

# Aqua Growth

## SOLUTIONS

### **High Fidelity Designs**

#### **Team Members**

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Our Low Fidelity Design contains the core features such as account registration, plant information, bluetooth devices, and a discovery page. However, our initial design lacks in showing the user experience flow. Additionally we overlooked functionality in our existing pages. To address these concerns in our High Fidelity Design, our focus was on improving our core features that set the foundation for the design. Moreover, by highlighting our user experience flow, we continue to meet our user needs by ensuring the design of our app streamlines user workflow and is easy to use.

The main areas we want to focus on are Comprehensive Data Analysis and Unlimited Plant Profiles. These two aspects are high priority for AquaGrowth because it's the major key strengths against our competitors. Previously in our market interviews, our team identified that users prefer sensor information in a user friendly way (Graphs / Summaries). Users prefer educational content that transforms the information into learning material to care for your plants.

Aside from our two major strengths, some minor strengths may include “Bluetooth Connectivity”, “Reusability” and “Plug and Play”. Bluetooth Connection is a major feature of our mobile application because it allows users to connect and send information from our plant device. This unlocks capabilities to read and write information directly from our four onboard sensors. Other features such as “Reusability” and “Plug and Play” are meant to directly benefit user experience. The reusability feature lets users add multiple plants (names, types, descriptions) in our database to gather sensor information across various types of plants. Pairing this feature with “Plug and Play” will ensure that users are able to immediately start gathering information without a complex setup process. These minor strengths are not our highest priority but will be addressed in our Figma views.

Other opportunities we can pursue are educational content and discovery pages. During our information gathering phase, users vocalized a need for educational content such as tips on how to take care of their specific plants. This includes information such as ideal moisture/temperatures for your plant, when you should water your plant etc. This led to our group having the idea of including a discovery page in which users would be shown relevant articles and information about plants based on the users created plants. While we understand this would be beneficial to our users, given the scope and timeline for our project we believe including this feature may not be obtainable. While no longer a priority we do have alternate solutions such as creating a database containing common household plants with information regarding their needs. Overall, our group would like to focus on delivering on all our other features and may come back to this later in time.

Feature	Low Fidelity Original Features	High Fidelity Changes	Justification in High Fidelity
Splash Screen	Did not have splash screen	Added Splash Screen	Follow industry standard (high profile app) Introduction to your app Delay time for pre processing (waiting a few seconds for setup to finish)
Login Page	Username Password Social Authentication	Added username, greeting, and social authentication	Meant to authenticate a user through email and password. After authentication we have the ability to record data by user.
Forgot Password and Change Password Page	Didn't have pages	Added forgot password and change password	The purpose of "Forgot Password" and "Change Password" is to let users regain access to their accounts if they forget their password. We can enhance security by emailing them to reset their password.
Registration Page	Username Email Password Confirm Password	Added registration with other platforms	Included the ability to register an account with other platforms for convenience. This removes the need of having to remember user credentials
Home Page	Didn't have home page	Added home page and prioritize plants by action indicator	Home page streamlines the workflow, prioritizes plants that require action and shows what plants need through action indicators (watering, sunlight, etc). Offers quick navigation to prioritized plants with visual display.
Plants Page	Displayed plants and their information	Removed health information	Removed the health information from the general overview of a users plants and moved it to be displayed only on the individual plant page to reduce data overload (perception from the user)
Individual Plant Page	Did not have a plant display name or option to edit the plant	Added plant display name, description, and an option to edit the plant	By adding a display name, users can easily identify which plant they are accessing. Additionally users can edit the plants details
Create Plant Page	Did not have a create plant page	Added a create plant page with fields for display name, type, and description, and image	A core feature needed so users can create an add all their plants they want to keep track of

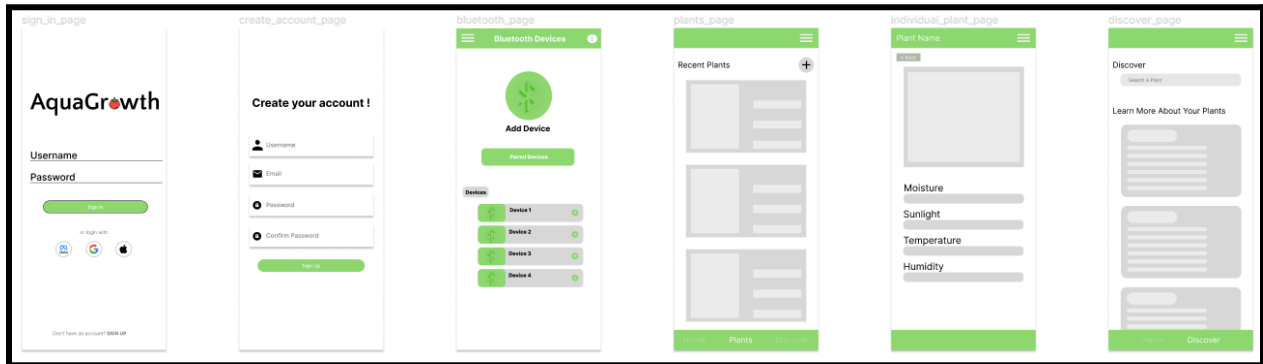
Edit Plant Page	Did not have an edit plant page	Added an edit plant page with the ability to change the display image, name, type description as well as removal of the plant	Users should be able to edit a plant for the purpose of removing a plant as well as indicating relevant changes (pictures, name, description etc)
Graph Page	Did not have graph page	Added page to display the data as a visual graph	Allows users to view the data of their plant as a graph for either the day, week, or month. As well as the days or weeks previous using the arrows by the date.
Account Page	Didn't have account page	Added Bluetooth, Profile Settings, Setup and Tips navigation	Centralized area that manages bluetooth settings, profile settings, setup / tips, and support for users.
Edit Profile Page	Didn't have edit page	Added visual profile summary	Lets users change their emails, password, and username for their account.
Bluetooth Device Page	Basic list view of Nearby "Peripherals"	Redesigned to appeal nearby devices	Connects the AquaGrowth device to your iPhone
Discovery Page	Discover articles about plants	Removed entire Discovery Page	The Discovery page is unobtainable for the scope of our project due to financial concerns, skill requirements, and time.

Our high fidelity design in Figma is a direct address to our low fidelity design foundation. Starting off we overlooked needed designs that did not appear in our initial design such as Splash Screen, Forgot Password / Change Password, Home Page, Sub plant pages, and Account page. These pages were added to address needed components from our core features. In terms of improving designs, an example of this is the plant pages. We improved the design with key action indicators, creating, deleting, and editing plants, along with streamlining the workflow for user plants. Other redesigns included the Bluetooth device page, because it didn't visually appeal to users. Utilizing a colorful listview applied with green connect and red disconnect buttons communicates with users on how to connect their AquaGrowth device. Our original goal is to fulfill Comprehensive Data Analysis and Unlimited Plant Profiles and can be seen through our designs by plant graph views, and plant pages.

When asking users for feedback on our high fidelity design, users noted that there was no option to remove an existing plant. This has been addressed by including a removal option within the edit plant page. Regarding our home page, users mentioned that they had an idea of what the action indicators meant (plants required attention) but they could not differentiate the meaning behind a grayed out indicator and a fully filled indicator. The consensus was to add a key or

legend to describe what is meant by the symbols. Lastly users mentioned that the design had a lot of white space. We may consider adding more color or a simple background design.

## Initial Design



## Final Design

