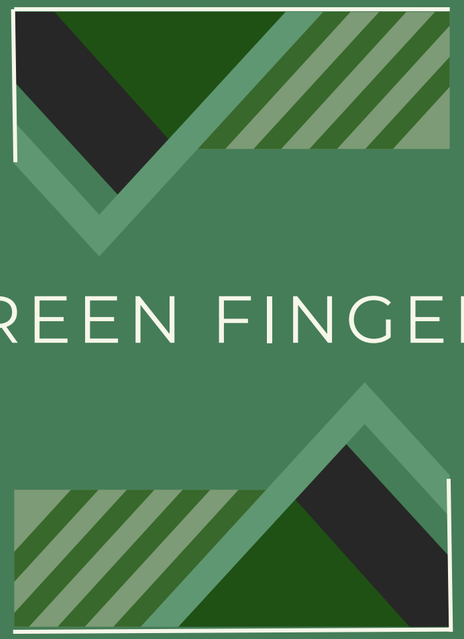
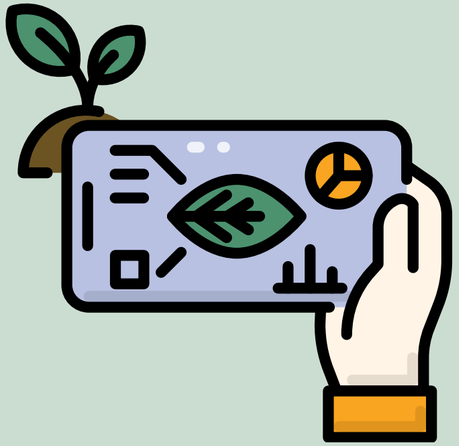
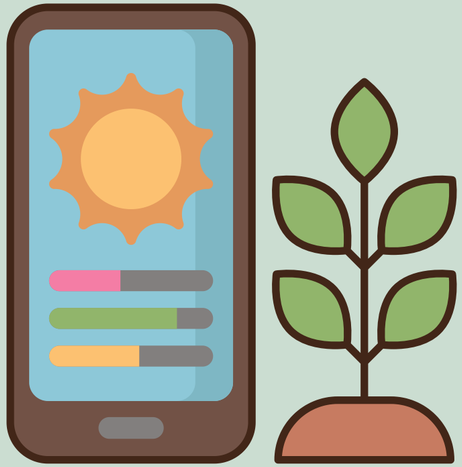
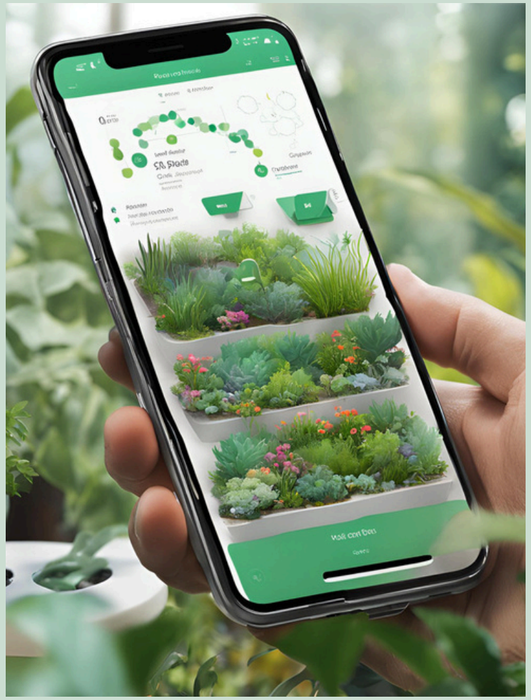

GREEN FINGERS



OUR VISION

Integrating software and hardware tools to manage both indoor and outdoor garden





- AUTOMATION & SMART FEATURES
- GUIDANCE & INFORMATION
- EFFICIENT GARDEN MANAGEMENT

OUR Mission

USERS

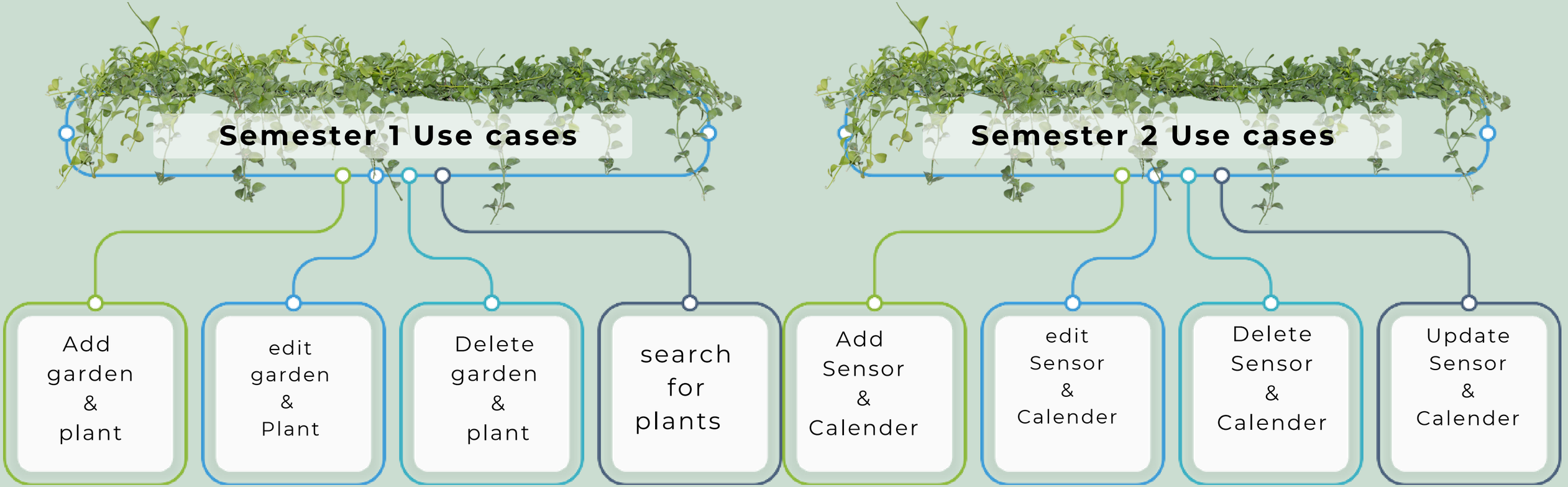
DEVELOP FOR:

plants Lover

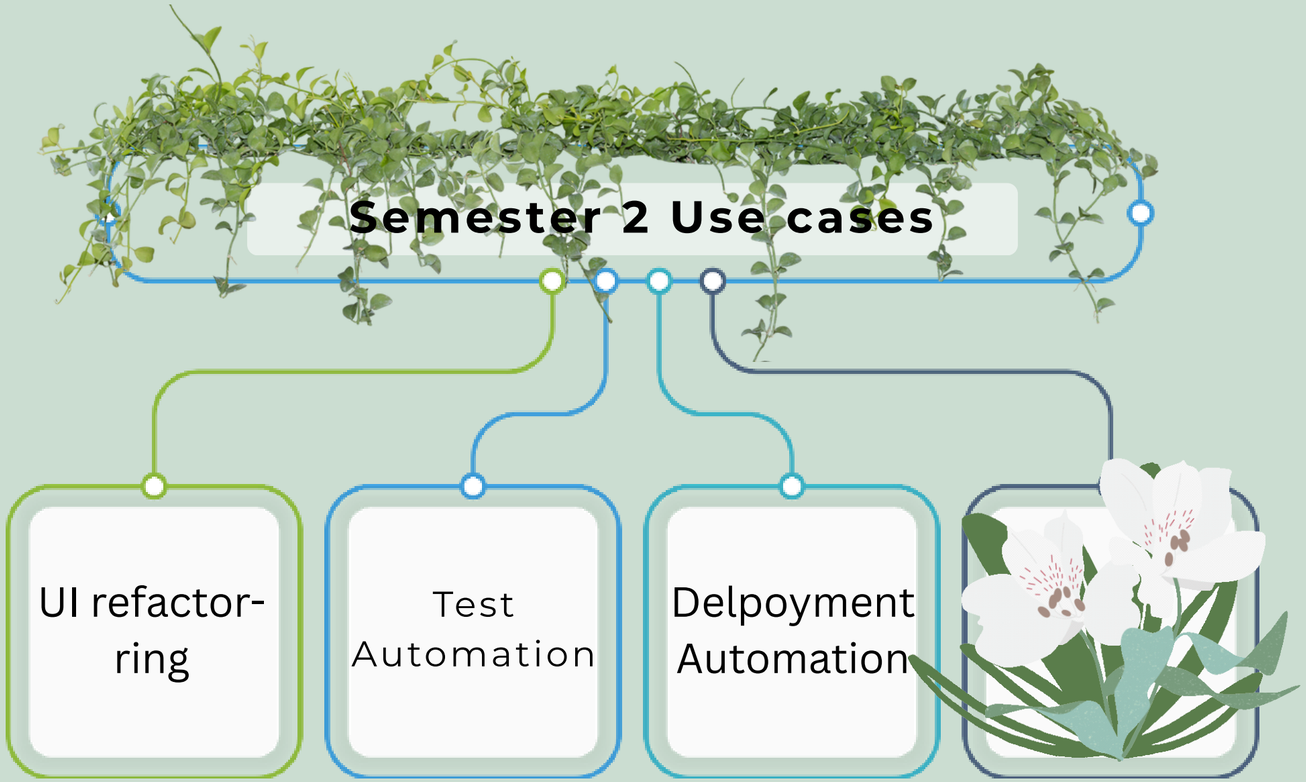
ADMINS

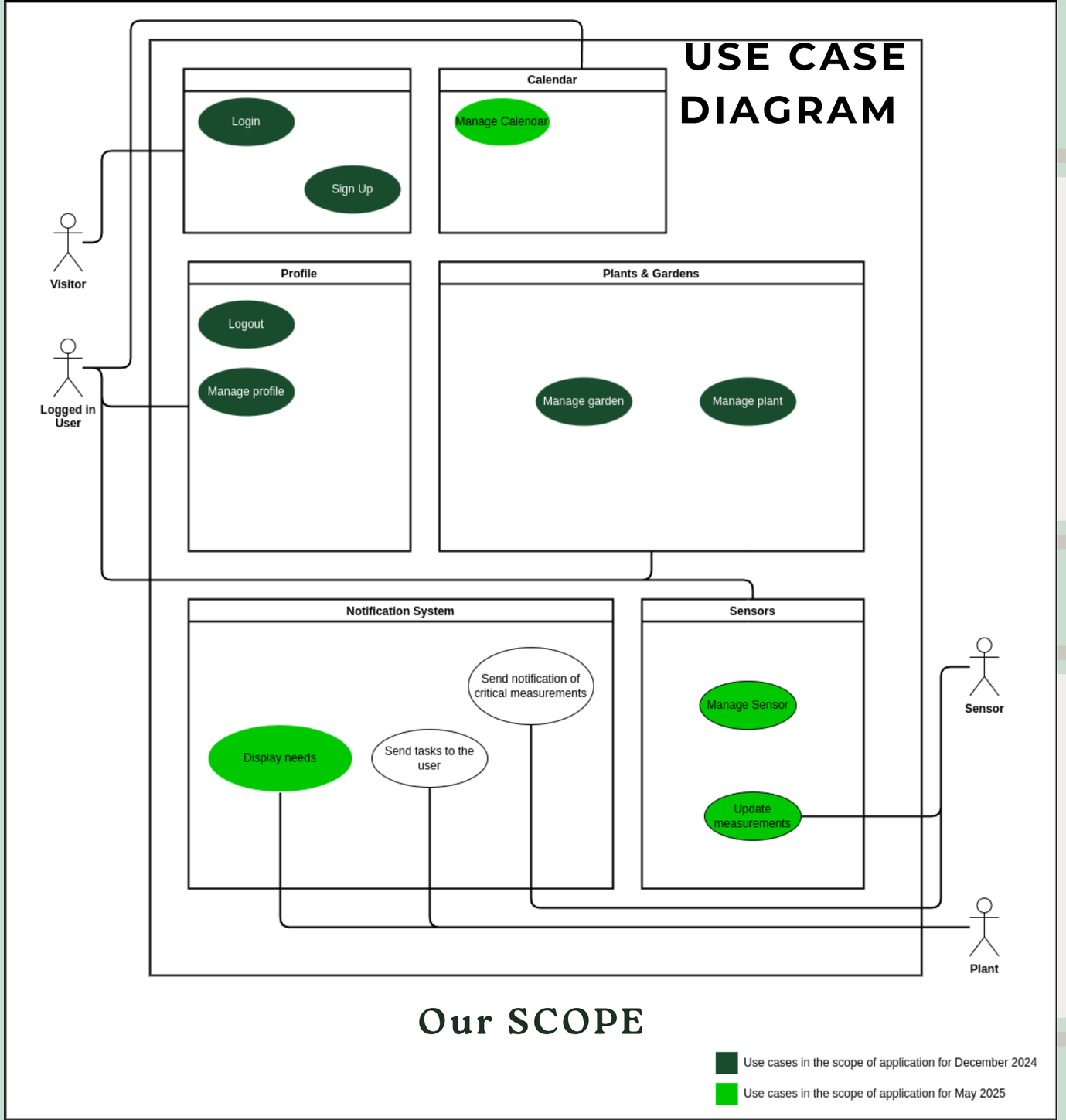
We aim to assist gardeners in tracking plant care through features like adding plants, managing watering schedules, receiving notifications, and integrating sensor data.

FUNCTIONAL USE CASES



Non functional Use cases





manage Sensor

- **Add** a sensor to your plant
- **show** moisture data
- **Update** the name and the corresponding plant
- **Delete** the data for the deleted plant

manage calender

- **create** a water plan along with adding a plant
- **show** the water plan and frequency in calender page an in detail page
- **Update** the water day plan manually
- **delete** the associated information when the corresponding plant is deleted.

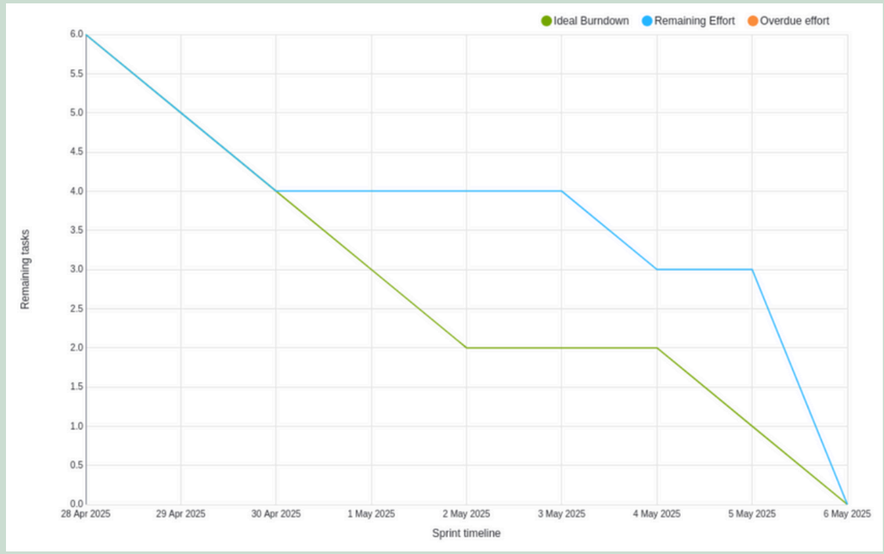
Project Management

Team working on
the new Ideas

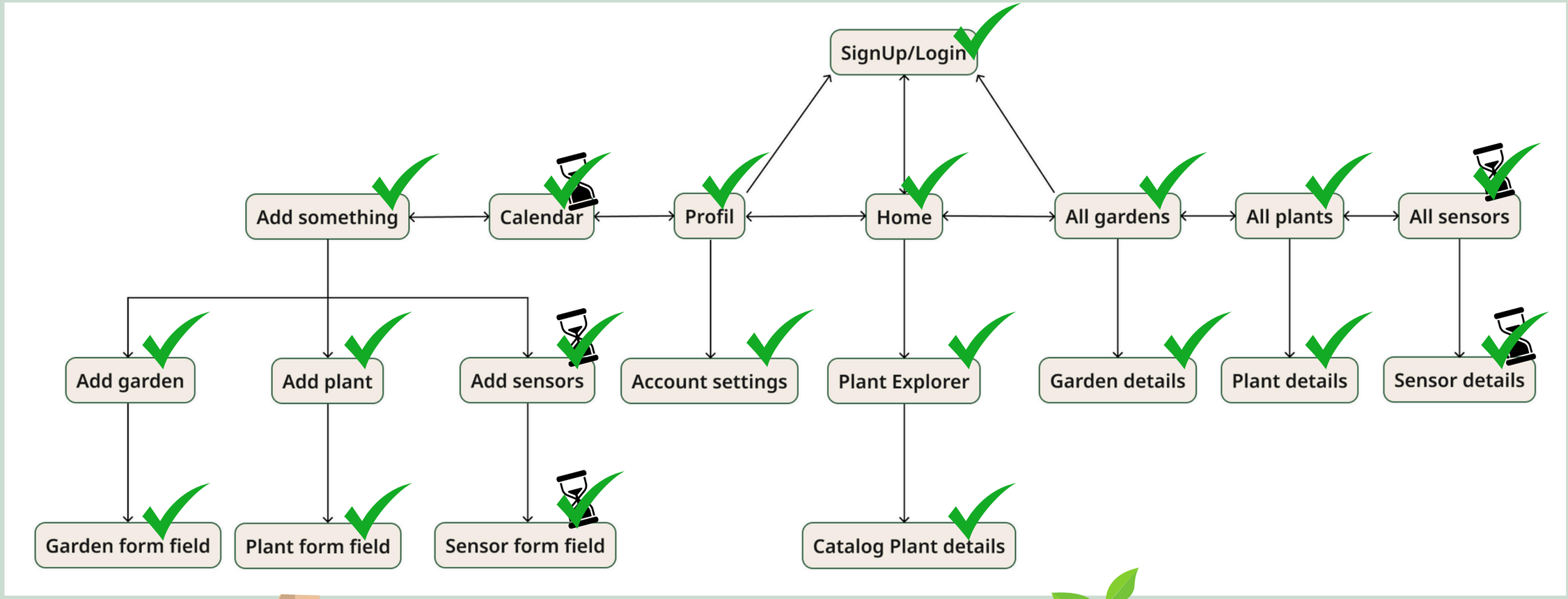
Sprint Review
every week

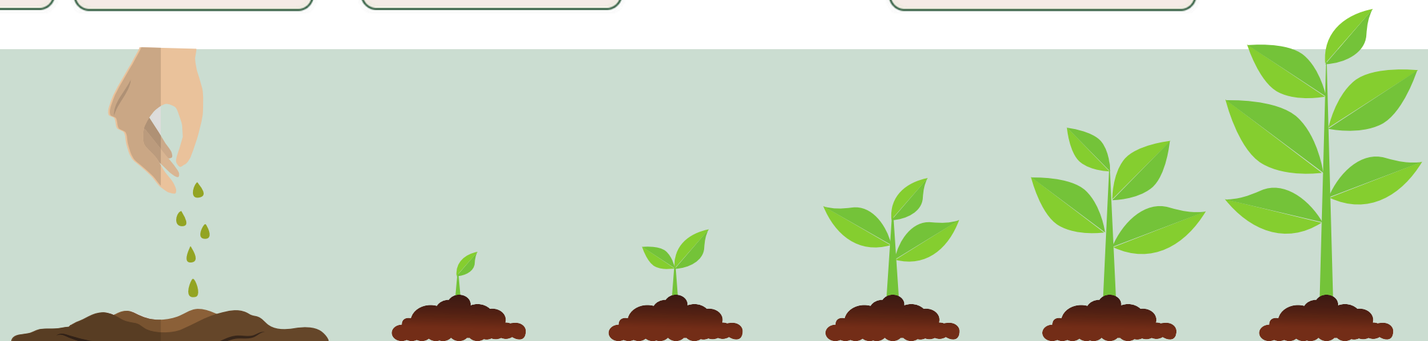
code review

product



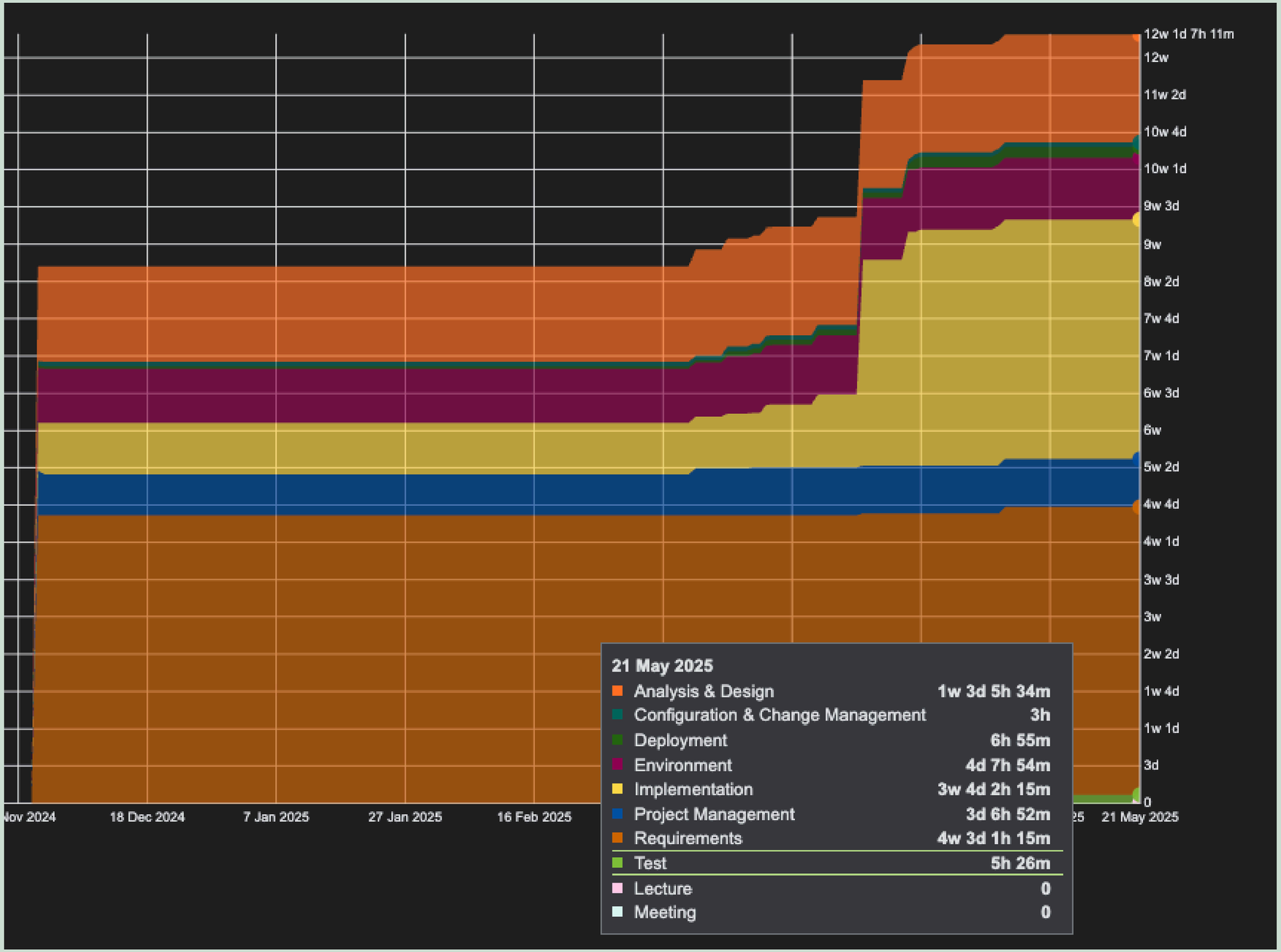
long-term planning





RUP

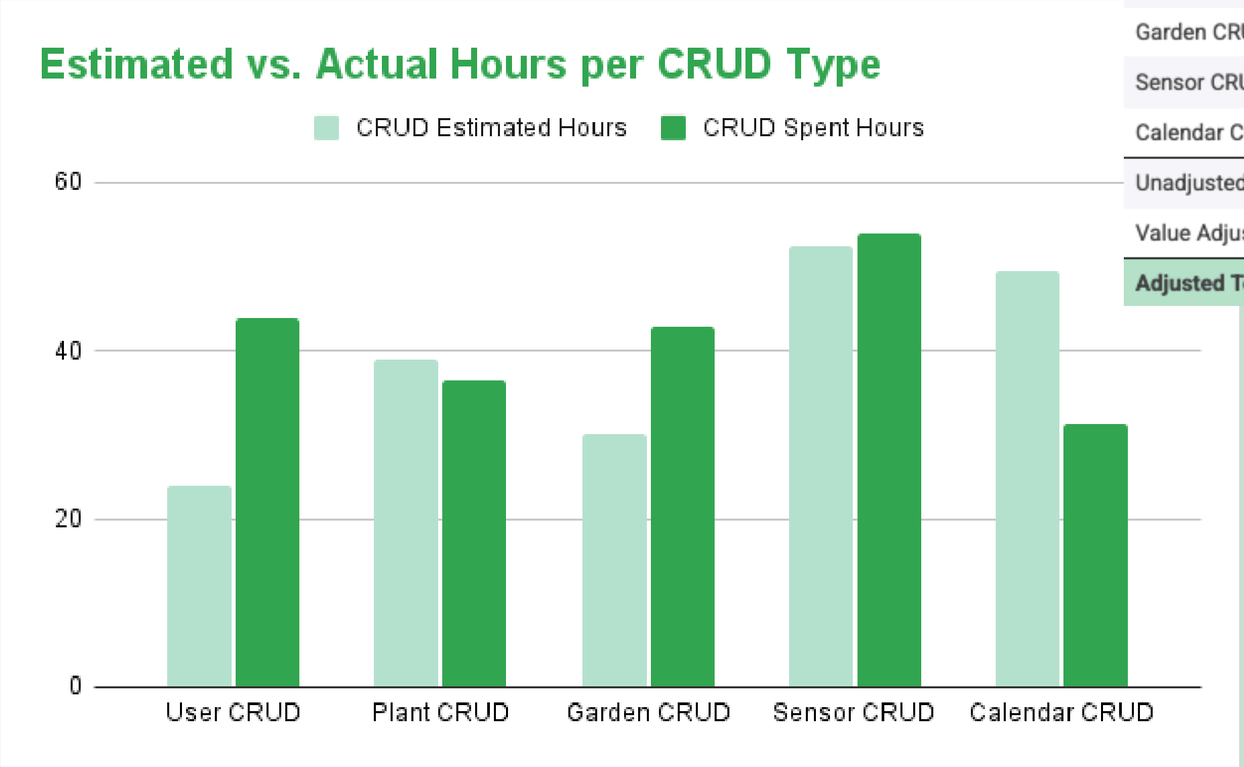
Our YouTrack Link

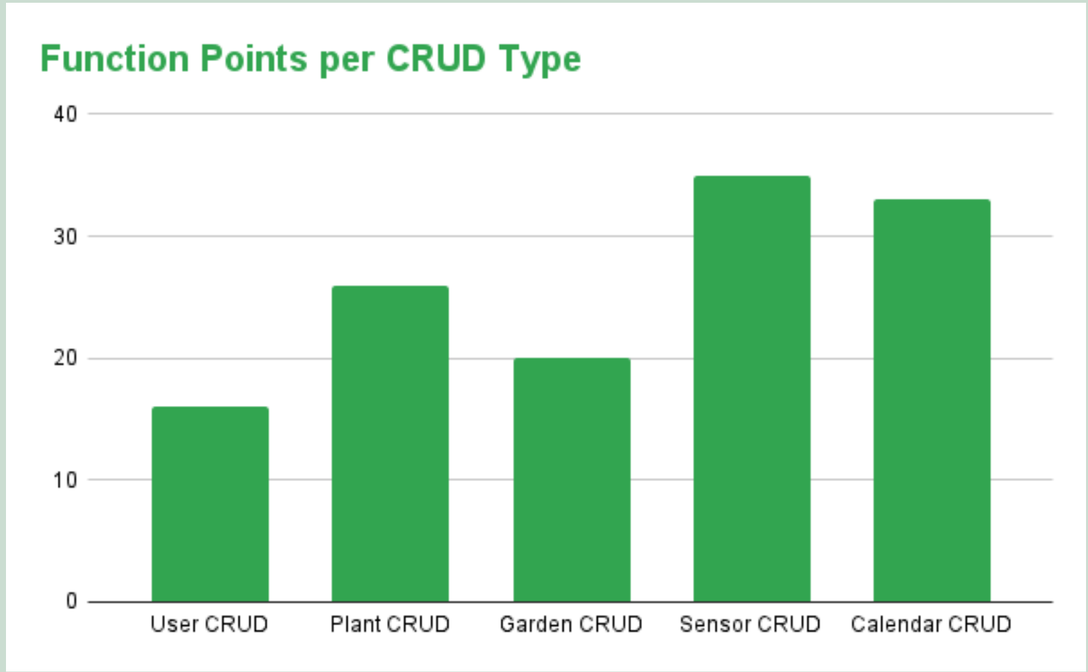


Cost Estimation

link to Function point /time spent

CRUDS	CRUD FP Points	CRUD Estimated Hours	CRUD Spent Hours
User CRUD	16	24	43,75
Plant CRUD	26	39	36,5
Garden CRUD	20	30	42,75
Sensor CRUD	35	52,5	54
Calendar CRUD	33	49,5	31,3
Unadjusted Total	130	195	208,3
Value Adjustment Factor (VAF)	1,01		
Adjusted Total	**131,3**	**196,95**	**208,3**





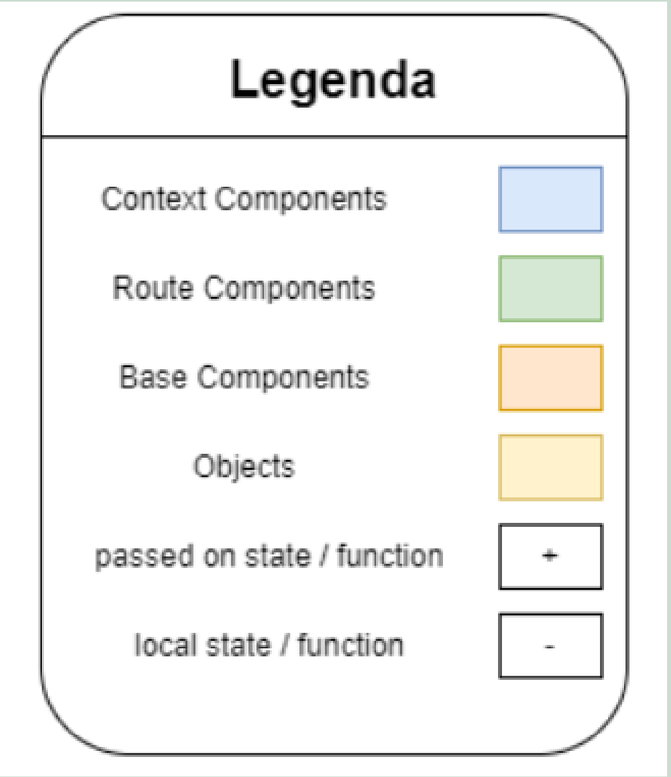
Risk Managment

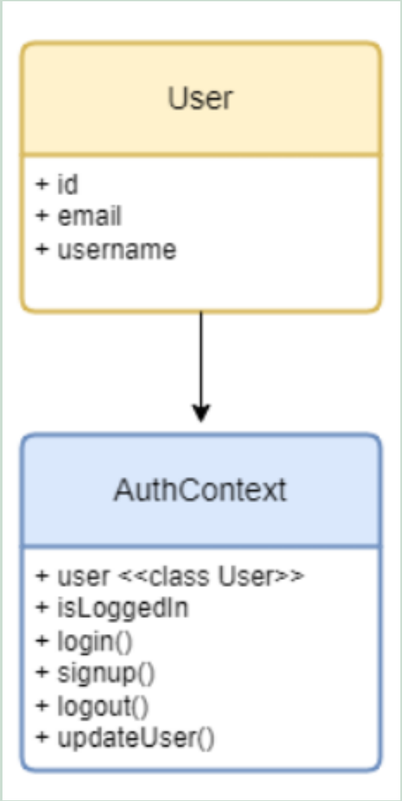
Link to Risk Management Sheet

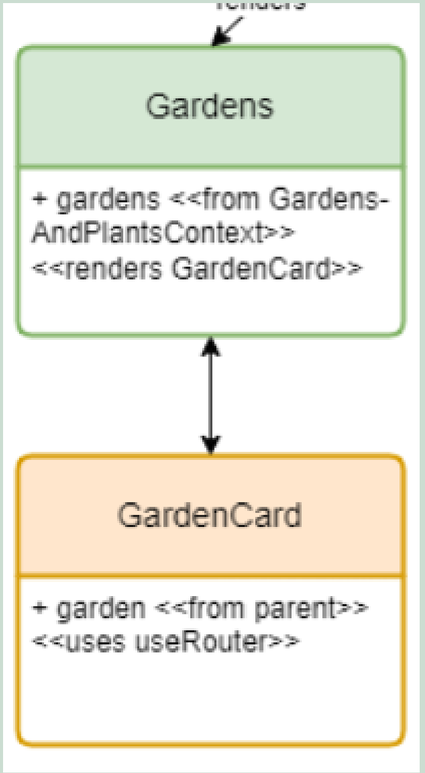
	Risk	Description	Risk Manager	Risk Category
2	Bad code quality	Bloated functions, patternless coding, so called "spaghetti code"	Casimir Bomans	Complexity
3	Lack of Time of Tracking	Forgetting to update Youtrack regulary after work is done.	mal.opderbeck.23@l...	Organizational Environment
4	Miscommunication	not being able to communicate in a team can cause a lack of trust between team members and lead to bigger problems	sim.golrokh.23@lehr...	Team
5	False time estimation	Wrong estimation of time for a issue	mal.opderbeck.23@l...	Estimation
6	Sickness	Team members get sick	sim.golrokh.23@lehr...	Team
7	Unbalanced work distribution	An unbalanced contribution of code to the project	Casimir Bomans	Team
8	Missing deadlines	Sprints fall behind schedule, resulting in the entire project deadline being missed	mal.opderbeck.23@l...	Estimation
9	Lack of project management tools	not using a proper tools for following the workflow can cause chaos in project	mal.opderbeck.23@l...	Requirement
10	Misunderstanding the requirements	cause not delivering the product in time and properly		Requirement
11	Loss of assets and code	Local developed code and assets can get lost		Organizational Environment
12	Team conflicts	Disputes between team members can halt progress and also lead to an unproductive environment		Team

	Probability	Damage	Priority	Mitigation Strategy
2	2	3	6	refactoring, code reviews
3	3	2	6	make use of YouTrack timer and visit sprint board. Plan time for updating administration at the end of a work phase.
4	2	2	4	try to make the team a trustworthy and safe place for communication between team members
5	2	2	4	Use Youtrack to get a clear view of used time and estimated time to see if our estimations are realistic.
6	2	2	4	Catch up on lost work and information when better again. Keep your code up to date on github, so other people can continue working.
7	1	3	3	Open comunication, keep track of blame on Github
8	3	1	3	Keep Youtrack up to date. Have weeklies to keep the team updated on the progress
9	2	1	2	using a proper tools
10	1	1	1	make the requirements clear in the team meetings
11	1	1	1	Make use of Github and push commits regularly.

Class diagram

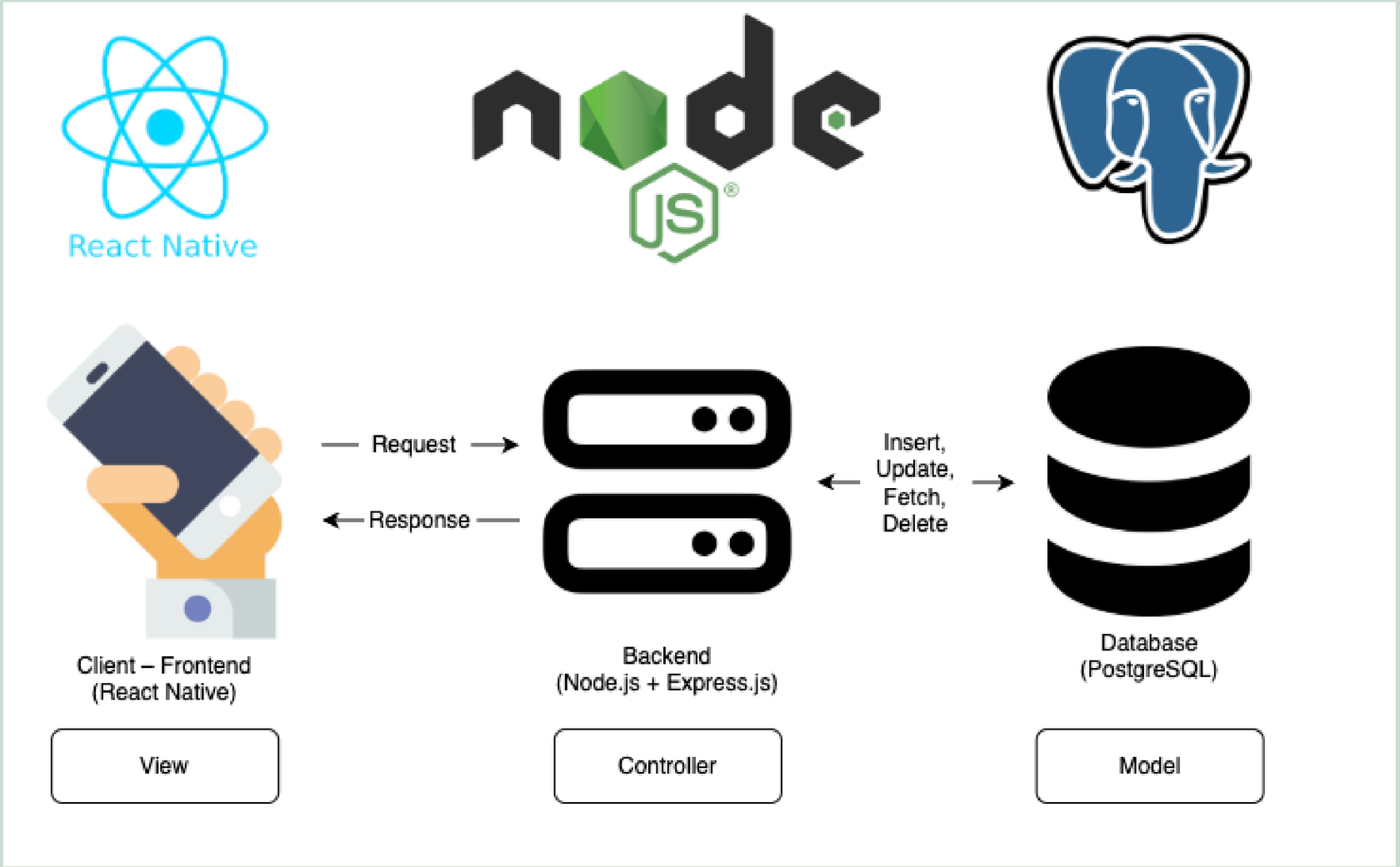




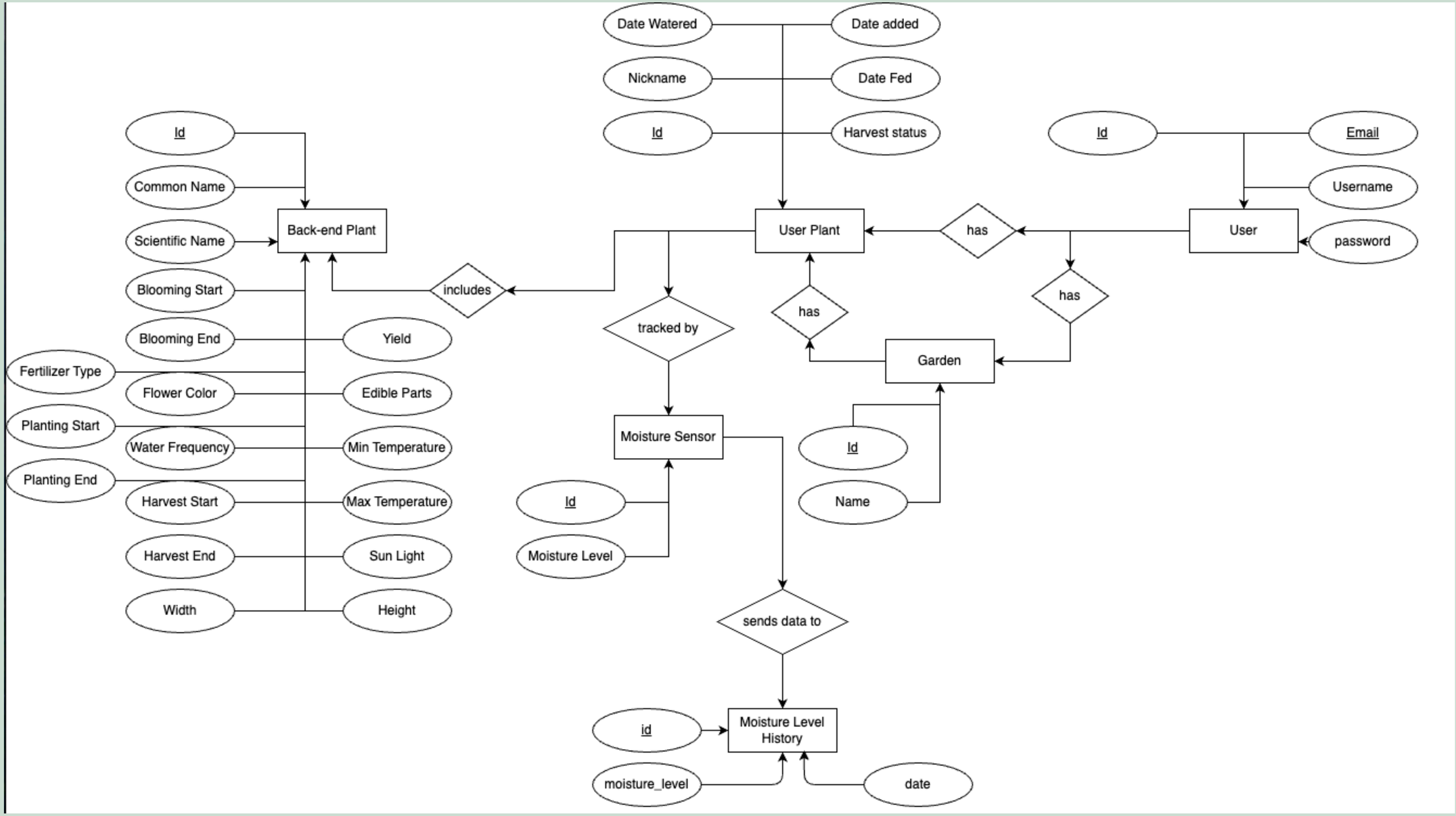


check out the complete class diagram here

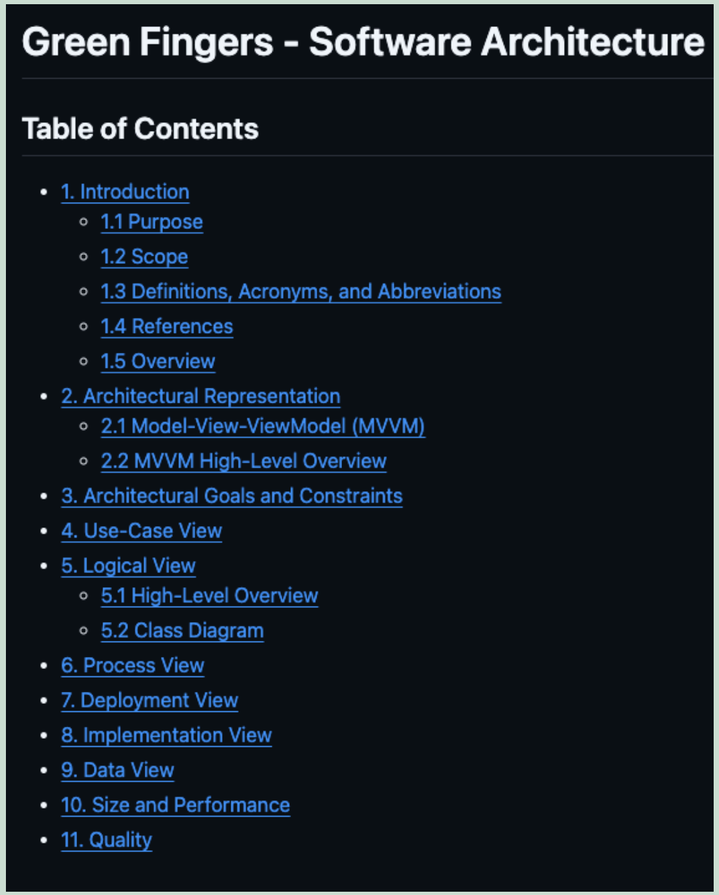
MVC architecture & TeckStack



Database structure



Technical ability



Green Fingers - Software Architecture

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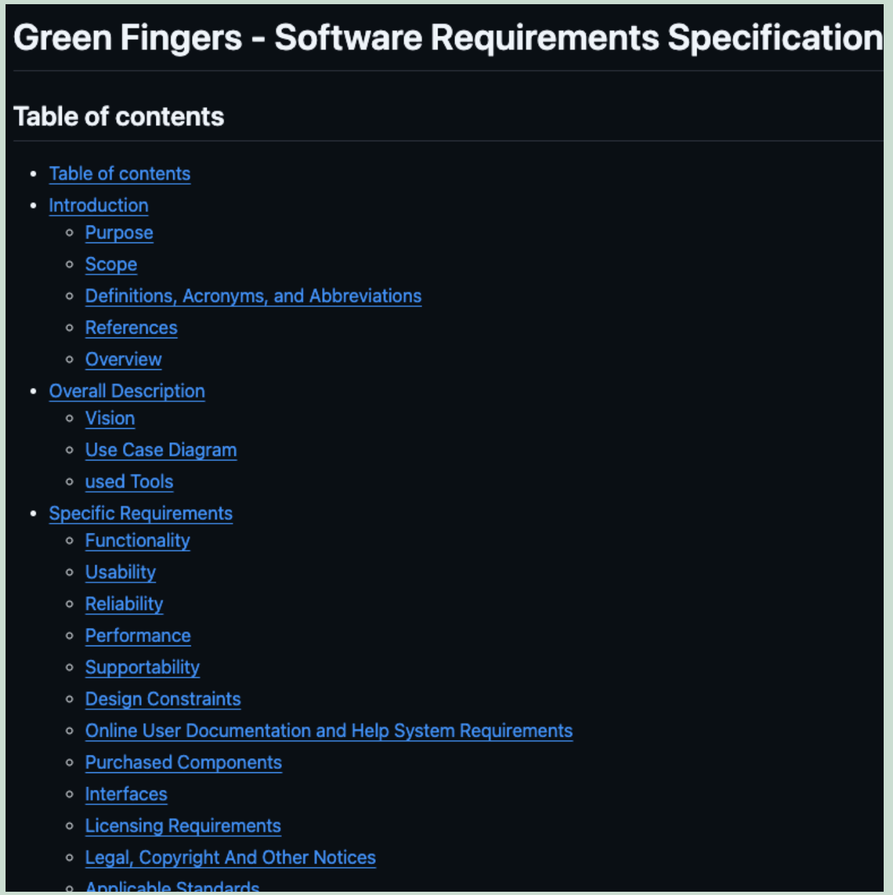
link to SAD



Green Fingers - Software Requirements Specification

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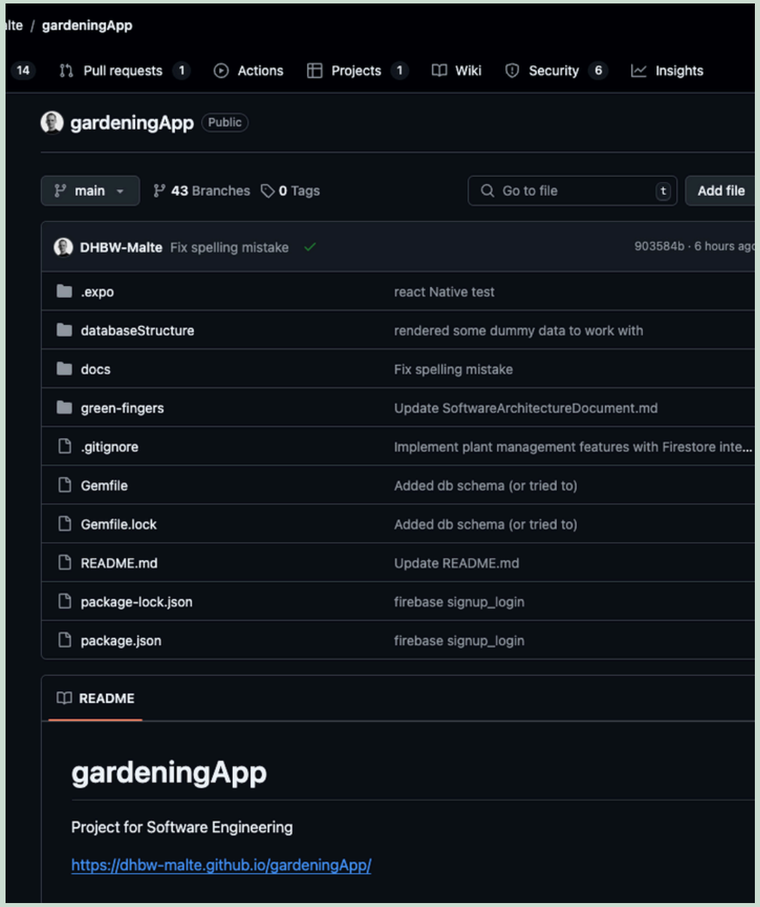
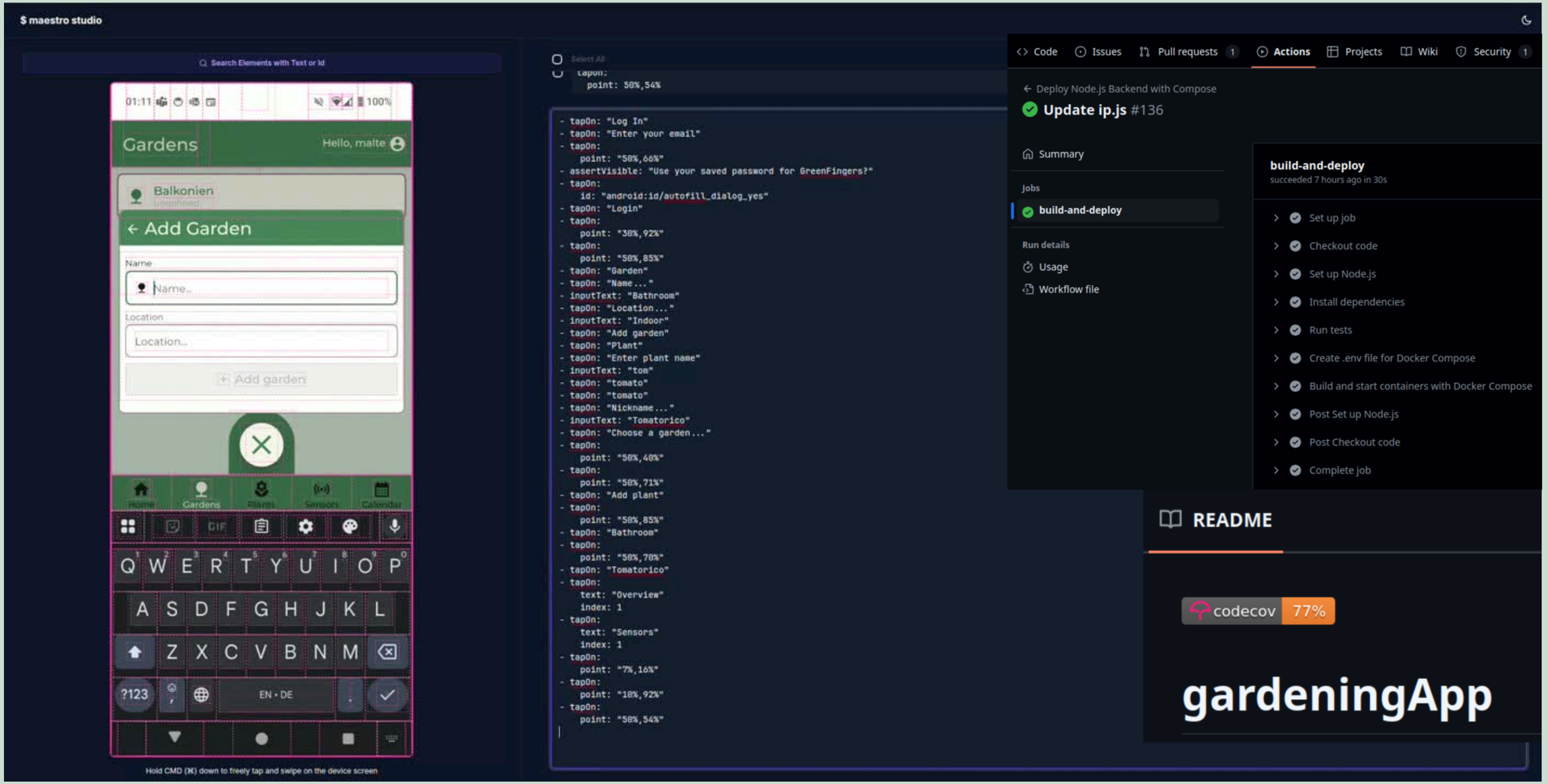
Link to SRS

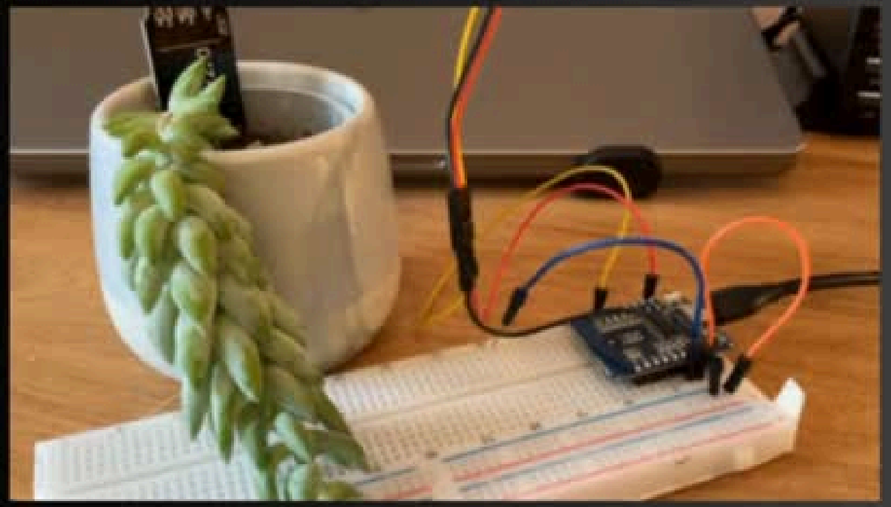


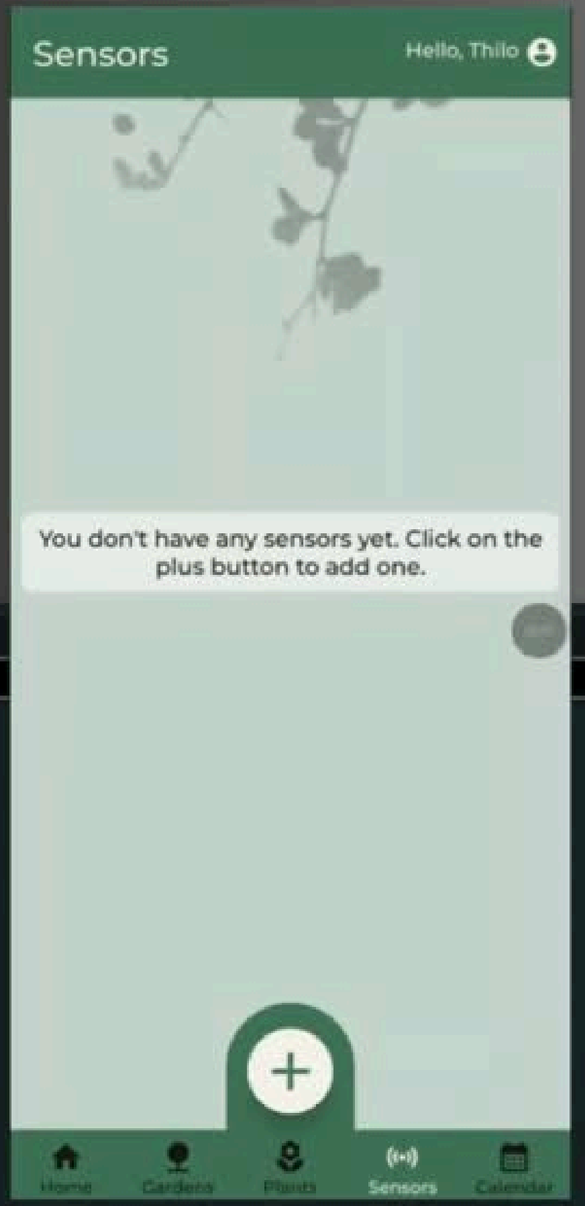
link to GitHub GardeningApp-FrontEnd

Link to Github GardeningApp-BackEnd

Testing & Automation - From E2E to Deployment







Output Serial Monitor

Message (Enter to send message to 'NodeMCU 1.0 (ESP-12E Module)' on '/dev/cu.usbserial-130')

```
18:59:42.232 -> {ld\|$$<  l c|  ;b AP started: GreenSensor_16AADF
18:59:42.232 -> 📍 IP: 192.168.4.1
18:59:42.232 -> 🔵 W
```

Ln 20, Col 3 NodeMCU 1.0 (ESP

DEMO


LIVE
DEMO