GRYBB TEAM 4 PROJECT REPORT

For this project our group worked closely with GRYBB to come up with a solution to a detrimental problem : death of newly planted trees.

Problem : Local governments are bound to make new city parts a lot greener. This includes planting new trees. Unfortunately, due to extreme hot summers, a lot of freshly planted trees die within 3 years and have to be replaced by the municipality. This percentage rose from 4% to 20%. Technical solutions to hold the water more efficiently (tree diaper / plastic boundaries around trees) are already implemented, however additional watering still must be carried out. To put things into perspective; only 10% of the water that is being given to a tree is effectively taken by the tree.

Proposed Solution: Our proposed solution to the problem is a web application that is extremely easy to use that has the main functionality of keeping track of the water levels of all the trees and editing them. This will ensure that the gardeners that use the application will know if the water levels of a tree are low and can water them which will solve the core problem of the trees dying due to insufficient watering. Since this application will be used by gardeners who may not necessarily have a lot of technical knowledge, this app has been made extremely user friendly. Additional features to make the web application extremely easy to use have also been implemented. For example, filtering trees based on characteristics to only see the trees the user wants to see and a routing system to get from one tree to another. The application is also very easy to understand. For example, the trees' water levels have been represented using the system of traffic lights (red being the lowest, yellow being average and green being the highest) which is universally understood by most people.