A PROJECT REPORT ON

"Garden Fever"

SUBMITTED IN

PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE COURSE OF DIPLOMA

IN ADVANCED COMPUTING (PG-DAC)



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CERTIFICATE

This is to certify that the project

"Garden Fever"

Has been submitted by:

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In partial fulfillment of the requirement for the Course of **PG Diploma in Advanced Computing**(PG-DAC AUG,2024) as prescribed by The CDAC ACTS, PUNE.

Place: Pune Date: 11/02/2025

Miss. Priyanka Mam

Project Guide Alumni Mentor

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TEAM SUNBEAM

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ABSTRACT

Garden Fever is an innovative e-commerce platform designed to provide gardening enthusiasts with a seamless shopping experience for plants, seeds, and harvesting tools. This project, developed as part of the CDAC curriculum, aims to bridge the gap between gardening suppliers and consumers by offering a user-friendly website with advanced features. The platform facilitates the purchase of a wide variety of plants and seeds, along with essential gardening tools, ensuring that users can find everything they need in one place. Developed with a React frontend and a Java backend, the website ensures a dynamic and responsive user experience while maintaining robust data handling and security. The integration of a well-structured database ensures efficient inventory management, order processing, and customer interactions. This project is designed to promote sustainable gardening practices while offering a convenient digital marketplace for gardening enthusiasts. Through continuous improvements and potential future integrations, Garden Fever aspires to revolutionize the gardening e-commerce industry.

INTRODUCTION

Gardening is not just a hobby; it is a way of life that promotes sustainability, improves mental well-being, and contributes to a greener environment. With the increasing interest in home gardening and urban farming, there is a growing demand for a reliable and convenient marketplace where enthusiasts can access high-quality gardening supplies. However, many individuals face challenges such as limited access to plants and seeds, expensive gardening tools, and the unavailability of rental services for harvesting equipment. To address these issues, Garden Fever was developed as a comprehensive e-commerce platform catering to the needs of gardening enthusiasts, farmers, and hobbyists.

Garden Fever is a user-friendly online platform that allows customers to purchase a wide variety of plants, seeds, and gardening tools. Whether users are home gardeners, urban farmers, or agricultural enthusiasts, the platform provides everything they need in one place.

The project is built using React for the frontend, ensuring an interactive and responsive user experience, and Java for the backend, providing robust functionality, secure transactions, and efficient database management. The website is designed with intuitive navigation, search filters, and security options to enhance customer satisfaction.

Key features of Garden Fever include:

- User Authentication & Security Ensuring data privacy and secure purchases.
- <u>Product Listings & Search Filters</u> Allowing users to easily browse and select gardening products.
- Order Tracking & Customer Support Providing real-time updates and assistance for users.
- <u>Sustainable Gardening Approach</u> Encouraging eco-friendly gardening practices through easy access to resources.

By leveraging modern web technologies and a well-structured database, Garden Fever aims to bridge the gap between gardening suppliers and consumers while promoting a seamless, efficient, and sustainable gardening experience. The platform aspires to become a go-to solution for gardening enthusiasts looking for high-quality products and cost-effective rental options, ultimately fostering a more green and self-sufficient lifestyle.

Need for Garden Fever:

Gardening plays a crucial role in promoting environmental sustainability, mental well-being, and self-sufficiency. With the rising interest in home gardening and urban farming, there is an increasing demand for a dedicated platform that simplifies the process of acquiring gardening supplies. Despite this growing enthusiasm, many gardening enthusiasts, small-scale farmers, and hobbyists face several challenges:

1. Limited Access to Quality Gardening Supplies

Many individuals struggle to find high-quality plants, seeds, and tools in their local markets. Traditional nurseries and gardening stores may have a limited selection, making it difficult for users to source the right products.

2. High Cost of Gardening and Harvesting Tools

Gardening requires various tools and equipment, some of which can be expensive, especially for beginners or seasonal gardeners. The inability to afford these tools often discourages individuals from engaging in gardening activities.

3. Convenience and Digital Accessibility

In today's fast-paced world, people prefer online shopping for its convenience. The gardening sector lacks a **dedicated digital marketplace** where users can browse and purchase gardening essentials from the comfort of their homes.

4. Sustainable Gardening Practices

With increasing awareness of environmental sustainability, more people want to adopt eco-friendly gardening practices. However, a lack of guidance and easy access to the right products makes it difficult for many to start their gardening journey.

How Garden Fever Addresses these Needs:

Garden Fever is designed to solve these challenges by providing an all-in-one digital platform where users can:

- Easily purchase a wide variety of plants, seeds, and gardening tools from a single marketplace.
- Explore a well-organized, user-friendly online store with search filters for a seamless shopping experience.
- Track orders, receive customer support, and access gardening resources to enhance their knowledge and skills.
- Encourage sustainable gardening by promoting the use of eco-friendly products and equipment.

REQUIREMENT SPECIFICATION

Software Requirement

Frontend: Html Css JavaScript ReactJs Backend: Java Spring SpringBoot Database:

MySql

SYSTEM DESIGN

System Architecture

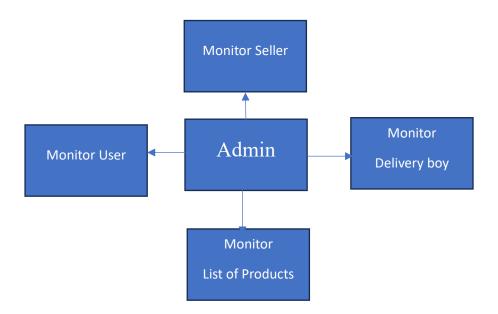
The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- ➤ Admin
- > Seller
- ➤ User
- Delivery Boy

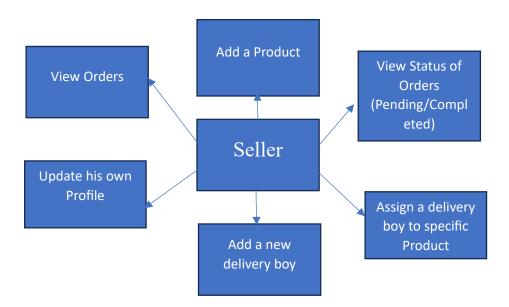
Admin:

The admin is the super user of this application. Only admin have access into this admin page. Admin may be the owner of the shop. The administrator has all the information about all the users and about all plants.



Seller:

The Garden Fever platform includes a dedicated Seller Module that enables vendors to manage their products, orders, and deliveries efficiently. Sellers have full control over their inventory and order fulfillment process, ensuring a smooth experience for both buyers and delivery personnel.



Product Management:

Add New Products:

Sellers can list plants, seeds, and gardening tools with descriptions, prices, and images.

Update Product Details:

Modify product information, including stock availability and pricing.

Remove Products:

Delete or disable products that are no longer available.

Order Management:

View Orders:

Sellers can access a list of received orders with customer details.

Update Order Status:

Change the status of orders (e.g., Pending, Completed).

Assign Orders to Delivery Boys:

Allocate specific orders to available delivery personnel for dispatch.

Seller Profile Management:

Update Personal Information:

Modify name, contact details, business name, and store description.

Delivery Boy Management:

Add New Delivery Boys:

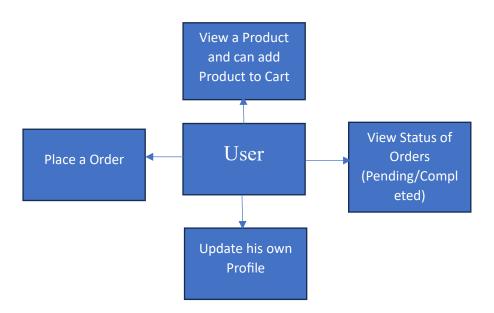
Register delivery personnel with their details and contact information.

Assign Delivery Boys to Orders:

Ensure timely delivery by assigning orders to available delivery staff.

User:

The User Module is designed to ensure a smooth shopping experience with essential features like product browsing, cart management, order tracking, and profile management.



Add Product to Cart:

- View the complete list of products, including plants, seeds, and gardening tools.
- Check detailed product descriptions, images, pricing, and availability.
- Select multiple products and add them to the shopping cart.

Shopping Cart and Order Placement:

- Modify Cart Items Increase or decrease quantity, remove products, or save items for later.
- Proceed to Checkout Place an order with selected products, choosing payment and delivery options.

Order Management and Tracking:

- View Order History Access a list of previous and current orders.
- Track Order Status Check real-time updates, including Pending and Completed status.

User Profile Management:

• Update Personal Details – Modify name, address, phone number, and email.

Delivery Boy:

The Delivery Boy Module in Garden Fever is designed to enable efficient order fulfillment by allowing delivery personnel to manage their tasks effectively. Delivery boys can update their profiles, view assigned orders, and mark orders as completed once delivered



Profile Management

Update personal details such as name, contact number, and address.

Manage login credentials for secure access.

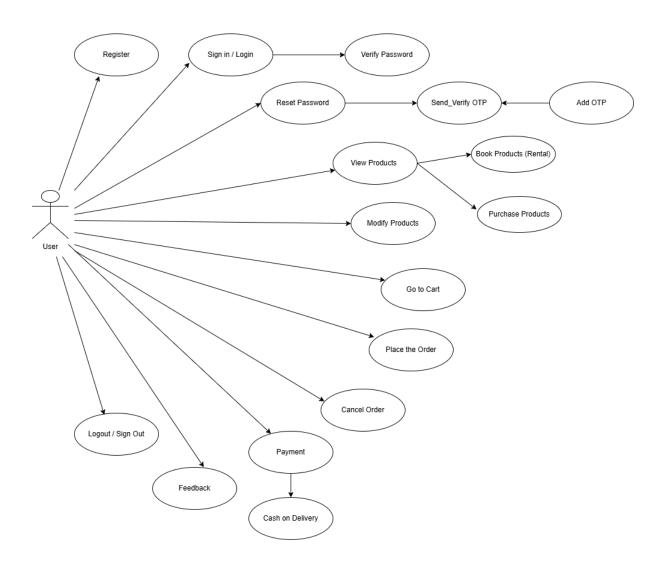
Order Management

See a list of orders assigned by the seller.

Change the order status from "Pending" to "Completed" after completion.

UML Diagram

Use Case: User



Use Case: Seller



FUTURE SCOPE

The Garden Fever platform has significant potential for expansion and enhancement, making gardening more accessible, efficient, and technology-driven. The following are key future developments that can further improve its usability, scalability, and sustainability.

1. AI-Driven Personalized Recommendations

Implement AI-based suggestions for plants, seeds, and tools based on user preferences, location, and seasonal conditions.

Provide smart gardening tips based on user purchase history.

2. Mobile Application Development

Develop a dedicated Android and iOS app to enhance accessibility and provide a seamless shopping experience on the go.

Enable push notifications for order updates, discounts, and gardening tips.

3. Advanced Order & Delivery Tracking

Integrate real-time GPS tracking for users to monitor their deliveries.

Provide estimated delivery times and automated updates for better user experience.

4. Subscription-Based Gardening Kits

Offer monthly or seasonal gardening kits containing curated seeds, fertilizers, and tools.

Introduce a membership program with exclusive discounts and expert gardening advice.

5. Community Engagement & Learning Platform

Create a gardening forum where users can share experiences, ask questions, and exchange tips.

Offer virtual gardening workshops and tutorials to educate users on plant care, organic farming, and sustainable gardening.

CONCLUSION

The Garden Fever project is a comprehensive e-commerce platform designed to simplify gardening for enthusiasts, hobbyists, and small-scale farmers. By integrating product sales, harvesting tools, and an efficient order management system, the platform provides a seamless experience for users, sellers, and delivery personnel. With a React-based frontend for an interactive user experience and a Java backend ensuring robust data management and security, Garden Fever offers a scalable and efficient solution for the gardening community. The platform not only makes gardening resources more accessible but also promotes sustainability. The seller module empowers vendors to manage their products, orders, and deliveries efficiently, while the delivery module ensures smooth and timely fulfillment of customer orders. The user module provides a hassle-free shopping experience with features like cart management, order tracking, and profile updates. The platform has immense potential for growth, with future enhancements such as AI-based plant recommendations, live order tracking, a mobile application, and community engagement features. These improvements will further enhance user convenience and promote sustainable gardening practices. In conclusion, Garden Fever is more than just an e-commerce platform; it is an innovative step toward digitalizing gardening resources, making gardening more accessible, and encouraging eco-friendly practices. By continuously evolving and integrating new technologies, the platform aims to become a leading marketplace for gardening enthusiasts worldwide.