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Indigenous Heritage Hub

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Abstract: In India, a wide variety of monuments and literal spots are dispersed throughout the nation, artistic heritage protection has lately gained significance. This study introduces a web operation for monument discovery powered by SUPPORT VECTOR MACHINE (SVM) that provides a variety of rudiments that will prop in guarding India's artistic heritage. SVM are used by the website as the deep literacy technology to precisely fete and classify monuments grounded on photos that stoner's input. It also provides a number of helpful features, similar as original information like tabernacle, culture and other information for druggies at the monument point. When visiting literal places, these aspects help to give guests a more thorough and immersive experience. The issues demonstrate how effective the SVM-grounded web operation is at classifying monuments. A sizable collection of images of notorious spots in India were used to test the proposed system. The system may be used for artistic preservation, tourism, and education.

Keywords: Support Vector Machine, Heritage, Culture, Web Operation

I. INTRODUCTION

The heritage of Thanjavur is rich and diverse, encompassing centuries of history, art, and culture. Situated in Tamil Nadu, India, Thanjavur is renowned for its magnificent temples, exquisite architecture, and vibrant traditions. The city's cultural significance is deeply rooted in its contributions to classical music, dance, and literature, with notable figures such as the legendary Carnatic composer Tyagaraja. Thanjavur's heritage also extends to its remarkable craftsmanship, including the world-famous Thanjavur paintings and intricately carved bronze sculptures. The region's cultural landscape is further enriched by its culinary traditions, festivals, and rituals, which reflect the synthesis of various influences over time. Additionally, Thanjavur is home to UNESCO World Heritage sites such as the Brihadeeswarar Temple, a masterpiece of Dravidian architecture.

The heritage of Thanjavur serves as a testament to the ingenuity and creativity of its people, preserving ancient traditions while embracing modern innovations. Through the proposed digital platform, users will have the opportunity to explore and learn about Thanjavur's endangered heritage, ensuring that its rich cultural legacy continues to be celebrated and cherished for generations to come. The culture of Thanjavur is a vibrant tapestry woven with diverse traditions, arts, and customs. Located in Tamil Nadu, India, Thanjavur boasts a rich heritage spanning centuries. Central to its culture are its deeply rooted religious practices, with temples like the Brihadeeswarar Temple playing a significant role. Thanjavur is renowned for its classical music and dance forms, such as Bharatanatyam, which are integral to its cultural identity.

The city is also celebrated for its literary heritage, with Tamil literature flourishing under royal patronage. Thanjavur's artistic legacy is exemplified by the intricate Thanjavur paintings and the skilled craftsmanship displayed in its bronze sculptures. Festivals like Pongal and Tamil New Year are celebrated with great fervor, showcasing the community's vibrant spirit. Culinary traditions are another hallmark of Thanjavur's culture, with dishes like sambar, dosa, and idli delighting palates worldwide. The people of Thanjavur take pride in their heritage, preserving ancient customs while embracing modernity. Through the digital platform, users will have the opportunity to delve into the depths of Thanjavur's culture, ensuring that its rich tapestry is safeguarded and shared with future generations.

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II. LITERATURE SURVEY

Monument Recognition using Deep Neural Networks, Siddhant Gada, Prof. Purva Raut, Viraj Mehta, Chahat Jain, and Karan Kanchan. In their effort, they use the Inception v3 deep learning architecture model to categorize famous Monuments of India. This architectural design consists of numerous distinct layers with the peculiar property of continuously analyzing the dataset and providing a better model

A Monument Recognition Mobile App ,V.Palma. The application's fundamental idea depends on deep learning techniques, particularly convolutional neural networks. The programme can identify architectural objects by using convolutional neural network algorithms.

"NU-LiteNet: Mobile Landmark Recognition using Convolutional Neural Networks, Chakkrit Termritthikun, Raisarn Muneesawang, and Surachet Kanprachar. They describes a new CNN model, called NU-LiteNet, which is designed to improve accuracy and reduce the **size** of the model for mobile applications. The authors conducted experiments on two datasets, one with images of Singapore landmarks and the other with images of Paris landmarks, and compared the results with those of other models, including AlexNet, GoogLeNet, and SqueezeNet. They found that NU-LiteNet achieved promising accuracy scores than the other models, while also being smaller in size. The authors also developed an Android application using NU-LiteNet for mobile landmark recognition.

Cathedral and Indian Mughal Monument Recognition using Tensorflow, Ajay Kumar Mallicka, VikashYadav, AniketNinawe, Hifzan Ahmad, Sah, Cornel Barna and Dinesh Kumar. The paper presents a study on the recognition of cathedrals and Indian Mughal monuments using TensorFlow, a popular machine learning framework. The authors likely explore the application of deep learning techniques for automated recognition and classification of these architectural structures from images.

III. WEB DEVELOPMENT

Web development involves the creation of dynamic and interactive websites or web applications, typically using a combination of programming languages and technologies. HTML (Hypertext Markup Language) forms the backbone of web development, providing the structure and content of web pages. It defines the various elements and their layout on a webpage. CSS (Cascading Style Sheets) complements HTML by styling the content, controlling its presentation, and enhancing the overall visual appeal of the website.PHP (Hypertext Pre-processor) is a server-side scripting language commonly used for web development. It operates on the server, generating dynamic content that is then sent to the client's web browser. PHP can interact with databases, handle form submissions, and perform various backend tasks, making it an integral part of the web development process.

MySQL is a popular open-source relational database management system (RDBMS) frequently used with PHP for backend development. It stores and organizes data in tables, allowing for efficient data retrieval and manipulation. In a typical web development workflow, HTML and CSS are responsible for creating the user interface and defining its visual appearance. PHP scripts handle dynamic content generation, database interactions, and server-side processing. MySQL stores and manages the website's data, ensuring its persistence and accessibility. Together, these technologies enable the creation of dynamic, data-driven websites capable of delivering personalized content and interactive user experiences. The separation of frontend (HTML/CSS) and backend (PHP/MySQL) concerns allows for modular development, easier maintenance, and scalability of web applications. Moreover, this stack offers flexibility, robustness, and security, making it a preferred choice for building a wide range of web solutions, from simple blogs to complex e-commerce platforms.

IV. ALGORITHM

SVM ALGORITHM

Support Vector Machine (SVM) is a important supervised machine learning algorithm used for bracket tasks. It works by chancing the stylish possible hyperplane or decision boundary that separates different classes in the data space. SVM aims to maximize the periphery, which is the distance between the hyperplane and the nearest data points from each class, making the bracket more robust. The data points closest to the hyperplane are called support vectors and play a pivotal part in defining the separating boundary. SVM can handle direct andnon-linear bracket tasks through the use of different kernel functions like polynomial, radial base function(RBF), and sigmoid.

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V. PROPOSED SYSTEM

The Indian Culture Management System is a web operation that aims to save, promote and the vibrant Indian culture and heritage. With it's features, this system empowers druggies to explore and learn about aspects of Indian traditions, art forms, carnivals, literal milestones and artistic events. It also facilitates exchange among people from colorful backgrounds. It's stoner-friendly interface allows navigation and access to a depository of artistic information. The system caters to a range of druggies similar as scholars, experimenters, excursionists and anyone exploring India's rich artistic heritage.



Figure1 System Architecture

VI. CONCLUSION

The Indian Cultural Management System is a web operation that includes information about different societies and practices that are present across Thanjavur. It's a stoner-friendly interface that enables druggies to learn about different societies of Thanjavur. This ensures mindfulness of the diversity that prevails in our country druggies of this website include, but aren't limited to travel bloggers, explorers, event directors, NRIs andartists.

VII. FUTURE SCOPE

- **Comprehensive database:** It contains a vast database that contains information about different societies and practices.
- Interactive Learning: Druggies can learn about different societies from vids, flashcards, interactive quizzes, delightful games.
- Event Management:
- This provides druggies with information about different events taking place in different locations.
- User benefactions: This enables druggies to partake details about their own societies and experiences.
- Cultural Exchange: This platform facilitates druggies to communicate by offering discussion forms, virtual meetings.
- Localization: This platform can be penetrated by everyone across the country as it'll be available in numerous different and effective languages.
- Search and Navigation: Hunt functionality enables druggies to recoup information about societies, events and all other fluently. This makes the website stoner- centric and effective.

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