

<b>Course Code</b>	CSE 438
<b>Course Name</b>	Smartphone Application Development
<b>Section</b>	01
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<b>Project Name</b>	Woodify
<b>Submission Type</b>	SRS Documentation

<b>1</b>	<b>Introduction</b>
<b>1.1 Purpose</b>	<ul style="list-style-type: none"> <li>• Create a marketplace where people are able to purchase plants of different types.</li> <li>• Create a community where users can communicate, seek, and offer suggestions on how to nurture trees.</li> <li>• Will make sure that the most trustworthy and important suggestions are acknowledged, enabling users to choose the best options for their trees.</li> </ul>
<b>1.2 Intended Audience</b>	<ul style="list-style-type: none"> <li>• Development Team.</li> <li>• Project Manager.</li> <li>• Clients and Product Owners.</li> <li>• User Interface Designers.</li> <li>• Quality Assurance and Testing Team.</li> <li>• Technical Writers.</li> </ul>

<b>1.3</b> <b>Intended Use</b>	<ul style="list-style-type: none"> <li>• To make it easier to sell trees.</li> <li>• Create a multi-layer user system.</li> <li>• Create a community where users can communicate, seek, and offer suggestions, with the option to "upvote" the best advice.</li> </ul>
<b>1.4</b> <b>Product Scope</b>	<ul style="list-style-type: none"> <li>• User Registration and Authentication             <ol style="list-style-type: none"> <li>1. Users can create accounts to access the platform's features.</li> <li>2. Sellers need to be verified before they can start selling.</li> <li>3. Buyers can register without verification.</li> </ol> </li> <li>• Tree Catalog</li> <li>• User Roles (Buyers, Sellers and Admins)             <ol style="list-style-type: none"> <li>1. Sellers can list and sell trees and plants.</li> <li>2. Buyers can browse and purchase plants listed by verified sellers.</li> <li>3. Admin can verify sellers.</li> </ol> </li> <li>• Shopping Cart             <ol style="list-style-type: none"> <li>1. Cart functionality to allow users to add items for purchase.</li> </ol> </li> <li>• Community Chat             <ol style="list-style-type: none"> <li>1. A dedicated query section for users to post their problems and seek solutions.</li> <li>2. Both sellers and buyers can participate in discussions.</li> </ol> </li> <li>• Chat system             <ol style="list-style-type: none"> <li>1. Chat System for buyers and sellers to communicate</li> </ol> </li> <li>• Upvoting System             <ol style="list-style-type: none"> <li>1. Similar to Quora, users can upvote helpful suggestions and advice.</li> <li>2. Enables users to identify the most valuable and trustworthy information.</li> </ol> </li> <li>• Notification System             <ol style="list-style-type: none"> <li>1. Specify how users will receive notifications for replies to their posts.</li> </ol> </li> </ul>
<b>1.5</b> <b>Definitions and Acronyms</b>	<ul style="list-style-type: none"> <li>• SRS: Software Requirements Specification.</li> <li>• Multi-layer users: suggests that the software system has various user roles or levels of access.</li> </ul>

	<ul style="list-style-type: none"> <li>• Community chat: A feature that enables users to communicate in real time and get advice on a shared platform.</li> <li>• Upvote: It means clicking a button or icon to express approval or agreement with an idea or message in the community conversation.</li> <li>• Catalog management: The process of organizing and maintaining a collection of items, in this case, trees, including their details, availability.</li> <li>• Notification system: Functionality that sends alerts to users.</li> </ul>
<b>2</b>	<b>Overall Description</b>
<b>2.1 User Needs</b>	<ul style="list-style-type: none"> <li>• User friendly interface for browsing and looking for available trees</li> <li>• Users can create accounts, log in, and manage their profiles.</li> <li>• Users can add trees to their cart and proceed with secure purchasing options.</li> <li>• In the community chat, users can submit queries and get advice regarding their trees and also participate in discussions and provide helpful advice to other users.</li> <li>• An upvoting system to identify and draw attention to the most trustworthy and insightful suggestions in the community chat.</li> <li>• A user can manage items in their inventory and specify whether they are available or not.</li> </ul>
<b>2.2 Assumptions and Dependencies</b>	<p><b>Assumptions</b></p> <ul style="list-style-type: none"> <li>• Users have access to a device (computer, smartphone.) with an internet connection.</li> <li>• Flutter framework will be used to develop the app.</li> <li>• Users will provide accurate information during the registration process.</li> <li>• Users will follow community rules and conduct themselves appropriately in chat.</li> </ul> <p><b>Dependencies</b></p> <ul style="list-style-type: none"> <li>• Functionality of the app will be limited to the constraints of flutter</li> </ul>
<b>3</b>	<b>System Features and Requirements</b>

<b>3.1</b> <b>Functional</b> <b>Requirements</b>	<ul style="list-style-type: none"> <li>● User Interface <ul style="list-style-type: none"> <li>○ The system will allow users to create a buyer or seller account.</li> <li>○ The registration information will be validated using google authentication system</li> </ul> </li> <li>● Profile Management <ul style="list-style-type: none"> <li>○ User will be able to edit their profile information including their name and picture</li> </ul> </li> <li>● Product and Inventory Catalog <ul style="list-style-type: none"> <li>○ The system will provide a product catalog for buyers to search, filter and sort on different criteria</li> <li>○ The system will provide inventory management for sellers to easily update their product listing.</li> </ul> </li> <li>● Shopping Cart <ul style="list-style-type: none"> <li>○ User will be able to add items to their shopping cart</li> <li>○ User will be able to update or delete any items or quantity in the shopping cart</li> <li>○ It will have the option for checkout and method of payment.</li> </ul> </li> <li>● Admin Dashboard <ul style="list-style-type: none"> <li>○ The system should provide an administrative dashboard for authorized administrators.</li> <li>○ Admins should be able to manage products, user accounts, and orders.</li> <li>○ The dashboard should include features like user management, query management.</li> </ul> </li> </ul>
<b>3.2</b> <b>External</b> <b>Interface</b> <b>Requirements</b>	<ul style="list-style-type: none"> <li>● User Interface <ul style="list-style-type: none"> <li>○ The user shall provide a user friendly environment for them to interact.</li> <li>○ The GUI will be followed by the industry standard</li> </ul> </li> <li>● Database <ul style="list-style-type: none"> <li>○ A database will be created to update and delete data easily.</li> <li>○ The database system shall meet certain goals to ensure confidentiality, integrity and authenticity</li> </ul> </li> <li>● Error Handling and Logging: <ul style="list-style-type: none"> <li>○ The system will provide appropriate error messages to handle errors and have a fail-safe function</li> </ul> </li> </ul>

<b>3.3 System Features</b>	<ul style="list-style-type: none"><li>● User Registration and Authentication</li><li>● Profile Management</li><li>● Inventory Management</li><li>● Tree Catalog</li><li>● User Roles (Buyers, Sellers and Admins)</li><li>● Cart</li><li>● Community Chat</li><li>● Upvoting System</li><li>● Notification System</li></ul>
<b>3.4 Nonfunctional Requirements</b>	<ul style="list-style-type: none"><li>● The system's response time with the database should be fast</li><li>● The system should not have any scalability issue</li><li>● The GUI should designed in such a way that users can easily understand at first glance</li><li>● The system's code should follow coding standards and best practices for maintainability and readability.</li><li>● The system should have regular and automated data backup procedures in place to prevent data loss.</li></ul>