Agriculture App Use Case Diagram

**Actors:**

* Guest
* Registered User
* AI

**Use Cases:**

* User Registration & Authentication
* Crop Doctor
* Weather Alert / Weather Information
* Chatbot

**Relationships:**

**Guest**: Can view weather information and interact with the chatbot.

**Registered User**: Can register and authenticate with the app, access the crop doctor, and receive weather alerts.

**Crop Doctor**: Can diagnose crop diseases and provide solutions.

**Weather Alert / Weather Information**: Can provide weather information and alerts to registered users.

**Chatbot**: Can interact with users and provide information and assistance.

**Detailed Description of Use Cases:**

User Registration & Authentication: Users can register for an account or authenticate with their existing account. Registered users have access to more features, such as the crop doctor and weather alerts.

Crop Doctor: Users can upload images of their crops to the crop doctor for diagnosis. The crop doctor will identify the disease and provide solutions.

Weather Alert / Weather Information: Registered users can receive weather alerts and view weather information for their location.

Chatbot: Users can interact with the chatbot to get information and assistance. The chatbot can answer questions about the app, provide information about agriculture, and help users with tasks such as finding crop prices and ordering supplies.

Example Use Cases:

Guest: A guest user views the weather information for Rawalpindi, Pakistan.

Registered User: A registered user uploads an image of their crops to the crop doctor for diagnosis. The crop doctor identifies the disease as leaf blight and provides solutions.

Registered User: A registered user receives a weather alert for a thunderstorm in Rawalpindi, Pakistan.

Registered User: A registered user asks the chatbot how to plant tomatoes. The chatbot provides instructions on how to plant tomatoes, including information on soil preparation, spacing, and watering.

