**Green Store – E-commerce portal**

**Project’s SRS**

**1. Introduction:**

Through our B2B E-Commerce portal, i.e., Green Store, the customers which includes suppliers of different plant materials such as tissue culture seedlings, coco peat, seeds, pebbles, pots (ceramic, earthen and plastic), compost, moss, fertilizers etc.

Manufacturers (nurseries) may choose from the different suppliers for their requirement. This whole ecosystem provides a B2B environment for easy collaboration among them. This platform provides a user-friendly interface to access their accounts (seller or buyer).

This document describes the requirements for an E-Commerce application purely based on agriculture.

The document is intended for the administrators and the developers of this project. (Designer, Tester and Architects).

**2. Scope:**

This software supports an electronic B2B application which enables the manufacturers (nurseries), retailers (offline stores) and farmers to take the products from the suppliers. Here, in this environment, the retailers can purchase products from the manufacturers (nurseries) such as pot plants and other stuff or from suppliers such as coco peat, compost, seeds, and pots at a wholesale price in order to sell the finished plants to the end customers. This application satisfies the supply chain requirements to all the businesses. All the businesses involved will be benefited and they will get all the negotiating powers. The transportation companies can be incorporated in this platform to transport the products from one end to the other. The suppliers will be having seller account which they have to first register as a seller in order to sell their products to the buyers. The buyers will also have to create an account in order to send their requirement message to the suppliers. The buyers will search for a product and the verified sellers will be listed based on the filters applied to the search results.

**3. Overall Description:**

3.1 Product Perspective:

The suggested framework is a solution for the businesses to have a secured and collaborative environment for the purchase/sell of products.

3.2 Functional Requirements:

* The buyer or seller will login to their accounts and the buyer will search for a product and the sellers will list down the products that they are willing to sell on this platform.
* The registered e-mail of both buyers and sellers will be used to authenticate as well as to cater the communication between the two parties.
* The buyer will send the requirement message which contains the quantity, size of the seedlings, quality, variety, and others. The buyer can also contact the seller directly with the call button.
* The seller will then get the requirements in their inbox from the seller or can get a call from the buyer.
* After order is confirmed from the buyer, the transportation company will contact the seller for the delivery of the consignment. The cost of the delivery will be decided by the transportation company decided according to the delivery source and destination.
* The platform will have multiple payment options which the buyer can leverage it. The amount will be withheld in the middle, and it will transfer to the seller’s account only after the delivery of the said product. This will build a trust between seller and the buyer.
* Both inputs should be reviewed for validation and messages should be issued for erroneous results. Invalid data should be skipped, and error messages should be given.
* The information given by the users should be maintained in the database.
* When submitting details during the registration, the mandatory fields must be reviewed for validity as to whether the provider has entered the necessary data in these mandatory fields. The e-mail of the user must be verified during registration.
* Time to time, the users should change their passwords and email of the users should be verified after every 6 months.
  1. **Non-Functional Requirements:**
* Availability –

The Green House Portal must be available for use as much as possible, and that downtime must be minimised.

* Compliance –

The Green House Portal must comply with legal and regulatory requirements.

* Maintainability –

The Green House portal must be capable of being maintained cost-effectively over its expected lifetime, and can incorporate additional requirements such as modifiability, configurability, extensibility, and interoperability.

Centralising logs, with all services and instances logging to a single central location

* Performance -

The Green House portal should be designed and built with an acceptable standard of performance as a minimum.

* Security -

The Green House application may not grant access until the user creates a strong password.

* **Technologies used**
  + [**Content management system**](https://elogic.co/glossary/content-management-system/)**(CMS)** – We will use Drupal as content management system in our web application.
  + **Web framework**– We will be using Bootstrap 3 in our web application for responsive website.
  + **Web server** – We will be using nginx web server in our web application.
  + **Programming language**– We will go with JavaScript which is a scripting language in our web app.
  + **Communication**– We will be using GitHub for sharing and storing all the official documents related to the web app. For team meeting, we will be using Google meet and MS teams.
  + **Hosting/Scaling** – We will be hosting our application in virtual private server.
  + **Web application accelerator** – AWS Global accelerator
  + **Data structure store** – We will be using Redis as a data structure in our web app as it is an in-memory store, faster, reliable, and very popular.
  + **Tag Managers**– Google Tag Manager
  + **JavaScript frameworks** – jQuery
  + **Mobile frameworks** – jQuery Mobile
  + **Widgets –** ecwid, shipworks, shipping easy
  + **DNS hosting** –We will have domain name as green-store and host the application in netlify.
* **Business Requirements**
  + **General** – It is a B2B model in which nurseries are able to communicate and sell products among each other and both the parties will be benefited with this deal. The buyers will have freedom to purchase from the available sellers based on the quality and price of the product.
  + **Scope** – This software is an e-commerce platform which helps customers to make effective purchases and helps sellers in increasing the sales and management of their products. Each customer and seller have access to pages where they can organize and see all their records. There are options to optimize search and keep track of the products one likes. There are methods designed to accept payment. There is a portal for customer support too in case of any discrepancies.
  + **Team**
* **Administrator** will have to add valid products and has control over the security of the web app.
* **Warehouse manager** will manage the stock of the products and track the products if it has been returned or accepted by the customer.
* **Salesperson** will create the invoices for the products purchased and oversees the refund process if the product is returned.
* **Shipping partner** 
  + **Tasks & Release management**
    - **Task workflow**:
* Create Customer and Seller Profiles
* Verify the products from Seller and add to the warehouse
* Receive orders from the customer and verify the authenticities’
* Process order and update the warehouse
* Ship products to buyer or from seller to warehouse
  + - **Deploy workflow –**
* Development environment –
  + Day to Day development, build and test activities.
  + Access provided to all project members
* Production Environment –
  + Final roll-out of the end product for Demo
  + Access provided to all project members and Institute and University evaluators
* **Functional Requirements**
  + **UX requirements** – The users will be able to buy products instantly, add the various products to the cart, pay through various options such as UPI, credit card, debit card and pay on delivery. They can also give review for the products that they have purchased and there will be forum where they can easily ask questions and any users can answer those questions. The online payment should be secured and reliable. The users can also save the products for later purchase, and they can like the product by clicking the like button.
  + **Management requirements** – The staff will be able to create invoices for the product purchased, send the confirmation mail for the purchased product, feed the current location of the product while delivery in the database, answer the queries from the customers and businesses. The management will be able to view the order history, admin panel, delivery track record and customer satisfaction report.
  + **Marketing requirements** – The application will send emails to the registered customers about the new launches, discounts, and price drop. It will have promo codes or gift cards for a particular product or for purchasing above a specified amount.
* **Sales requirements –** The sales team can change the price of a product; manage the category of products, control over the shipping method and its charges. It is flexible to change the payment method anytime
* **Features**

This section includes all the features (native and third-party) that you want to add. Regardless of the ecommerce platform you choose, you will likely want to add:

* + A customizable menu
  + Carousels
  + A product Wishlist
  + A product [inventory](https://elogic.co/glossary/inventory/) management system
  + CRM integration
  + A blog module
  + Multicurrency/multilanguage
  + One-step checkout
  + The ability to log in with [social media](https://elogic.co/glossary/social-media/)/email accounts
  + Integrations with review sites
  + Integrations with payment processors/gateway
  + Delivery
* **Roles**
  + **Admin**
    - (General) As an admin, I want to manage all products and carousels.
    - (Specific) As an admin, I want to create products and remove products.
    - (More specific) As an admin, I want to add a valid product name, image, and specifications.
  + **Customer**
    - (General) As a customer, I want to buy a selected product.
    - (Specific) As a customer, I want to create an account to proceed with the order from the shopping cart.
  + **Customer support**
    - (General) As customer support, I want to send order confirmation emails and tracking details for the product.
* **Appendix** 
  + **Modelling Requirements**
    - Use Case Diagram
    - Class Diagram
  + **GANT Chart**
  + **Test Plan**
  + **Test Execution summary**