SMART INDIA HACKATHON 2024



TITLE PAGE

- Problem Statement ID SIH1555
- Problem Statement Title Creating a Virtual
 Herbal Garden
- Theme MedTech/HealthTech
- PS Category Software
- Team ID –
- Team Name Code Hunterz





IDEA TITLE



Proposed Solution (Describe your Idea/Solution/Prototype)

- **Increased Accessibility**: Provides access to medicinal plant knowledge from anywhere, overcoming limitations of physical gardens.
- Interactive Learning: Offers 3D models of plants for detailed exploration, including rotation and zoom features, enhancing user engagement and understanding.
- Comprehensive Information: Delivers detailed profiles on each plant, covering botanical names, medicinal uses, habitats, and cultivation methods.
- Multimedia Integration: Enriches learning with high-quality images, videos, and audio descriptions, catering to various learning preferences.
- **User Engagement Features**: Enables users to bookmark favorites, take notes, and share content on social media, fostering community interaction and personalized learning.



TECHNICAL APPROACH



- Technologies:
 - JavaScript for interactive features and 3D models
 - HTML/CSS for webpage structure and styling
 - Python for backend data handling
- Frameworks:
 - Three.js For creating and rendering 3D models
 - Node.js For backend server and API development





FEASIBILITY AND VIABILITY



Potential Challenges:

- Complexity of 3D models: Creating realistic and interactive 3D models may be technically demanding.
- Data Accuracy: Ensuring accurate and comprehensive plant information can be resource-intensive.

Possible strategies for Challenges:

- Utilize Existing Resources: Leverage pre-built 3D models and libraries to streamline development.
- Feasibility Analysis: The project is viable due to growing interest in AYUSH digital education, accessible advanced technologies for 3D modeling and web development, artificial intelligence, and the availability of machine learning, with potential for monetization and user acceptance.



IMPACT AND BENEFITS



- Impact on Target Audience:
 - •Enhanced Education: Provides students, practitioners, and enthusiasts with a comprehensive and interactive tool for learning about medicinal plants in AYUSH.
 - •Increased Accessibility: Makes knowledge about medicinal plants accessible to a global audience, regardless of physical location.
- Benefits of the Solution:
 - •Immersive Learning Experience: Engages users with interactive 3D models, multimedia content, and virtual tours, improving understanding and retention.
 - •Comprehensive Information: Offers detailed plant profiles and educational resources, supporting better-informed decisions in traditional and holistic medicine.



RESEARCH AND REFERENCES



- React Native
- JavaScript
- Internet
- Python
- VS Code
- Machine Learning
- NFT's and Cryptocurrency
- AYUSH