TRAVEL AND TOURISM MANAGEMENT SYSTEM

A Minor Project Synopsis Submitted to

Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal
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1. Abstract

This project "TRAVEL AND TOURISM MANAGEMENT SYSTEM" is used to automate all process of the travel and tourism, which deals with creation, booking and confirmation and user details. As travel and tourism became an essential part of our lives in recent world so it is required to organize things in a way that everything should be available at one place this website will help the user to know all about the places and tour details in a single website. The admin can add packages to the website and hotels by a tour page. Then the users can sign in and book each project, they can be confirmed by the admin in their managebooking page. The user can see the confirmation in my booking page. It is an easiest platform for all travelers which can be easily booked and know the all details.

2. Introduction of the Project (1 paragraph)

Tourism is the largest and fastest-growing industry across the world. It gives the opportunity for people to understand the culture, civilization, and religious aspects of a country. Travel and tourism management system is used to book a tour from anywhere in the world by a single dynamic website which will help the user to know all about the places and tourdetails in a single website. The admin can add packages to the website from a certain travel agents and hotels by create a tour page. Then the users can sign in and book each project, they can be confirmed by the admin in their manage booking page. The user can see the confirmation in their my booking page. It is a easiest platform for all travelers which can be easily booked and know the all details.

3. Objective (100 words)

- With Travel and Tourism becoming an important area of activity, there is a need of management systems which organize things in proper manner.
- Our website will be promoting travel and tourism and tourism related activities such as cultural shows, fairs and festivals etc.
- The purpose is to develop a system using which one can perform all the operations related to travelling.
- Nearly Everyone goes on a vacation for this 'a Tourism management system' would play a vital role in planning the perfect trip.
- It is a easiest platform for all travelers which can be easily booked and know the all details and management system organize things in well-designed manner.

4. Scope (100 words)

The growth in the tourism industry has increased the lucrative career opportunities because it solely depends on human resources. It is also the highest-earning source for foreign exchange across the globe, and it includes everything from government to private departments. Tourism Management is all about travel, and tourism planning for tours as per the customer's interest. It involves accommodation, transportation, food, events, conferences, and other trade-related activities. Our website will provide everything at one place so the user don't have to worry about much.

5. Study of Existing System (200 words)

Name	Description	Merits	Demerits	Reference

Super-Fish	**A Mobile Application for Fish Species Recognition Using Image Processing Techniques and Deep Learning.** People from all around the world face problems in the identification of fish species and users need to have access to scientific expertise to do ,so an innovative smartphone application has been developed for the identification of fish species that are commonly found in the lagoons and coastal areas, including estuaries and the outer reef zones of Mauritius.	- Eventually, having an automated means to identify fish species would prove to be a real advantage to different stakeholders namely the government, marine managers, fish farmers, fisherman, fish mongers, boat owners, seafood industrialists, marine biologists, oceanographers, tourists, students and to the public at large. Tourism is one of the pillars of economy and marine ecotourism a growing sector, with sustainable ecotourism a new trend to be adopted. Such knowledge on fish species will be useful to tourists in the context of promoting marine ecotourism.	The number of fish species in the dataset is less which is to be increased to improve the better identification of fish species and to tackle the challenging issues such as partial occlusions and pose variations through the use of more powerful deep learning architectures.	https://journal.uob.edu.bh/handle/123456789/4007
Fish identification from videos captured in uncontrolled underwater environments	Underwater video-based surveying is being more widely deployed due to the low-cost of digital video cameras and possibilities to verify the estimates at a later point in time, based on video recordings. Proposed a framework for this purpose based on state-of-the-art algorithms for tracking and image set classification. The actual tracking and image set classification algorithms used in this work can be replaced by other algorithms without the need for modifying the presented framework.	The image level accuracy is higher than set level accuracy indicating that most mis-classifications happened for small sized test image sets. In practice, the method will deliver improved classification accuracy for higher frame rate videos as more image patches can be obtained for the same fish as a result of tracking.	A closer inspection of the results revealed that problematic cases arose when the illumination was quite poor. To analyse the effect of the number of images in the test set, the experiment was repeated using test set size thresholds. Underwater video systems have shown to	https://academic.oup.com/icesjms/article/73/10/2737/2647103?login=false.

			be cost effective, accessible, and provide a means of repeatable sampling of fish populations.	
Analysis of color feature extraction techniques for Fish Species Identification.	This case study presents some experimental results regarding the use of five different feature extraction techniques to the problem of fish species identification. The feature extractors tested are the Bag of Visual Words (BoVW), the Bag of Colors (BoC), the Bag of Features and Colors (BoFC), the Bag of Colored Words (BoCW), and the histograms HSV and RGB color spaces. The experiments were performed using a dataset, which is also a contribution of this work, containing 1120 images from fishes of 28 different species. The feature extractors were tested under three different supervised learning setups based on Decision Trees, K-Nearest Neighbors, and Support Vector Machine. From the attribute extraction techniques described, the best performance was BoC using the Support Vector Machines as a classifier.	The problem of the background of the image has no significant impact on the description of the images when the color is used. This is because, given a set of images relating to a species of fish belonging to a specific aquarium, the background of the images tends to have the same colors since the lighting and the aquarium are the same.	The BoFC presented a good result compared to the techniques that use color in the description of the images. Although the same problem was found in the use of points of interest is found in the BoFC, inserting color into the description has attenuated the problem. To improve this,other types of attribute extraction techniques and also deep learning.	https://www.researchgate.net/publication/346632287_Analysis_of_color_feature_extraction_techniques_for_Fish_Species_Identification

DNA barcoding for fish species identification	DNA barcoding seems to be a promising approach for discovery of newer fish species, taxonomic identification, characterization and facilitating biodiversity studies. It supports researchers to appreciate genetic and phylogenetic associations by collection of molecular, morphological, and distributional data. Fish DNA barcoding is based on the sequencing of a uniform area of Cytochrome C Oxidase type I (COI) gene, has received significant interest as an accurate tool for species identification, authentication, and phylogenetic analysis. The aim of this review article is to investigate recent global status, approaches, and future direction of DNA barcoding in fisheries. DNA barcoding works under the principle that inter-species variations are greater than the intraspecies variations, allowing one to distinguish the species using nucleotide sequences.	Effective tool in assessment of cryptic species, can be used to quickly and accurately identify the invasive alien species (IAS) and prompt preventive measures with subsequent regulatory control can be initiated,can be used as an important tool for identification, authentication and safety assessment of sea food, particularly for processed, cooked or smoked products. DNA barcodes are also used to detect food fraud and products taken from conserved species.	Low resolutions in the cases of recently diverged species, high rates of intraspecific divergence reported in geographically isolated populations, species complexes and hybrids. Some researchers highlighted the presence of pseudogenes and mitochondrial introgression, reproductive isolation of the biological species is difficult to investigate.	https://www.faunajournal.com/archives/2020/vol7issue4/PartB/7-3-14-408.pdf
Fish species identification using a convolutional neural network trained on synthetic data	This method uses a novel technique based on Convolutional Neural Networks, Deep Learning and Image Processing, it ensures considerably discrimination accuracy improvements than the previously proposed methods. Fish species recognition is a multi-class classification problem, the state-of-the-art algorithms implemented over individual input images which perform classification mainly using shape and texture feature extraction and matching.	The proposed method of the classification of fish species gives an accuracy of 96.29% which is very high compared with the other current implemented methods used for this application. Hence the proposed approach can certainly be used for real time applications as the computation time is 0.00183 seconds per frame.	The method couldn't achieve 100% accuracy as some images couldn't be classified accurately due to the effect of background noise and other water bodies. We plan to improvise algorithm further by implementing	https://arxiv.org/ftp/arxiv/papers/1805/1805.10106.pdf

	The proposed method uses Convolutional Neural Networks which makes the process simpler and more robust even while working with a large dataset. CNNs are also much more flexible and can adapt to the new incoming data as the dataset matures. The classification is done by pre-processing the images using Gaussian Blurring, Morphological Operations, Otsu's Thresholding and Pyramid Mean Shifting, further feeding the enhanced images to a Convolutional Neural Network for classification.		Image Enhancement techniques to counter for the lost features in the images.	

6. Project Description (200 words)

The proposed system is designed to be more efficient than the manual system. It invokes all base tasks that are now carried out manually, such as the forms transactions and reports which is added advantage. The proposed System is completely computer-based application. Thousands of records can searched and displayed without taking any significant time

Advantages of the Proposed System

- Gives accurate information
- Simplifies the manual work
- It minimizes the documentation related work
- Provides up to date information
- Friendly Environment by providing warning messages.
- travelers details can be provided
- booking confirmation notification

7. Methodology/Planning of the Project work (200 words)

First of all we will develop a website for out work. On that website we will have the following features –

Admin authentication - This module is mainly based on admin. System will check the admin user name and password for authentication. After the verification for authorization the admin can be able to precede the process. All works are done under his control.

User Registration – This module covers the details about the registration of users which they can be register by itself by adding data like name, password, email id and further details. After registration they can be sign in by their username and password.

Package Creation - The admin can create packages by creating package page which the type, price, details, place details all the travel tour package details can be added here. Which it will be showed in user homepage.

Package booking - In this module maintain the booking of travel packages by the user by selecting a various packages with date and certain comments.

Booking confirmation/manage - Booking confirmation is the process of confirming the booked packages by the admin that is booked by the user with date and comment. Also admin can manage the booking by cancelling.

Issue ticket - Tickets can be issued for the user in the issue ticket page in the homepage of user the certain booked packages only can be issued.

8. Expected Outcome (100-150 words)

Major fishes and there species are covered in this project so when a user is trying to find a species or information related to a specific fish it would become really easy to do it just by uploading a clear picture of that fish. The identification of fish species and users need to have access to scientific expertise to do ,so an innovative smartphone application has been developed for the identification of fish species that are commonly found in the lagoons and coastal areas.
.Identification of fishes helps in the export of processed edible fishes as the buyers are very conscious about the correct fish identification along with their scientific and popular names.
Biological diversity is being lost as species go extinct, and it is only by understanding species that we can shape the social, political, and financial forces that affect conservation efforts.
With the help of this program a user can finds so many things about fishes just by uploading a photo such as its species its scientific name, Region and countries in which that particular fish is found.

9. Resources and Limitations (150 words)

Here, User can check package details easily as all the packages are divided into sub category. User can Book packages online. Admin can Add/Update/Delete – Users, Category, Sub Category, Packages. Admin can also Add Advertisements To the site and Delete / Update it if they want & admin can view all the enquiry. The design of this project is pretty simple and user won't find it difficult to understand, use and navigate.

TECHNOLOGY-

Front end: HTML, CSS, JavaScript

1. HTML: HTML is used to create and save web document. E.g. Notepad/Notepad++
2. CSS : (Cascading Style Sheets) Create attractive Layout
3. Bootstrap : responsive design mobile freindly site
4. JavaScript: it is a programming language, commonly use with web browsers.

Back end: PHP, MySQL

1. PHP: Hypertext Preprocessor (PHP) is a technology that allows software developers to create dynamically generated web pages, in HTML, XML, or other document types, as per client request. PHP is open source software.
2. MySQL: MySql is a database, widely used for accessing querying, updating, and managing data in databases.

OPERATING SYSTEM : Windows 7 or Above.

Basic software programs-
Basic Text or HTML Editor, Web Browsers, Graphics Editor, FTP Client-Need an FTP (file transfer protocol) client to transfer your HTML files and supporting images and graphics to your web server.
Hardware Requirements:
Processor: Minimum 1 GHz; Recommended 2GHz or more.
Ethernet connection (LAN) OR a wireless adapter (Wi-Fi).
Hard Drive: Minimum 32 GB; Recommended 64 GB or more.
Memory (RAM): Minimum 1 GB; Recommended 4 GB or above.
Backup Drive- Have backup drive for your computer to ensure that you don't lose the investment you've made in your computer.

There is a limitation as there are so many species are found in our oceans so it is really difficult to create a database with all of them so we have tried to cover the major species under our project.

10. Conclusion (100-150 words)

In the last decade various attempts have been made to identify species of fishes but as technology is increasing interest of peoples are also shifting no one like to read about fishes from classical textbooks viewing just 1-2 photograph. So this is more of a technical approach to create interest among students in aquatic life and also to help fishermen community to get more accurate price for their products. .Identification of fishes helps in the export of processed edible fishes as the buyers are very conscious about the correct fish identification along with their scientific and popular names. Correct scientific name of any organism on which one is going to work is a prerequisite for anyone before starting his biological research. Biological diversity is being lost as species go extinct, and it is only by understanding species that we can shape the social, political, and financial forces that affect conservation efforts.

11. References

Mention the sources referred for the study and development of the project. References include literature, books, websites or any other kind of resource directly or indirectly referred for development of project and its report. All the references should be listed in **IEEE format.**