

Efficient Approach for Travel Package Recommendation System

Ms. Thanmai¹, Ms. Shirisha², Mr. Prashanth³

Department of CSE Balaji Institute of Technology and Sciences, Warangal, Telangana state, India.

Abstract:

Recent modern era where people are more interested in travelling and roaming the world and want to experience new things. So there can be many ways that people full fill their travelling wishes, and get what they wanted. In the late years if, people want to travel they used to decide a place and time according to their daily schedule, and they used to decide a place where they wanted to go. But in today's world no one has time even to plan their holiday or a free time for themselves. This paper helps you deal with the efficient approach for your travel where all you need is a free time and money to afford the travel. [9]Efficient Approach for Travel Package Recommendation System deals with your travel interests and your financial propose regarding the travel and helps you get your ideal and unique travel experience far so. The main intension is all about your travel and your allowances that provide by the system. We will help you find your ideal travel package and let you also know about the things that are further more easy to approach for you and helps you get the free spirited experience of the travelled places so far. This paper will also explains the things like and about, if the customer or the traveller is confused about where to go and what to see in his travel then the system recommends the places to the customer of his interests and will also manages the ideal travel deal.

Keywords: Travel package, Efficient Approach, Recommendation System.

I. INTRODUCTION:

Efficient Approach for Travel Package Recommendation System is all about the idea of getting a required and manageable travel allowance for the customer so that he/her can enjoy their free time from their busy schedule and that travel package also in their financial status. This Travel package will be accommodate through online services as everything now-a-days will be online. [2]This helps the customer easy to approach their trip. In this the system target is to find the ideal travel package to the customer here it is described as a recommendation system for the traveller. The recommendation system provides a unique feature of providing the travel package to the customer according to his/her interests mentioned in the form for the trip and helps them to clarify their travel confusion of where to go and enjoy the day.

II. LITERATURE SURVEY:

Many travel packages around the country or world gives you only what you are requested for and they help you get you through the features that involves in the trip.[1] All around the world the travel packages will be good and their aim is to provide the requested facilities to their customers. They provide the customer with his/her details that entered for the trip and only focus on those things, and they are not affected for other details that can be meant for the travel package. Many travel packages are selected by the customers through the ratings and reviews that was given by the previous users and which are mostly not available.[3] And travel packages will be within the landscapes that are geographically co-located and related between them and will be easily found within the area specified. Traditional recommended travel packages will be with that of seasonal perspective.

A overview of the field of recommender systems and describes the current generation of recommendation methods that are usually classified into the following three main categories: content-based, collaborative, [7] and hybrid recommendation approaches. This paper also describes various limitations of current recommendation methods and discusses possible extensions that can improve recommendation capabilities and make recommender systems applicable to an even broader range of applications. These extensions include, among others, an improvement of understanding of users and items, incorporation of the contextual information into the recommendation process, support for multi criteria ratings, and a provision of more flexible and less intrusive types of recommendations. Recommender systems made significant progress over the last decade when numerous content-based, collaborative, and hybrid methods were proposed and several "industrial- strength" systems have been developed. However, despite all of these advances,[10] the current generation of recommender systems surveyed in this paper still requires further improvements to make recommendation methods more effective in a broader range of applications. In this paper, we reviewed various limitations of the current recommendation methods and discussed possible extensions that can provide better recommendation capabilities.[4] These extensions include, among others, the improved modelling of users and items, incorporation of the contextual information into the recommendation process, support for multi criteria ratings, and provision of a more flexible and less intrusive recommendation process. [5]We hope that the issues presented in this paper will advance the discussion in the recommender systems community about the next generation of recommendation technologies. Recommender systems are information search and decision support tools used when there is an overwhelming set of options to consider or when the user lacks the domain specific knowledge necessary to take autonomous decisions.[6] They provide users with personalized recommendations adapted to their needs and preferences in a particular usage context. In this paper, we present an approach for integrating recommendation and electronic map technologies to build a map-based conversational mobile recommender system that can effectively and intuitively support users in finding their desired products and services.[8] The results of our real-user study show that integrating map-based visualization and interaction in mobile recommender systems improves the system recommendation effectiveness and increases the user satisfaction.

1. EFFICIENT APPROACH FOR TRAVEL MANAGEMENT:

In these we propose to make personalized travel package recommendation system for the tourists who are users and from the existing travel packages. We implement the model of TAST to develop and acquire TRAST model which is nothing but the extraction of topics that is contributed from the tourists interests and also from the landscapes around, seasonal time i.e.; these are called intrinsic features. We add some additional factors in those packages to approach the developed and personalized recommendation system. We have few advantages in

these proposed system that include, recommending the travel packages based on the customers interest, TRAST model encapsulates and implements unique characteristics of the data travelled and This approach helps to provide a better experience rather than the traditional recommendation approach.

This architecture explains you about the module that gives the system works and their processing of recommendation system. We have four modules those are USER Module, SERVER Module, Package Recommendation and Test Model they are acquired for implementing and designing the personalized travel package.

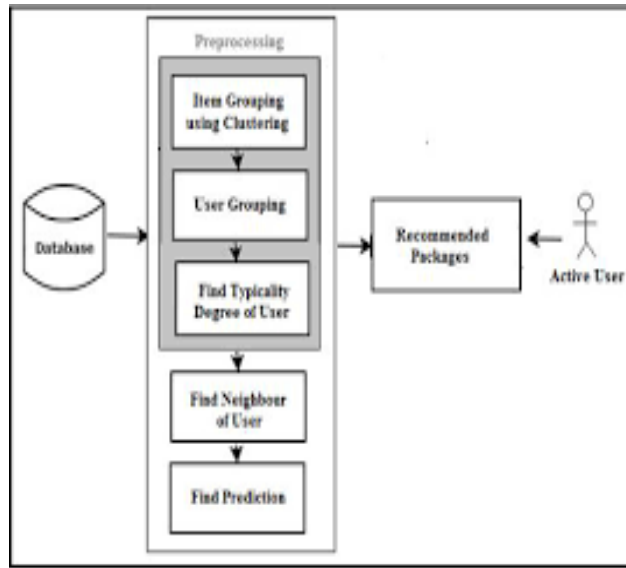


Figure 1. Processing of the Travel management system

Model that is implemented in this recommendation system will be TAST model and the below figure (fig 2) gives brief about it.

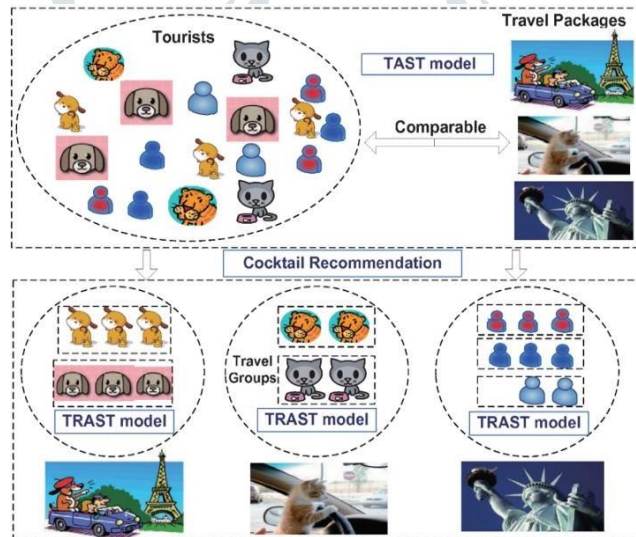


Figure 2. Online offline travelling Pack System

Each and every process that involves in this system will be executed in both offline and online way like the below figure (figure 3)

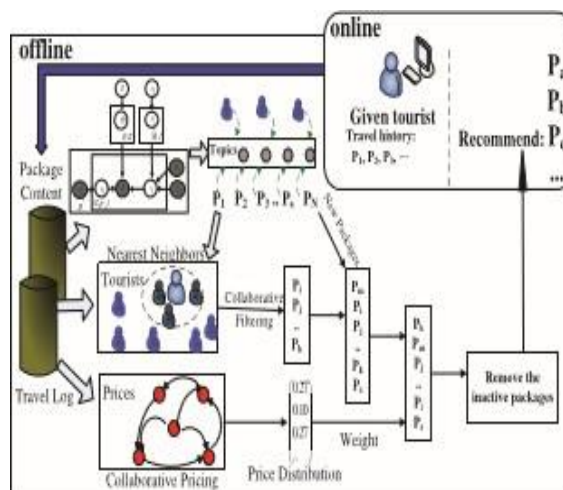


Figure 3. Collecting Information in Travelling System

And finally the process will be hierarchical so (figure 4)

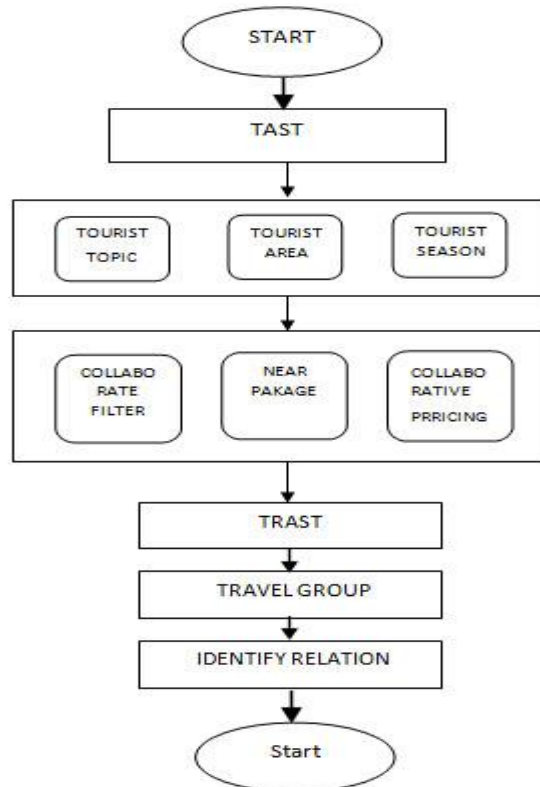


Figure .4 Flow chart of Travelling System

III.EXPERIMENTAL STUDY:

In this overview we explain about the no. of people arrived at the site and got themselves registered in this travel package. The main proposal is to know about how many people are satisfied with the service provided and the accuracy of the customers in the era.

In the below figure (fig 5) we show you the accuracy and covered percentage of people in the travel recommendation system and there feedback based on the service provided

	PACKAGE	TRAVELLERS	PERCENTAGE
1	Season1	75	75.00%
2	Season 2	40	40.00%
3	Season 3	98	98.00%
4	Season 4	85	85.00%

Table1.Travellers information comparison

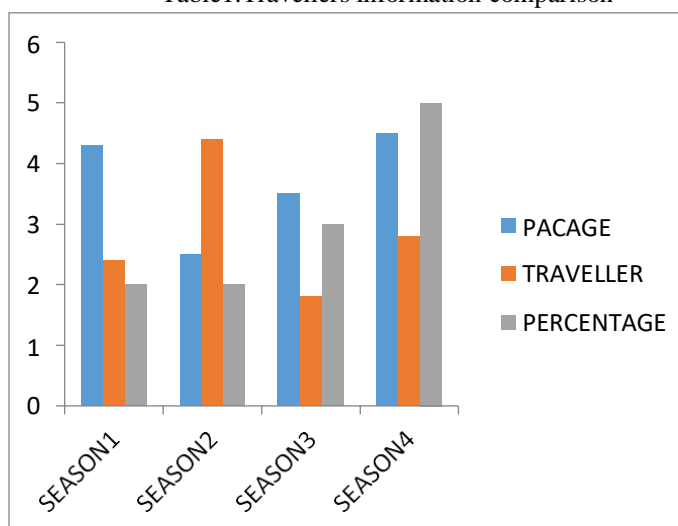


Figure 5. Comparison chart of Traveller

IV. CONCLUSION:

This paper helps you gain the information about the recommendation system that is involving in the modern real world where everything is online service provided and that helps customers or users an easy way to be in their scheduled time. This recommendation system mainly focuses on the approachable manner with the users or customers of the travel packages and this identifies the characteristics of the package estimated to the customer and will help the user to find out the ideal and specified package that is advised to the customer by the service provider. The package can be either of the choice of the user or that is based on the interests of the customer which is provided by the online recommendation system

V. REFERENCES

- [1] Qi Liu, Yong Ge, Zhongmou Li, Enhong Chen, Hui Xiong “Personalized Travel Package Recommendation” 2011.
- [2] Y. Koren and R. Bell, “Advances in Collaborative Filtering,” Recommender Systems Handbook, chapter 5, pp. 145-186, 2011.
- [3] W. Chen, J.C. Chu, J. Luan, H. Bai, Y. Wang, and E.Y. Chang, “Collaborative Filtering for Orkut Communities: Discovery of User Latent Behavior,” Proc. ACM 18th Int’l Conf. World Wide Web (WWW ’09), pp. 681-690, 2009.
- [4] R. Pan et al., “One-Class Collaborative Filtering,” Proc. IEEE Eighth Int’l Conf. Data Mining (ICDM ’08), pp. 502-511, 2008.
- [5] Q. Liu, E. Chen, H. Xiong, C. Ding, and J. Chen, “Enhancing Collaborative Filtering by User Interests Expansion via Personalized Ranking,” IEEE Trans. Systems, Man, and Cybernetics, Part B: Cybernetics, vol. 42, no. 1, pp. 218-233, Feb. 2012.
- [6] B. D. Carolis, N. Novielli, V.L. Plantamura, and E. Gentile, “Generating Comparative Descriptions of Places of Interest in the Tourism Domain,” Proc. Third ACM Conf. Recommender Systems (RecSys ’09), pp. 277-280, 2009.
- [7] Ahamed, B. B., & Ramkumar, T. (2015). Deduce User Search Progression with Feedback Session. *Advances in Systems Science and Applications*, 15(4), 366-383.
- [8] J. Herlocker, J. Konstan, L. Terveen, and J. Riedl, “Evaluating Collaborative Filtering Recommender Systems,” ACM Trans. Information Systems, vol. 22, no. 1, pp. 5-53, 2004.
- [9] M. Gori and A. Pucci, “ItemRank: A Random-Walk Based Scoring Algorithm for Recommender Engines,” Proc. 20th Int’l Joint Conf. Artificial Intelligence (IJCAI ’07), pp. 2766-2771, 2007.
- [10] Ahamed, B. B., Ramkumar, T., & Hariharan, S. (2014, December). Data integration progression in large data source using mapping affinity. In *Advanced Software Engineering and Its Applications (ASEA)*, 2014 7th International Conference on (pp. 16-21). IEEE

Authors Biography:



THANMAI BINGI

student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana State, India



SHIRISHA GUNDETI

student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana State, India.



PRASHANTH LAKA

student of B.Tech in Computer Science and Engineering, Balaji Institute of Technology & Sciences, Warangal, Telangana State, India.