a scheduling menu for assigning instructions. Task can be added using the “Add Task” button based on the predefined list.
4. Farmers can amend an entry and/or change its order of form using “Edit Task”.
5. “Delete Task” allows cancellation; removes the entry from the table.
6. Display a live camera feed whenever “Go to live feed” is clicked; Otherwise, it minimizes the camera area.
7. Display the list of previously recorded video/audio.
8. When clicked on row of recording list, playback will be display in video area.

Possible Alternatives:

* Open the window to print error message if the error reason is known. (e.g., battery down, memory full)
* Clicking on “edit” or “delete” does not select a task; the user needs to select a row entry to interact.

**Scenario: Equipment Maintenance Scheduling**

For drone system and water system, display UI to allow user to request maintenance and monitoring equipment.

1. Allow users to enter new entry: open window for them to enter parameters including task title, description, cost, level of emergency, date & time schedule.
2. Enables edit and/or delete of entries when selected.
3. Provide the window across multiple tabs of dashboard.

Possible Alternatives:

* If no selection is made during edit or deletion task, prompt the user to select the row.