Internal Specifications:

1. Following Data has been provided for the different inbuilt plants -

Plant Type/ Property	Rose	Tulip	Tomato	Lemon	Apple	Orange
Max Age(In days)	10	25	35	5	20	55
Sprinkler Time (in hr)	10	8	14	18	20	5
Max Temp Level	80	60	40	50	60	50
Min Temp Level	25	30	35	40	30	35
Fertilizer after day (in day)	2	3	7	4	6	5
Current Age	0	0	0	0	0	0

Max Age - It indicates the approx. days taken by plant to grow.

Sprinkler Time - After this time water sprinkler will be ON for particular sector.

Fertilizer day - Day after which fertilizer will be given.

Max Temp Level - Plant property for Max temp.

Min Temp Level - Plant property for Min Temp.

Current Age - Indicated the Current age of the plant.

Log Checking:

Go to src/Data/myGardenLog.txt path. The log is contained in myGardenLog.txt file.

Log will will contain following content -

- a. Real Time
- b. Real Date
- c. Garden Time
- d. Garden Date
- e. Log Message
- f. Level: There are 4 different levels in log file:
 - a. Config Indicating the configuration log.
 - b. Warning Indicating Warning to the garden(like Random Event).
 - c. Fine Indicating the system is working fine.
 - d. INFO Indicating informations like when gardener overrides the system.

Manual For automated Gardening System:

- 1. Import / Launch / Run the Project Files.
- 2. Gardening System Will be displayed with various plant section and controller sections.
- 3. **Important** Click "ON" to start the gardening system.
- 4. For Watering a particular section -

Click on the corresponding section button for instantly providing water to the corresponding section. This will override the automatic function and will provide water instantly. After this override, system will wait the watering duration of the corresponding plant before next watering. In can of no override, water will be given automatically in the defined time.

5. For giving fertilizers to the plants -

Garden can Select which plant to be fertilized based on the needs. Gardener can select the type of plant from drop down menu and can override the automatic fertilizer controller. In can of no override, fertilizers will be given automatically in the defined time.

6. Pesticide system Override -

Pesticide can also be override as per the needs of the garden. If garden thinks that any plant needs the pesticide, it can be done using the drop down list from the System. In can of no override, pesticide will be given automatically in the defined time.

7. For creating any Random Warning event -

Any random event can be created to check the functionality of the automated system and check the performance based on various natural changes. We can select any one event among the 5 from the drop down menu to induce the changes. The system will automatically detect the event and execute the process based on the event to secure the Garden and Plants.

- 8. Current Time It shows the current time of the Garden in 24 hr system.
- 9. Current Day It shows the current day of Garden since the start of the system.

10. Current Temperature -

This shows the current temperature situation of the garden. This value fluctuates randomly throughout the day, but it increases during Day hours i.e. 6-18 hrs and decreases otherwise. The rate of increase or decrease is random, which is the similar to the case in real life.