**Functional Requirements**

1 - A user interface that enables users create accounts, add their information, the planets they are interested and the location of the users.

2 - Verification email is sent to user whenever he/she registers for the first time on some software system.

3 - The application allows to user to enter password and username to login to app.

4 - Authentication of a user when he/she tries to log into the system.

5 - The application must store all Users data

6 - The application shows to the user all posts of plants who is interested in.

7 - Machine learning model to allow to user capture / upload the plant image for plant type detection and classification. The model is also used for plant examination from pests and diseases, if plant is diseased, it returns details about this disease and recommends Treatments.

8 - A Server that stores users data and Machine Learning Models.

9 - The user enters the plant type and agricultural area and the application outputs the best time plan and quantity of fertilizer to grow well.

**Nonfunctional requirements**

- Emails should be sent with a latency of no greater than 12 hours.

- The application shows the post by the order of the tag plants and the location of the users.

- User can search for posts with plant tag.

**1 - Performance requirement**

- The application must respond any operation in less than 4 seconds.

**2 - Safety and security requirements**

- The application must not affect, harm, or damage users and their mobiles.

**3 - Availability**

- The application must be available within 24 hours every day.

**4 - Usability**

The application allows to users interact with the application to achieve required goals effectively and efficiently.