**Executive Summary**

This project was planned as an ambitious undertaking to create a fully developed and fleshed out application. However, extenuating circumstances severely halted the development process. Furthermore, much of the software being used to develop had a high learning curve and slowed down progress even more. This led to the completion of an underdeveloped project that has structure and partial inner workings but very little functionality.

**Final Requirements and Comparison with the Initial Requirements**

Initially the requirements with the application were as follows: logs into app, posts to app, discovers posts, comments on post, messaging other users, drawing a trail, and creating an account. These were supposed to be done in sprints which were two weeks in length. These components were designed to work in conjunction with one another and third party tie-ins to form a fully functional application. These requirements began to differentiate as progress was made. Once the situation developed further, the requirements changed to being able to deploy the server and see an updated display.

**Final Timeline and Comparison with Initial Timeline**

The original schedule was for sprint one to establish the wireframe, UI/UX design and database design. The second sprint was focused on UI/UX implementation, messaging features, and posting features. The third sprint handled all of the API tie-ins from other services such as PlantNet and Weather. The remaining sprints were allocated for testing the software. In reality, not much progress was made on the project. For the first sprint, the group established a plan and acquired all of the required software needed to continue development. The second sprint focused on setting up the server and being able to deploy it with Heroku. In addition, there was work done on the css and html portion of the application. The third sprint focused primarily on continual touch ups to the application, and development of the database. After this point, due to extenuating circumstances (COVID-19) the group lost most of its cohesiveness and little was developed thereafter.

**Project Results Compared with Expectations**

This project went vastly differently than what was originally anticipated. Although we started the project a little behind, consistent meetings and planning were beginning to give momentum and put us back on schedule. However, the outbreak of COVID-19 coupled with the software having a high learning curve quickly interrupted the progress and momentum that was previously gained. Consequently the previous expectations that were established quickly became irrelevant or unachievable. Originally, the expectation was to make a fully fleshed out application, but multiple setbacks and obstacles derailed that from happening. Instead, we were left with a skeleton of a product. This contained the structure and design of what the application was supposed to be along with a database that was never deployed. In addition, it had some request handling functionality between React and Express and css enhancements.

**Project Process Review**

The team process was developed around two-week sprints which would produce deliverables, after three of these sprints were completed it would switch from development to testing. This would use Trello for task management and Github for version control. Additionally, there were group meetings every week meant to discuss and monitor progress. Although this process seemed adequate while planning, it became clear that there were some issues. For example, only having one brief meeting a week caused some issues. If there was any uncertainty it would usually wait until the next meeting which was a considerable portion of the sprint. Also, assigning roles with little flexibility to crossover presented an issue with individuals being confined to a role that was not necessarily desired. These issues presented some obstacles that had to be addressed and took time away from the actual project. Overall, the process was functional enough even with the flaws, but extra time was needed in order to address them.

**Work to be Done**

The project has much of the structure and framework established, but there is still considerable work to be done. Work still needs to be done on the routes to allow the database to be fully functional and take in inputs from the user. This will allow for creation and storage of users as well as creating more security, if programmed correctly. Furthermore, the third party functionality and tie-ins need to be developed to allow for a more interactive application. These would include geolocation and a PlantNet tie-in to allow for map interactions and identification of flora. Once these are accomplished chats and other interactions between the users can be refined and implemented.

**Manuals**

**User/Administrator Manuals**

Due to a lack of development a user manual is not possible.

**Deployment/Installation Instructions**

Due to a lack of development deployment instructions are not possible.

**Code Scripts**

This contains the source code for the project

[**https://github.com/aw88-uwf/greenwalker**](https://github.com/aw88-uwf/greenwalker)

This contains the queries to setup the database

<https://github.com/aw88-uwf/greenwalker/blob/master/server/SQL%20Queries>