E-NURSERY PORTAL

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Abstract:

Our website E-Nursery Portal aims to revolutionize the plant shopping experience. It provides a convenient and accessible platform for customers to explore, purchase, and care for various plants. The website offers a user-friendly interface by leveraging the technology. It is used for browsing a vast collection of plants categorized by type, size, and care requirements.

This website is not only used to sell the plants but also to sell the pots and accessories that are related to gardening. This includes product listings, detailed descriptions, high-quality images, and an intuitive interface for seamless browsing and purchasing. Customers can browse the plants and purchase them via the website and make the payments on Cash On delivery which also gives trust to the customers on our website.

The customershave to register if they are new users.They must log in to the website to place the order. All their information is stored in our database. If the users forget their passwords, we have provided a forgot password option so that they can reset their password. The admin can directly log in to the website as the admin information is already preserved in the database. The admin can view all the information about the users, and products sold.

Beyond sales, the website also provides valuable resources. This includes plant care guides in the form of FAQs. By use of this, the customers can read the questions and know the solutions for the questions, if it doesn't have the questions that are to be known to the customers, they can post their questions via Contact Us. By using this everyone can share their knowledge. The platform seeks to foster a love for nature and sustainable living while supporting local nurseries and growers.

1. INTRODUCTION

In today's lifestyle, everyone is engaging themselves in planting and gardening. For this, they have to purchase the plants by visiting the nursery and checking whether the plants are qualitative or not. This is a traditional way to purchase the plants. So, we developed an**E-Nursery Portal "Gardener's Choice"** in which the users can purchase the plants without visiting the nurseries. The users can browse the various plants and different types and designs of pots to do gardening.

This provides a variety of plants, such as seasonal, medicinal, and flower plants. This project allows customers to leverage the services provided by our website. Our services include purchasing plants, making secure transactions via cash on delivery, and providing Gardening

guidance through FAQs. Customers can also contact us with their doubts about gardening via Contact Us. Customer service is essential in our project.

Overall information regarding the plants, pots, and accessories, the number of plants that are ordered by the customers, user details, and admin details are stored in our database. In addition to its sales offerings, the website serves as a rich resource hub with plant care guides available through FAQs. Customers can find answers to common questions and, if their query isn't addressed, they can use the "Contact Us" feature to ask directly. This encourages a collective sharing of knowledge. The platform is dedicated to nurturing a passion for nature and promoting sustainable living while also supporting local nurseries and growers.

2. LITERATURE SURVEY:

The present study is based on high-tech nurserymanagement in horticultural crops. The goal of effective nursery management is to provide planting materials of the highest quality for new development areasand replanting. This information is acquired from the paper "High Tech Nursery Management, A Way for Enhancing Income"published by Singh, L.K. Meena, and Paramveer Singh.This research was only limited to the development of the species and seeds using high-tech management and technologies.

Plant nursery management involves running a business that grows andsells plants for private or commercial use. This can involve selling plants wholesale ordirectly to customers through mail order, online, or garden outlets. In this field, you mayoversee operations that produce a few specialty plants or those that offer a wideselection of plants sourced from various regions around the world. This information is extracted from the paper"Plant Nursery Management" published by P. Ratha Krishnan, Raj want K. Kalia, J.C. Tewari, and M.M. Roy. Many people want to buy plants and they are directly concerned with the nurseries and the plants but sometimes people don't know specific information about particular Plant items as well as sellers are not technically skilled.

In "Design & Implementation of Web-Based Application for Plant Nursery" the author describes how they havecreated a method that enables customers to purchase plants without having to visit the shop in person.Their work was highly focused on the development of the platform only.Lack of customer support was there. The authors are Dr. Mahendra Makesar, Yogendra Nikam, Pratik Dudhkawde, Shubham Kathane, Suraj Kawadkar. This paper was released in 2020.

Purchasing the herbs and fruits that are used for health cures are been discussed in the paper "Online Herbs & Fruits". They have been used for a long time in curing diseases and usefulness for health. The limitation of this project was that it helps the user to easily search for herbs and fruits that will be good for the health of the user depending on any health issue or disease that he/she is suffering from but not for plants. The research paper waspublished by Manali Bachhav, Snehal Jadhav, and Anushri Sonawane in 2018.

An e-commerce platform serves as a marketing tool to attract customers, a dynamic system for user interaction, a medium for executing transactions,and a portal providing useful information about the products and services offered. It focuses on the various functionalities of an e-commerce website throughwhich the sale is carried out. This was discussed in a

research paper "A System for E-Commerce Website Evaluation"published by Snezhana Sulova in 2019. Customersdon't compare plant prices with other shopkeepers at the same time.

3.EXISTING SYSTEM

The plant nurseries typically involve manual processes where customers must visit a physical nursery to purchase plants, often facing limited access to plant information and price comparisons. Most nurseries do not have an online platform, meaning customers need to interact with staff directly to inquire about plant species, availability, and care instructions. Payment methods are often limited to cash or card at the nursery, and there is no facility for online payments or pre-ordering. Customers cannot easily compare prices across nurseries or access detailed information about plant quality and seller reputation. Customer service is mainly offered in person, which may limit the customer's ability to ask for expert advice remotely.

Many plant enthusiasts are eager to purchase plants directly from nurseries. However, they often face challenges due to a lack of specific information about certain plant varieties, compounded by the limited technical expertise of nursery sellers. These sellers tend to focus primarily on developing their platforms, often neglecting the crucial aspect of customer support. While some systems are available to help users search for health-beneficial herbs and fruits, there is a noticeable gap when it comes to providing comprehensive information about various plants. Moreover, many existing systems are concentrated on the high-tech development of plant species and seeds, rather than offering a holistic approach that includes user-friendly purchasing options and extensive customer service. This creates a need for an innovative platform that bridges these gaps, offering detailed plant information, excellent customer support, and seamless online purchasing solutions.

4. PROBLEM STATEMENT:

The traditional method of purchasing plants from nurseries involves physically visiting stores, inspecting the quality of plants, and selecting the necessary gardening accessories. This process is time-consuming, inconvenient, and often lacks a seamless experience. Additionally, many customers, especially beginners, face challenges in understanding how to properly care for their plants and may struggle to find relevant information regarding plant varieties, care instructions, or suitable pots and accessories. The absence of a centralized, easily accessible platform for browsing, purchasing, and receiving plant care guidance exacerbates these challenges.

Many plant enthusiasts prefer buying plants directly from nurseries. However, they often lack specific information about certain plant varieties, as nursery sellers might not always be technically skilled. Furthermore, customers usually end up purchasing plants from a single nursery without the opportunity to compare prices from other nurseries. Sometimes, the long distances to nurseries can discourage them from visiting altogether. Therefore, it is crucial to have an online system that offers flexibility in purchasing plants, making online payments, and providing comprehensive customer services.

There is a need for an efficient, user-friendly, and accessible solution that allows customers to browse a diverse range of plants, pots, and accessories, make secure purchases online, and receive reliable guidance on plant care. Furthermore, such a platform should also facilitate knowledge sharing among users and provide support for those who may have specific gardening-related queries.

The E-Nursery Portal, "Gardener's Choice", seeks to address these issues by offering an online platform where customers can easily browse and purchase plants, gardening accessories, and related products from local nurseries, all from the comfort of their home. In addition to a seamless shopping experience, the platform will provide valuable resources such as plant care guides, FAQs, and a "Contact Us" feature for personalized support. The portal will support a cash-on-delivery payment system to build trust among users. Moreover, the platform will store and manage customer and product information securely, ensuring a smooth and transparent process for both customers and administrators. By doing so, the portal aims to foster a greater love for nature, promote sustainable living, and support local nurseries and growers.

The core problem this platform addresses is the need for an integrated, accessible, and user-friendly solution to purchase plants and related gardening products, while also providing valuable resources for plant care and fostering a sense of community around gardening.

5. PROPOSED SYSTEM:

By collecting the information from various sources and research papers. We analyse that most people want to purchase plants for which they have to be directly concerned with the nursery. Sometimes people don't know the information about particular plant items as well as the seller and quality of the plants. The e-nurseryPortal is a platform that allows customers to easily view the description of the plantsand purchase the plants to the desired one.Customer service is extremely important.

Our goal is to ensure every customer enjoys a pleasant shopping experience. Our staff is committed to answering questions with expertise and providing advice whenever necessary. Then the customers will visit our website often and repeat the purchases. By retaining our old customers, it will be easier for us to gain new users because they recommend our website to their friends and family. By this, we can keepincreasing daily sales by expanding the range of plants we offer.

Customers can purchase plants from the comfort of their homes and explore a wide variety of options available in the nursery.When a user proceeds to check out an order, the user must register to our website, login to the website, and proceed to place the order. The information including the buyer's name, address, and Products that are been ordered by the userare recorded in the system for future reference.

Advantages of the Proposed System:

1.   **Convenience**: Customers can browse and purchase plants from the comfort of their homes, eliminating the need to visit physical nurseries.

2. **Trust and Security**: COD allows customers to pay only upon delivery, reducing the risk associated with online payments and increasing trust in the transaction.

3. **Wider Reach**: An online platform can reach a broader audience, including those in remote areas who may not have easy access to local nurseries.

4. **Variety of Options**: Customers can explore a wider range of plants, seeds, and gardening supplies that may not be available locally.

5. **User Reviews and Ratings**: Customers can access feedback from other buyers, helping them make informed decisions about their purchases.

6. **Cost-Effective**: Eliminating the need for a physical storefront can reduce operational costs, which may lead to lower prices for customers.

7. **Educational Resources**: An e-nursery portal can offer gardening tips, care instructions, and other resources to help customers succeed in their gardening endeavours.

6. METHODOLOGY:

Modules:

Our project includes three modules:

1.Admin Module

2.User Module

3.Database Module

Admin Module:

The admin module of thewebsite is the backbone that ensures smooth operations and management. It provides administrators with a comprehensive set of tools to manage various aspects of the online store, such as:

1. **User Management:** Admins can manage customer accounts, including registration, login, and account details. They can also manage different roles and permissions for staff members.
2. **Product Management:** This section allows admins to add, update, or delete products. It includes features for managing product categories, descriptions, prices, stock levels, and images.
3. **Order Management:** Admins can view and manage customer orders, update order statuses, process refunds, and handle returns. They can also track shipping details.
4. **Inventory Management:** This tool helps keep track of stock levels, manage suppliers, and generate inventory reports to ensure products are always available.
5. **Content Management:** Admins can manage the content of the website, including banners, blogs, FAQs, and other static pages. This helps keep the website up-to-date and engaging for customers.

6. Reports and Analytics: Provides detailed reports and analytics on sales, customer behavior, product performance, and more. This data helps in making informed business decisions.

7. Settings and Configuration: Allows admins to configure various settings of the website, such as payment gateways, shipping options, tax rates, and site policies.

Overall, the Admin module is designed to provide a seamless and efficient way to manage the website, ensuring that both the customer experience and business operations run smoothly.

User Module:

The User module of an e-commerce website with a cash-on-delivery (COD) option is designed to provide a seamless and user-friendly experience for customers. Here are the key features and functionalities:

1. User Registration and Login: Customers can create an account by providing basic details and logging in to manage their profile and track orders.

2. Product Browsing and Search: Users can browse through various categories, view product details, and use search filters to find specific items.

3. Shopping Cart: The module allows users to add products to their shopping cart, update quantities, and remove items as needed.

4. Checkout Process: When ready to purchase, users proceed to checkout, where they provide their delivery address and select the cash-on-delivery payment option.

5. Order Tracking: After placing an order, users can track its status, view the estimated delivery date, and receive notifications about any updates.

6. Order History: Customers can access their order history to view past purchases, reorder items, and manage returns or exchanges if needed.

7. Customer Support: The module includes a contact option for customer support, allowing users to raise queries or issues related to their orders.

8. Profile Management: Users can update their personal information, change passwords.

9. Wishlist: Users can save products to their wishlist for future reference or purchase.

The User module is designed to enhance the shopping experience by making it easy and convenient for customers to browse, purchase, and manage their orders, even with the limitation of a cash-on-delivery payment option.

Database Module:

The Database module of our website is essential for managing and organizing all the data associated with the site's operations. Here are the key features and functionalities:

1. User Data Management: Stores and manages customer information, such as user profiles, login credentials, order history, and preferences.

2. Product Data Management: Organizes product information, including product names, descriptions, prices, stock levels, categories, images, and metadata.

3. Order Data Management: Keeps track of all customer orders, including order details, payment status, shipping information, and order history.

4. Inventory Data Management: Monitors stock levels, supplier details, restock dates, and inventory movement to ensure products are available.

5. Shipping Data Management: Stores shipping details, including shipping addresses, shipping methods, tracking numbers, and delivery statuses.

6. Content Management: Manages website content, such as blog posts, FAQs, promotional banners, and static pages.

7. Analytics and Reporting: Collects and stores data for generating reports and analytics on sales performance, customer behavior, product popularity, and more.

8. Security and Compliance: Ensures data security and compliance with relevant regulations by managing user permissions, data encryption, and audit logs.

The Database module is the backbone of our website, providing a structured and secure way to handle vast amounts of data necessary for smooth and efficient operations.The database consists of overall information regarding the user and the admin stores the data about new users and already existing users and checks the user by using constraints like mobile number and email ID**.** It also stores the plant's information and updates the related information for future purposes.

7. CONCLUSION:

In conclusion, the E-Nursery website serves as a comprehensive and user-friendly platform designed to revolutionize the plant shopping experience. With essential pages like the index, Contact Us, About Us, and Register/Login, it ensures a seamless and engaging user journey.

The index page provides an intuitive starting point, showcasing the diverse range of plants and gardening accessories available for purchase. The Contact Us page facilitates easy communication, allowing customers to seek assistance and share their inquiries, fostering a community of plant enthusiasts. The About Us page offers insights into the mission and values of the platform, highlighting its commitment to nature, sustainability, and supporting local nurseries and growers. Finally, the Register/Login page ensures secure access to personalized features, enabling customers to manage their profiles, track orders, and enjoy a tailored shopping experience.

The proposed system can ensure the privacy of the customer's data, and make secure payments through different payment schemes like credit card, debit card, UPI/QR, or net banking and they can even make the cash on delivery. The customers can view the plants on the website and can compare the pricing ranges between different types of plants. They can purchase their desired plants by securing them in their carts. We also include a service where the customer can receive the bill receipt after payments.

By integrating these essential components, the E-Nursery website not only simplifies the plant shopping process but also nurtures a passion for gardening and sustainable living, making it a valuable resource for all plant lovers.

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