Use case descriptions

UC-01: Process Photos in UI

Summary

Process photos as instructed by user.

Rationale

Displaying the capabilities of processing photos can let potential users know the actions they can perform on photos when connected to an actual FarmBot.

Users

Potential users of farmbot.

Preconditions

The user has logged into the FarmBot control panel.

Steps

1. The user accesses the FarmBot demo page through a web or mobile application.
2. The user locates and clicks the ‘Photos’ tab on the UI.
3. The UI displays a collection of photos stored in the photos tab.
4. The user filters the photos by applying a set of conditions.
5. The UI shows the filtered photos on map and actions the user can perform (flipper will not be influenced!).

Alternative Path1

4b. The user clicks ‘Weed detection’ button.

5b. The UI shows spotted weeds (if any) to the user.

Alternative Path2

4c. The user clicks ‘Measure soil height’ in the measure soil height tab.

5c. The UI shows the soil height to user.

Alternative Path3

4d. The user flips over photos by clicking left/right button.

5d. The UI flipper shows the photo as instructed.

Post Condition

The user has successfully processed photos and get the expected results.

UC-02: Move FarmBot in UI

Summary

Move the farmbot and take photos as instructed by user.

Rationale

Moving the FarmBot in a simulated environment can help potential users understand how the UI operates when connected to a farmbot.

Users

Potential users of farmbot.

Preconditions

The user has logged into the FarmBot control panel.

Steps

1. The user accesses the FarmBot demo page through a web or mobile application.
2. The user locates the ‘MOVE’ tab on the UI.
3. The UI presents a screen showing a graphical representation of the FarmBot's options for movement, option for photo taking and option for reset location.
4. The user selects the direction they want the FarmBot to move (e.g., up, down, left, right).
5. The simulated FarmBot starts moving in the specified direction.

Alternative Path1

In step 4, if user wants to take a photo from current perspective, it should have a button for taking photos.

4b. The user clicks ‘take a photo’ button in the ‘MOVE’ tab.

5b. A photo of current position was added to all photos.

Alternative Path2

In step 4, if user wants to restart and move in a different way, it should have a reset button to bring simulated robot back to origin.

4c. The user locates and clicks the ‘reset' button.

5c. The simulated robot returns to its starting point.

Post Conditions

The user has successfully moved the simulated farmbot and taken photos in the UI.

UC-03: Watch Intro Video

Summary

Show an intro video to user as required.

Rationale

Videos provide a visual way to demonstrate an actual FarmBot in action. It allows potential users to see how the robot operates, how it interacts with plants, and how it performs various tasks.

Users

Potential users of farmbot.

Preconditions

The user has logged into the FarmBot control panel.

Steps

1. The user accesses the FarmBot demo page through a web or mobile application.
2. The user locates and clicks the ‘webcam’ tab
3. The UI pops up a window that shows an intro video to the user.
4. The user clicks and watches the video.

Alternative Paths

In Step 3, If the intro video fails to load in UI, UI should reports to the user the error message and provides the link to the corresponding video.

3b. The UI reports the message “Video fails to load” and provides the link to video.

4b. The user clicks the link and is redirected to the corresponding video to watch.

Postconditions

The user is successfully watch the video introducing how an actual farmbot works.