

AYUSH Virtual Herbal Garden

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Abstract: *The virtual Herbal Garden is an immersive digital platform designed to educate and engage users' indices world of medicinal plants. AYUSH(Ayurveda, Yoga Naturopathy, Unani, Siddha, and Homeopathy) practices. The garden Features an interactive map that categorizes plants into different AYUSH traditions, offering detailed profiles. High-quality visuals, and audio description. This platform allows them to explore and the learn about various medicinal plant, their properties, uses and cultural importance. This platform also provides a features like ratings, feedback and comments about any favourite plant. Users will be notified to Stay connected to the application.*

Keywords: Herbal Garden.

I. INTRODUCTION

The Virtual Herbal Garden is an innovative digital platform that replicates the experience of real herbal garden through virtual technology. It allows users to explore various medicinal plants and herbs from different parts of the world without leaving their location. The platform offers detailed information about each plant, including its uses, benefits and cultivation methods. By interacting with interactive features, users can learn about herbs in a more engaging and educational way. This virtual garden aims to promote awareness of herbal medicine, preserve plant diversity, and provide accessible learning resources for those interested in natural healing. It also supports research and education by creating a virtual space where users can simulate plant growth and experiment with different gardening techniques.

The AYUSH Ministry was formed in 2014 by the Government of India to promote the development, research, and practice of alternative medicinal systems that have deep roots in Indian culture. The ministry focuses on the promotion of Ayurveda, yoga, Unani, Siddha and Homeopathy as health systems and encourages their integration into healthcare practices across the country. The government focus on these traditional systems aims to offer more holistic and natural healthcare options, especially in rural areas.

The Ayush Virtual Herbal Garden Project represents an innovative approach to bridging technology and traditional herbal knowledge, focusing on enhancing awareness, preservation, and accessibility of medicinal plants. With the rising interest in alternative medicine and the urgent need to conserve biodiversity, this project aims to create a digital platform that serves as a virtual herbal garden, providing users with detailed information about a wide range of medicinal plants. Leveraging advancements in information technology, the project develops an immersive and interactive experience that allows users to explore

the various medicinal plants in a virtual environment. It incorporates high-quality imagery, detailed plant descriptions, and medical benefits, along with the traditional uses of herbs, as documented in ancient medicinal texts and modern-day research. The project seeks to offer a user-friendly interface for students, researchers, and herbal medicine practitioners to understand their ecological importance.

II. LITERATURE SURVEY

The AYUSH Virtual Garden is an online platform designed to teach users about medicinal plants used in traditional healing systems like Ayurveda, Yoga, and Homeopathy. It offers a digital garden where users can explore plant details,

learn about their uses. And interact with them in an engaging way. The platform uses advanced technologies like AI and Machine learning to help users identify plants, get personalized recommendations, and experience virtual gardening. The Project is still developing, with plans to add features like Mobile apps augmented reality, and wearable health device integration in the future. The Goal is to make traditional healing knowledge more accessible and encourage natural, holistic health practices.[1].

The virtual Herbal Garden Project is an online platform designed to teach users about medicinal plants used in traditional AYUSH systems (Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy). Using 3D models and multimedia tools like images and videos, the platform offers an interactive and immersive experience where users can explore different plants, learn about their medical uses, cultivation methods, and more. Developed using Unity 3D, the garden allows users to navigate through a virtual environment and access detailed plant information. The project aims to make learning about medicinal plants more engaging and accessible, overcoming the limitations of traditional, static resources. The platform is designed to be user-friendly and educational, with features planned to enhance it further with virtual reality and more interactive features[2].

III. PROPOSED APPROACH

There are total 3 modules such as

- User Module
- Plant information
- Purchase Plant
- Search
- User Feedback and Ratings
- Notification and alert
- Admin

The Process of Using the Ayush Virtual Herbal Garden begins with the user. Initially, the system checks whether the user is registered in the platform.

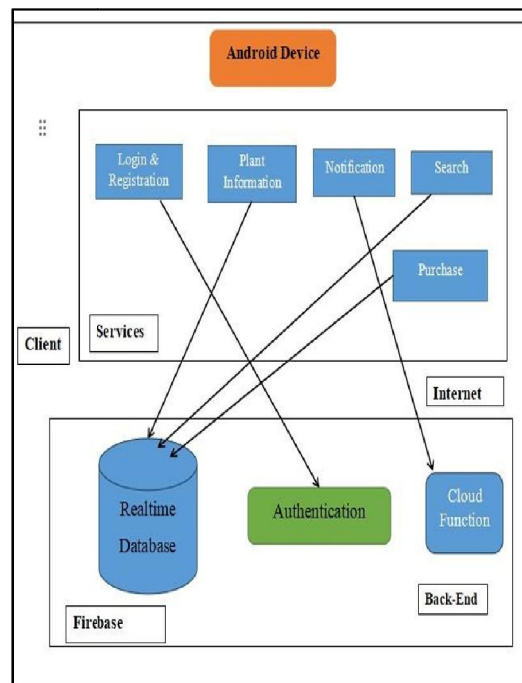


Figure 1- System Design

If the user is not registered, they are prompted to sign up. Once the user has completed the registration process, they can log in to access the platform. After successful login, the user is directed to the home screen, which serves as the central

hub for navigation. From the home screen, users can access several key functionalities, including the ability to search For specific plants and view detailed information about them, make purchases of plants available on the platform, and receive updates inand notifications regarding the latest activities or plant availability. When the user selects a plant, detailed information about that particular plant is displayed.

The system also integrates cloud functions to handle background tasks and processes efficiently. Additionally, the platform relies on a Realtime Database (RDB) to store and retrieve essential data, such as user details.

Plant information, and purchase history, ensuring smooth and responsive interactions across the platform.

IV. CONCLUSION

In conclusion, the virtual Herbal Garden Android Application offers a comprehensive platform for learning about AYUSH medicinal plants.

By combining traditional knowledge with modern technology, this project promotes awareness, conservation, and education.

With its User-friendly interface, interactive features, and standardized information. This app has the potential to revolutionize access to AYUSH medicinal plant knowledge.

The AYUSH Virtual Herbal Garden project helps make information about medicinal plants more accessible to everyone. it creates an online space where people can easily learn about the different herbs their uses, and how to grow them. This project combines traditional knowledge with modern technology.

Making it easier for people, researches, and health professional to explore and use herbal remedies. it also helps preserve ancient herbal wisdom and brings it into today's healthcare practices.

REFERENCES

- [1]. Harshal Jagdish Lanke, Harshada Thorat, Ayush Katkar, Pooja Dumbre, Swati Singh "Ayush Virtual Garen" IJFMR.
- [2]. Hemalatha S M, Navabharathi J, Mathivanan G, Shivapriyan A S " Virtual Garden for Ayurvedic Plants" IJIRT Volume 11 Issue 6