A COCKTAIL APPROACH FOR TRAVEL PACKAGE RECOMMENDATION

A main project Submitted to Annamalai University in partial fulfillment of the requirements for the Award of the degree of

BACHELOR OF COMPUTER APPLICATIONS

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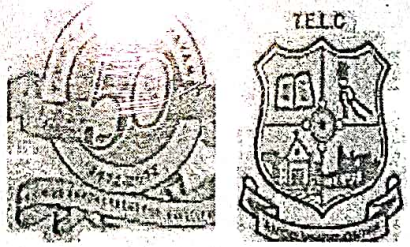

DEPARTMENT OF COMPUTER SCIENCE

TRANQUEBAR BISHOP MANIKAM LUTHERAN COLLEGE (TBMLC)

PORAYAR

APRIL-2024

DEPARTMENT OF COMPUTER SCIENCE

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VIVA-VOCE EXAMINATION

The viva-voce Examination of this project work has held on 06-04-2024

06/04/24.
INTERNAL EXAMINER

6/4/24
EXTERNAL EXAMINER

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CHAPTER- I

INTRODUCTION

Tourism is most favored activity when people have free time. Many tourism facilities are provided by many organizations. The people or the tourist chooses his own travel package according to his personal interest. The travel companies focus on the interest of tourist so that to increase their market value and provide huge packages. So there is needed to make travel package more effective. Recommender systems are a developing area and attraction towards it is growing day by day. Through recommender systems the number of product recommendation are achieved while dealing with customer.

1.1 HISTORY OF DATAMINING

Data mining is the computational process of discovering patterns in large data sets involving methods at the intersection of artificial intelligence, machine learning, statistics, and database systems. It is an interdisciplinary subfield of computer science. The overall goal of the data mining process is to extract information from a data set and transform it into an understandable structure for further use. Aside from the raw analysis step, it involves database and data management aspects, data pre-processing, model and inference considerations, interestingness metrics, complexity considerations, post-processing of discovered structures, visualization, and online updating. Data mining is the analysis step of the "knowledge discovery in databases" process, or KDD.

The term is a misnomer, because the goal is the extraction of patterns and knowledge from large amounts of data, not the extraction (mining) of data itself. It also is a buzzword and is frequently applied to any form of large-scale data or information processing (collection, extraction, warehousing, analysis, and statistics) as well as any application of

computer decision support system, including artificial intelligence, machine learning, and business intelligence.

The actual data mining task is the automatic or semi-automatic analysis of large quantities of data to extract previously unknown, interesting patterns such as groups of data records (cluster analysis), unusual records (anomaly detection), and dependencies (association rule mining, sequential pattern mining). This usually involves using database techniques such as spatial indices. These patterns can then be seen as a kind of summary of the input data, and may be used in further analysis or, for example, in machine learning and predictive analytics. For example, the data mining step might identify multiple groups in the data, which can then be used to obtain more accurate prediction results by a decision support system. Neither the data collection, data preparation, nor result interpretation and reporting is part of the data mining step, but do belong to the overall KDD process as additional steps.

1.2 MOTIVATION

In E-commerce the recommender system are having great victory. Recommender systems are categories. Content based system is item recommendation in analyzed. It retrieves the information and filters it for research. For ex if a tourist goes to hill stations many times then database contains "hill station" as recommendation. Collaborative filtering systems - it rely on the similar factors of user and or items. Preferences of different users for same item are recommended by system. Personalized travel package has many challenges while designing and executing the recommended system. First, the travel data are less and scattered for an example recommendation for movie may cost more to travel than its price. Second, usually travel package are location based so they are said to be spatial or temporal for example the package contains locations which are geographically near. And

these packages vary season vise. Third, the old recommendation system depends on rating and the travel data may not contain such rating.

1.3 AIM OF THE PROJECT

To overcome this challenge the cocktail approach is introduced. It analyzes different characteristics of exiting package. Then develop the tourist area season topic (TAST) model which represents packages. Cocktail approach has some extra factors like season and pricing for recommending personal travel package.I extend the TAST model to the tourist-relation-area-season topic (TRAST) model for capturing the latent relationships among the tourists in each travel group. Finally, I evaluate the TAST model, the TRAST model, and the cocktail recommendation approach on the real-world travel package data. Experimental results show that the TAST model can effectively capture the unique characteristics of the travel data and the cocktail approach is, thus, much more effective than traditional recommendation techniques for travel package recommendation. Also, by considering tourist relationships, the TRAST model can be used as an effective assessment for travel group formation.

CHAPTER- VIII

CONCLUSION AND FUTURE WORK

8.1 CONCLUSION

There is need to understand the different sets of users interest to provide a suitable package. While recommending the travel package different topics and related information is analyzed. Then develop the TAST model which outputs the topic and season recommendation. It finds the tourist interest for recommending package. It also discovers tourist interest and gives the spatial-temporal correlations for landscapes. The TAST model is utilized to build cocktail approach for personalized recommendation for travel package. The cocktail approach is based on hybrid recommendation strategy. TAST model is extended to TRAST model which acquire the relations between tourists in each group. TRAST model is used for effective analysis of automatic formation.

8.2 FUTURE WORK

In future, I extended the TAST model to the TRAST model, which can capture the relationships among tourists in each travel group. Finally, an empirical study was conducted on real-world travel data. Experimental results demonstrate that the TAST model can capture the unique characteristics of the travel packages, the cocktail approach can lead to better performances of travel package recommendation, and the TRAST model can be used as an effective assessment for travel group automatic formation. I hope these encouraging results could lead to many future work.

HOSTEL MANAGEMENT SYSTEM

(Frontend Admin Module)

A main project Submitted to Annamalai University in partial fulfillment of the requirements for the Award of the degree of

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VIVA-VOCE EXAMINATION

The viva-voce Examination of this project work has held on 06-09-2024

INTERNAL EXAMINER

EXTERNAL EXAMINER

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CHAPTER 1

INTRODUCTION

1.1 ABOUT THE PROJECT

Hostel management using Flutter is a software project that involves developing a mobile application to automate and streamline various hostel management tasks. The project will use Flutter, an open-source mobile application development framework, to build a cross-platform application that can be used on both Android and iOS devices.

The primary objective of the project is to provide hostel management staff with an easy-to-use application that can help automate various tasks, such as guest check-in and check-out, room allocation, reservations management, billing and invoicing, and inventory management. The application will provide an intuitive user interface that can be used to access information quickly and easily.

The application will also provide various features to enhance the guest experience, such as online reservations, room availability tracking, and online payments. It will be integrated with various payment gateways and accounting software to enable real-time financial tracking.

The project will involve several stages, including requirements gathering, design, development, testing, and deployment. The requirements gathering stage will involve working closely with hostel management staff to identify their specific needs and requirements. The design stage will involve creating wireframes, user interfaces, and other design elements.The development stage will involve coding the application using Flutter, integrating various APIs and payment gateways, and building the necessary database infrastructure. The testing stage will involve various testing procedures, such as unit testing, integration testing, and acceptance testing, to ensure the application meets the required standards.

Finally, the deployment stage will involve launching the application on various app stores, such as Google Play and Apple App Store, and providing ongoing support and maintenance services.

CHAPTER 7

CONCLUSION AND FUTURE ENHANCEMENT

CONCLUSION:

In conclusion, building a hostel management application in Flutter can greatly streamline the management of hostel operations, from managing bookings and room assignments to tracking payments and maintaining customer records.

With the help of Flutter's intuitive and flexible user interface framework, developers can create a sleek and user-friendly application that can be easily integrated with other systems and services.

By leveraging the power of Flutter's widgets and plugins, developers can create a robust application that is cross-platform, meaning it can be used on both Android and iOS devices.

This enables hostel staff to access critical information and manage operations from anywhere, anytime.

Furthermore, Flutter's rich ecosystem of third-party libraries and tools provides developers with a wide range of options for building custom features and functionalities that meet the unique needs of their hostel management application.

Overall, building a hostel management application in Flutter can greatly improve the efficiency and effectiveness of hostel operations, leading to increased customer satisfaction and improved business outcomes.

using Flutter to develop a hostel management application can help streamline operations, improve efficiency, and enhance customer satisfaction. With Flutter's cross-platform capabilities and rich ecosystem of tools and libraries, developers can create a user-friendly, feature-rich application that can be accessed from anywhere.

Ultimately, a well-designed hostel management application can help hostel staff manage bookings, room assignments, payments, and customer records more effectively, leading to improved business outcomes.

FUTURE ENHANCEMENTS:

There are several potential future enhancements that could be implemented in a hostel management application built with Flutter. Some of these include:

Integration with third-party services: Integrating the hostel management application with third-party services like payment gateways or customer relationship management (CRM) systems can provide additional functionalities, such as online payments and better customer tracking.

Customizable dashboards: Customizable dashboards can help hostel staff access relevant information and data quickly and easily. These dashboards could be tailored to individual staff members or roles, with different levels of access and permissions.

Predictive analytics: Leveraging machine learning and predictive analytics can help hostel managers better forecast demand, optimize room assignments, and make informed decisions.

Mobile key integration: Integrating with mobile key technology could provide a seamless and secure way for guests to access their rooms, eliminating the need for physical keys or cards.

Voice-based assistants: Voice-based assistants, such as Amazon Alexa or Google Assistant, can help automate certain tasks or provide information and assistance to guests, improving their overall experience.

Overall, implementing these enhancements can help make the hostel management application more efficient, user-friendly, and valuable for both hostel staff and guests.

CHAPTER 9

BIBLIOGRAPHY

Tippie College of Business - The University of Iowa. (2022, March 1). How to Write a Bibliography. https://tippie.uiowa.edu/how-write-bibliography

ThoughtCo. (2016, June 23). How to Write a Bibliography For a Science Fair Project. https://www.thoughtco.com/write-bibliography-for-science-fair-project-4056999

Science Buddies. (2012, June 13). How to Write a Bibliography in APA and MLA styles With Examples. https://www.sciencebuddies.org/science-fair-projects/science-fair/writing-a-bibliography-examples-of-apa-mla-styles

Hostalite. (n.d.). Terms of Use. https://www.hostalite.com/terms-of-use/

Liutilities. (n.d.). How to Write a Bibliography for Internet Sources. https://www.liutilities.com/how-to/write-a-bibliography-for-internet-sources/

Title: Flutter in Action Author: Eric Windmill Published: 2020

Chapter 8 covers building a hostel management system in Flutter, including database integration and UI design.

Title: Flutter Cookbook Author: Flutter Team Published: 2019

Chapter 6 provides examples and recipes for handling forms and data entry, which are relevant for building a hostel management system.

Title: Flutter for Beginners: An introductory guide to building cross-platform mobile applications with Flutter and Dart Author: Alessandro Biessek Published: 2020

This book covers the fundamentals of Flutter development and can help you get started with building a hostel management system.

ADAPTIVE PROVISIONING OF HUMAN EXPERTISE IN SERVICE ORIENTED SYSTEMS

A main project Submitted to Annamalai University in partialfulfillment of the requirements for the Award of the degree of

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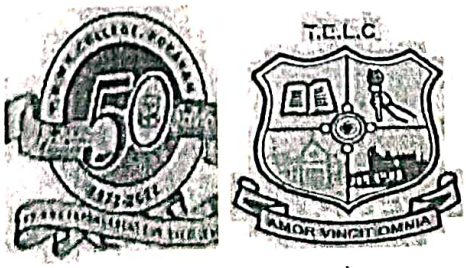

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VIVA-VOCE EXAMINATION

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INTERNAL EXAMINER

6/4/24

EXTERNALEXAMINER

CONTENT

ABSTRACT

Web-based collaborations have become essential in today's business environments. Due to the availability of various SOA frameworks, Web services emerged as the de facto technology to realize flexible compositions of services. While most existing work focuses on the discovery and composition of software based services, we highlight concepts for a people-centric Web. Knowledge-intensive environments clearly demand for provisioning of human expertise along with sharing of computing resources or business data through software-based services. To address these challenges, we introduce an adaptive approach allowing humans to provide their expertise through services using SOA standards, such as WSDL and SOAP. The seamless integration of humans in the SOA loop triggers numerous social implications, such as evolving expertise and drifting interests of human service providers. Here we propose a framework that is based on interaction monitoring techniques enabling adaptations in SOA-based socio-technical systems.

SYSTEM ANALYSIS

EXISTING SYSTEM:

While most existing work focuses on the discovery and composition of software based services, we highlight concepts for a people-centric Web. Knowledge-intensive environments clearly demand for provisioning of human expertise along with sharing of computing resources or business data through software-based services.

LIMITATIONS OF EXISTING SYSTEM

To address these challenges, we introduce an adaptive approach allowing humans to provide their expertise through services using SOA standards, such as SOAP.

PROPOSED SYSTEM:

The seamless integration of humans in the SOA loop triggers numerous social implications, such as evolving expertise and drifting interests of human service providers. Here we propose a framework that is based on interaction monitoring techniques enabling adaptations in SOA-based socio-technical systems.

ADVANTAGES OF PROPOSED SYSTEM

- These systems are characterized by both technical and human/social aspects that are tightly bound and interconnected.
- The technical aspects are very similar to traditional SOAs, including facilities to deploy, register and discover services, as well as to support flexible interactions.

CONCLUSION

This project work motivates the trend towards socio-technical systems in SOA. In such environments social implications must be handled properly. With the human user in the loop numerous concepts, including personalization, expertise involvement, drifting interests, and social dynamics become of paramount importance. Therefore, we discussed related Web standards and showed ways to extend them to fit the requirements of a people-centric Web. In particular, we outlined concepts that let people offer their expertise in a service-oriented manner and covered the deployment, discovery and selection of Human-Provided Services. In the future, we aim at providing more fine-grained monitoring and adaptation strategies.

The future work may aim at providing more fine-grained monitoring and adaptation strategies. An example is the translation service presented in this paper, where some language options are typically used more often, or even more successfully than others. In that case, data types could be modified to reduce the number of available language options in theWSDL interface description and to restrict input parameters. Harnessing delegation patterns that involve various participants, a complex social network perspective is established.

BIBLIOGRAPHY

Good Teachers are worth more than thousand books, we have them in Our Department.

REFERENCES MADE FROM:

1. Beginning ASP.NET 4: in C# and VB by *Imar Spaanjaars.*
2. ASP.NET 4 Unleashed by *Stephen Walther.*
3. Programming ASP.NET 3.5 *by Jesse Liberty, Dan Maharry, Dan Hurwitz.*
4. Data Communications and Networking, by *Behrouz A Forouzan.*
5. Computer Networking: A Top-Down Approach, by *James F. Kurose.*
6. Operating System Concepts, by *Abraham Silberschatz.*
7. Beginning ASP.NET 3.5 in C# 2008: From Novice to Professional, Second Edition by *Matthew MacDonald.*
8. Amazon Web Services (AWS), Online at http://aws. amazon.com.
9. Google App Engine, Online at http://code.google.com/appengine/.
10. Microsoft Azure, http://www.microsoft.com/azure/.
11. A. Agrawal et al. Ws-bpel extension for people (bpel4people), version 1.0., 2007.
12. M. Amend et al. Web services human task (ws-humantask), version 1.0., 2007.
13. D. Brabham. Crowdsourcing as a model for problem solving: An introduction and cases.
14. A. Cherns. The principles of sociotechnical design. *Human Relations,* 29(8):783–792, August 1976.