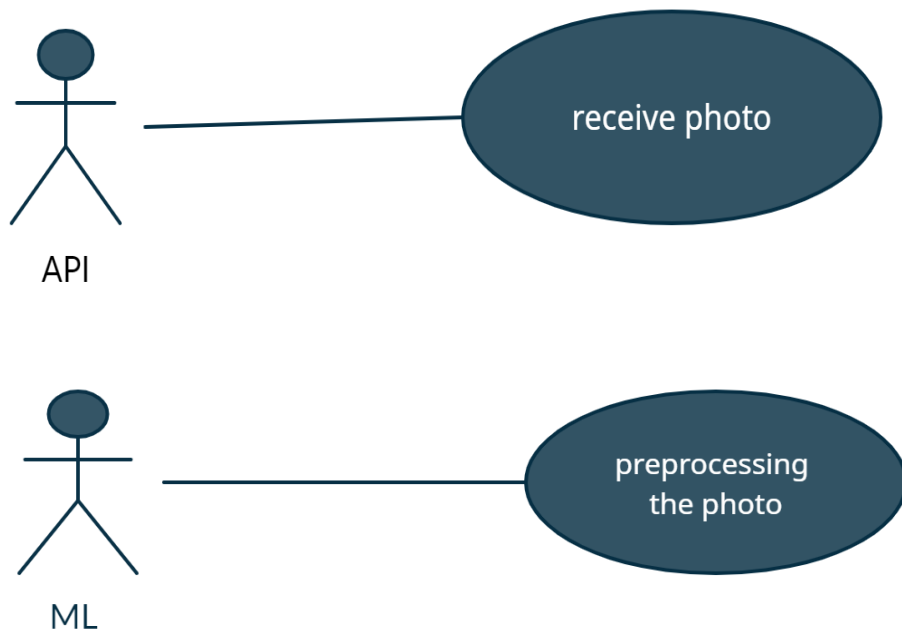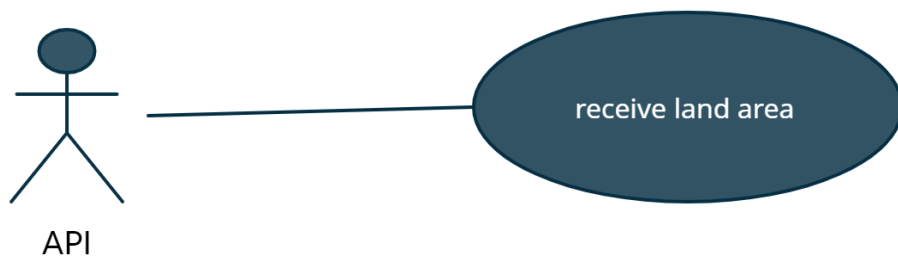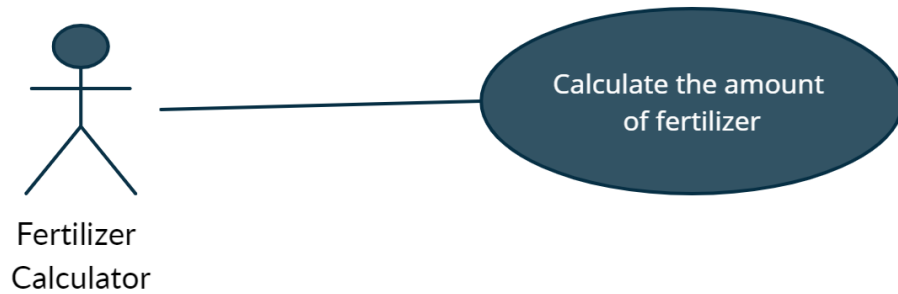| Use Case ID:	ML01
Use Case Name:	Preprocessing the photo and Extract features
Area:	Server
Actor:	ML
Description:	Extract the features from received photo
Preconditions:	A valid photo
Postconditions:	ML module has successfully extracted features from received photo
Triggering Event:	API send a photo
Main Flow:	1. Receive the photo from API 2. Preprocess the photo 3. Extract the features from the photo 4. Return the result of the health status of the plant
Alternative Flow:	-if user upload invalid photo, warning message should appear to the user to reupload the data. -if the plant not included with our plants, warning message should appear to the user that app couldn't check the data.

ML — Extracting features

Use Case ID:	Fertilizer_Calc01
Use Case Name:	Calculate the amount of fertilizer.
Area:	Server
Actor:	Fertilizer Calculator
Description:	Getting the land area and the plant then type return the amount of fertilizer
Preconditions:	There are no preconditions.
Postconditions:	Return the amount of the fertilizer.
Triggering Event:	API send the land area and plant type to Fertilizer Calculator.
Main Flow:	1. Received the land area. 2. Received the plant type. 3. Calculate the fertilizer amount. 4. Return the amount of the fertilizer amount.
Alternative Flow:	-if the land area not valid number, a warning message should appear to the user.

Fertilizer
Calculator

Calculate the amount
of fertilizer

API

receive land area

Use Case ID:	API01
Use Case Name:	Return the result and save posts.
Area:	Server
Actor:	API
Description:	API save user posts and return the result diseases, Fertilizer quantity.
Preconditions:	• There are no preconditions.
Postconditions:	• API return the result of plant status.
Triggering Event:	Received a photo and plant type or land area.
Main Flow:	-user take or upload a plant photo. -API send a photo to ML module. -user enter land area and plant type. -API send land area to Fertilizer Calculator

Alternative Flow:	- -if the land area not valid number, a warning message should appear to the user. -if user upload invalid photo, warning message should appear to the user to reupload the data.

API

Return the result diseases , Fertilizer quantity

API

save user posts