**Gardening Application**

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**CS 1530 SPRINT 1 DELIVERABLE**

**Ranked List of User Stories**

|  |  |  |  |
| --- | --- | --- | --- |
| Input Digital Garden Size | | Priority | High |
| As a user  I want to specify the size of my digital garden  So that I can accurately represent my real garden. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Create Digital Garden | | Priority | High |
| As a user  I want to have a rectangular garden bed that stands out on the page  So that I can place plants in a clearly defined area. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Create Plant Library Object | | Priority | High |
| As a user  I want to have a library of plants  So that I can choose a plant to place in my garden. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Plant Library GUI | | Priority | High |
| As a user  I want to see a list of species in my plant library  So that I can select a plant to place in my library. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Create Unique Plant | | Priority | High |
| As a user  I want to create a new plant when I tap one from the library  So that I can have as many of the same type of plant in the digital garden as I want. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Adding Garden plants | | Priority | High |
| As a user  I want to be able to place plants in specific locations in digital garden  So that I can make a well design a garden bed. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Alerts for Plants in Digital Garden | | Priority | High |
| As a User  I want to be alerted when plants need to be pruned, harvested, etc.  So that the application can help me tend to my garden. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Garden Yearly Calendar | | Priority | High |
| As a User  I want to create a new garden every year  So that my application is useful every year I want to plant. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Perennial and Tree Propagation | | Priority | High |
| As a user  I want plants in my digital garden that last longer than a year to show up in following years  So that I don’t have to place them over and over every year. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Repositioning Garden Plants | | Priority | Med |
| As a user  I want move plants that are already in my digital garden  So that I do not have to delete and recreate plants just to make a small change to my garden layout. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

|  |  |  |  |
| --- | --- | --- | --- |
| Deleting Garden Plants | | Priority | Med |
| As a user  I want be able to delete plants from my garden  So that I can refine my design for a garden. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Deleting a Perennial or Tree | | Priority | Low |
| As a user  I want a deleted perennial or tree to disappear from following years  So that I don’t have to manually delete them from all following years. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| 25 Starting Plants | | Priority | Low |
| As a user  I want the plant library to start with 25 plant species  So that I can jump right into building a garden bed. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| Adding Plants to Plant Library | | Priority | Low |
| As a user  I want to add custom plant species to my plant library  So that I can grow whatever I want in my garden. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

|  |  |  |  |
| --- | --- | --- | --- |
| Deleting Plants From Plant Library | | Priority | Low |
| As a user  I want to be able to delete plants from my plant library  So that my plant library does not become cluttered, and I may remove any mistakes. | | | |
| Author: Joseph | **Date: 5/24/15** | **Estimate:** | |

|  |  |  |  |
| --- | --- | --- | --- |
| Google Calendar | | Priority | Low |
| As a user  I want my garden alerts to be Google Calendar events  So that I can easily see upcoming garden events with my own calendar and share them with my friends and students | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

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| --- | --- | --- | --- |
| HSL Color selector | | Priority | Low |
| As a user  I want to choose plant species color in an intuitive way  So that I can tell new species apart and change existing plant colors. | | | |
| Author: Joseph | **Date: 5/27/15** | **Estimate:** | |

**Walking Skeleton**

The walking skeleton for this project can be located at the following address:

https://github.com/cs1530-group1/garden\_app

**Test Plans**

A description of what you plan to test, what tools you think you will need, and why

The test outline should be at least several paragraphs explaining what sorts of things you think will need to be tested, and why. Remember to include functional and non-functional aspects (reliability, scalability, performance, etc)!

**User story determination and prioritization**

To begin writing user stories I first had to contact our client.  I emailed Stacey Steggert the day I received the project. With only 11 weeks for development there was no time to waste. I tried to learn about the details on three major aspects of the project. First, the platform the project would run on had to be decided. My team and I hope to work in the android developing environment. Her return email appended “Sent via the Samsung Galaxy Tab® 4.“ She informed me that android was great for her, and I knew we would need to make sure the user interface would scale well to her screen size. For my second and third topics, I asked about Stacey’s goals and mental image of user interface.

Her description seemed fluid. There were clearly goals she wished to accomplish. Stacey writes, “My goals include tracking crop rotation and yield; designing garden bed layout, especially how annuals will fit in around trees and perennials; a calendar of tasks like when to prune, fertilize, etc.” However, she had no indication of how the user interface would be laid out. For this, I had to apply my gardening knowledge to try and understand what she really needs.

Clearly there would be a high priority for having a digital garden bed. It would be filled with digital representations of plants. Being an avid gardener, I know that different plants need different sizes of growing space. In order to comfortably lay out plant positions, the final growth size of each plant would need to be represented. A library of plants needed to be created to hold each species of plant. From there, plants would be selected and placed in the garden.

Furthermore she needed some level of calendar events. This was a point of contention within our group. Some people felt that this would best be done locally, Using timed events and an internal calendar. However, Stacey indicated that she wished to share the calendar with others. Google calendar would allow app to integrate deeper into the user’s life. While this is a lot more work than simple alerts, it enables many features that would otherwise have to be implemented separately. As such alerts are a good start with a goal of eventually creating events in Google calendar.

The priority for the user stories begin with the base user interface. First the garden bed needs to be created. Then a library of plants is created for filling the garden. The process of adding plants follows, allowing plants to be selected and placed. Alerts should be generated for plants as necessary. Following years of digital gardens are created, and then edge cases are generated for plants that live longer than a year. These are the most important features of the product and are all ranked high priority.

Medium priority user stories involve editing a current garden. Plants need to be delectable. A user may change their mind about a plant. They may also want to adjust the plants position slightly. These small modifications are important for an interactive digital garden bed. Finally, Low priority user stories focus on a few edge cases, plant library changes, and the 25 plants promised to ship with the product. Google Calendar is included as low priority, as it is a late goal for the project.

-Joseph Podnar