Intro

We have designed an application that is aimed at users who are interested in either creating a new garden or are looking for help with one that already exists. The application will be able to take a user’s initial idea for a project and help them develop it into a reality. It will enable them to design the layout of the garden in which they will be able to place the plants they have chosen from an extensive database. Not only this, but the user will be able to use an augmented reality function to help them envision how the project will actually look. Users will be able to create an account giving them a space to create and save multiple projects.

The potential benefits of the application will not stop here. Once a user has created a garden, they will be able to receive regular advice and guidance on how to maintain and develop their project. This will be achieved with a calendar function that dynamically updates and notifies the user. This will all made possible by utilising an extensive database of plants that the user will be able to search and browse at their leisure. If a user is in need of any further assistance they can look on or post a question to the forum where they can get advice from fellow users.

Our ambition is that our application will improve the gardening experience for all of our users.

Functionality specifications

Through the development of our proposal we have defined the essential functional specifications to be

* Creating and logging into an account

The user will need to be able to create or log in to a pre-existing account. The account will hold all of the user’s relevant information including saved projects.

* Drawing function to design gardens

The user will be able to create a plan of their garden in table view and be able to place plants they have selected from our database. They will also be able to use a real-time AR function to view a video feed of their garden and place images of their plants to get a vision of how the project might look. This will require an API for rendering interactive 3D and 2D graphics. The user can also save their project or load a previous project.

* Database of plants

This will be an extensive database that users will be able to search and brows for information on a large variety of plants. This will also require a database management system.

* Dynamic calendar

The calendar will be a place the user can look for information, on previous and upcoming tasks. The calendar will be updated either automatically from any saved projects or manually by the user.

* Notifications

Notifications will alert the user when a task in their calendar is approaching. The notification system will periodically check the plant information stored on the users account to see if there are any tasks approaching and notify them accordingly.

* Forum

The forum will be a place where a user can post a question and reply to the questions of other users.