## **Project Management Document**

## I. Definition of the tasks involved in the project

Write a paragraph that overviews what the goals of the software are and divides the achievement of these goals into specific tasks to be completed.

The goal of our software is going to be to provide a safe and useful e-commerce environment for consumers of like interests as us to purchase, browse, and expand their knowledge of plants. We are going to allow consumers to access our e-commerce environment via a website so we will be creating a website from scratch to allow for personalization and character in our website. We want our website to provide a clean look that will not scare users away with pop ups or any other distracting elements. We will achieve this clean look through our implementation of jsNode and have an easily navigational website with a built in search and organize/ filter products option. For these features we will have to implement multiple functions that can sort through all of our items and return just the desired/ selected options from the user. We also want to provide users who are new to plants with the ability to grow their minds and learn about their fellow seedlings. We will do this by having a menus option coded that will allow the user to have the ability to choose what section of the website they want to explore. The purchase option on the side of software will perhaps be the most difficult we expect just because when dealing with sensitive information (card info, names, profile information) it will all need to be encrypted via HTTPS/SSL. Optimistically we are planning on having some sort of user verification function as well to double down on security practice.

## II. Risk

List out the potential risks to the company (e.g., monetary risk) and list potential risks to the end users (e.g., security risks from sensitive information) when developing/using the software. Write how your team plans to reduce the chance of these risks.

Along with every creation and usage of an e-commerce website inevitable risks follow. There is a persistent risk of online security like malware, phishing, hacking and spam. Similarly but still different there are privacy issues where customer's sensitive data could be compromised and used for spam or other things like theft or unsolicited marketing. However our team plans to combat these security risks with a duo verification every time that a returning user logs in with an automatic password and when sensitive information (credit card information) is put in it will be stored very safely and we will utilize a standard encryption and verify that all data is encrypted. There is also system reliability where the internet service provider server might crash. There could also be bugs with the online payment system and it could show errors due to plugins occasionally containing bugs. There are also possibilities of perhaps someone using a stolen credit card to purchase things from our website so in that case we would have to include some kind of backup system for when such happens this could be a big monetary risk especially when accepting credit cards which allows customers to void the purchase if it was perhaps an accident. For issues on our end the best we can do is protect all systems against malware by encrypting sensitive information, managing data access, data acquisition, and management.

NOTE: Remember that I am not requiring you to actually implement security protocols, but the interface may need to *appear* to be secure to the user.

### III. Evaluation criteria and methods

We plan to run a user study to evaluate usability.

# IV. Implementation

List out the programming tasks to be done in the project and assign a member(s) of the team to complete the tasks. Much of this you can draw from your requirements document.

The core requirements are spread out among all team members but we will all be helping in additional areas due to the need for connectivity and communication among the functions.

Core Requirements: At least 50 items to sell, Search, Organize/ Filter Products, Inspect Product Details, Buy, Log in, and Must be designed to effectively work with screen readers.

**Isabel** - Will be mainly working on the buying and selling of the minimum of at least 50 items to sell. Isabel will also be working on the choosing of the merchandise and the item function with Amber. They will be responsible for keeping track of the items that will be sold and by creating a product/ item function. They will also have to work closely with the Buy, inspect product details, and the organize/ filter products functions.

**Brian** - Will be responsible for working on the login aspect of the website including the security of all the users information and encrypting data given to the website from the user. This is where new user profiles will be created Sam will also aid in this area. There will be multiple functions in conjunction with this. This will include implementing and encryption function, creating a new user function, log in function, forgetting password function/ reset password function.

**Amber-** Will be helping Isabel with the choosing and uploading of the items that the website will contain. She will be responsible for keeping the website look neat and clean. She will be uploading images of the items that are for sale. Amber will also be responsible for the Inspect Product Details area of the website where users can find more information about the products for sale.

**Sam-** Sam will also be working with Brian in the login functions as well as the general encryption functions. He will also be working on the organize/ filter products by implementing a search function also conjunctively working in unison with the Search function requirement. With these in mind he will also have to work closely with the buy and the login functions. Sam will also be working on the functionality of the design of making our website work effectively with screen readers for the persons with vision disabilities.

**Brynna-** Will be working with Sam on implementing search functions giving the ability to the user to sort through the 50 items we will host. Brynna will also be helping out with the buy/purchase function that will allow users to enter credit card info/ other sensitive data also working in unison with Brian on the encryption side of things.

NOTE: I encourage you to use version control software such as Github. It takes a bit of time to set up, but it ends up saving you time when multiple developers are involved and allows you to roll back to previous versions with ease. However, this is not a requirement.

## V. Training

For most software, there needs to be training or support for end users (e.g., a how to contact support page, FAQ, help etc) for your customers). Write a paragraph on how this will be handled. Which members of the team will handle this? You can also draw from your requirements document for the tasks for this.

There will be an easily accessible frequently asked questions page on the menu options for users who need assistance in navigating the website. If they wish to call/ chat/ talk to a customer support representative located at the bottom of our webpage along with the certifications of our website. When they click on 'Contact Us' they will be prompted with a fill in form that will allow us to sort the issues from highest importance to lowest. There will also be a separate page for returns and there will also be a fill in form to fill out for the user that wants to make a return. After the message is submitted they will be sent to a thank you page along with an estimate when they will approximately hear back from us.

## Example:

The software will have a Frequently Asked Questions page linked from the front page. There will also be contact information for help at the bottom of the FAQ page. Moreover, we will have a form filled in on the Contact Us page that can be directed to the support team.

### VI. Maintenance

Once the software is deployed, what kind of maintenance would be required to keep it working properly? Write a paragraph about this.

Website maintenance for the website would consist of several areas that would be needing attention on a semi regular basis. Security is something that would definitely need to be kept up with to allow the website to keep working properly. For example a scan for vulnerabilities should be performed regularly. Browser compatibility testing should also be tested regularly just to keep up with the user's web browser of choice. Software updates are also an additional concern to keep bugs out of the software to prevent the website from breaking. There also needs to be

website backups done regularly to keep up with the constantly changing information that is contained in the website, for example the constant changing number of the stock. If a customer places an order for a plant that is no longer in stock that we are actually out of would be a really bad look for our business. The performance is also something that could be a big factor in keeping valuable customers coming back and the business successful since it is a solely based company online an issue like slow performance could really hurt a business like ours. For us this could also look like making sure the site in general is working and if we have any links or microservices ensuring those are still working as well, updating content as needed, and fixing anything and everything that is broken to prevent further breakage.

NOTE: I don't expect you to actually implement any of this, but you should consider how they may affect your design and functionality.

### VII. Future needs

Are there any functionality/interface concerns that may not make it into this first version, but that should be integrated in future versions? Explain your ideas here in a paragraph.

Yes some examples of functionality/interface concerns that probably won't make it into this first version of our website just for the time sake of just one semester are things like the ability for our users to sign up for newsletters sent to their email to update them on new stock or perhaps seasonal plants that we might have limited amounts of. We think another really cool idea would be the implementation of an intuitive help bot that would help users that are not as familiar with websites or computers in general. There would be a little button in the right hand corner of the website that you could either exit out of if it gets annoying or you can click on it to re-open. I think a lot of well established websites already do something like this and the button on the website resembles a little question mark which is pretty self explanatory for functionality sake. But the bot would be able to answer questions intuitively almost as if the user was conversing with an actual person. Worst case scenario the bot is unable to answer the question like if it is an tech or IT question the bot is unfamiliar with it will lead the user to the correct menu option to fill out the proper information that will be sent to an IT employee. Another microservice that we think would be really fun to include is a review and comments section. This one might even be accessible currently but we are just wanting to focus on the basic requirements before dipping our toes in any additional projects. We might do a really basic version of reviews with just the option of adding stars but as far as leaving comments and verifying the user that is leaving that review has actually purchased that product we are doubtful that we will have the time capacity to achieve that.