



## SMART TOURIST GUIDE: RECOMMENDATION AND SUGGESTION SYSTEM

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**Abstract**— *Travel and tourism have become one of the fastest growing sectors. This has led to various developments of various systems for tours and travel purpose. Travelling sites like Gibbon and Oyo have started providing hotel booking online. Similarly there are numerous other services provided by tourism sector. They provide packages for different locations, travel destinations and as per person's interest and monetary limits also. Thus they have nearly covered all aspects but we still lack system which provides packages as per user's interest and need. Thus in this paper we aim to build a system that provides user to select packages as per their monetary value and automatically recommend nearby places to visit once a user logs into the system.*

**Keywords** — Tourism, recommendation, preferences, locations.

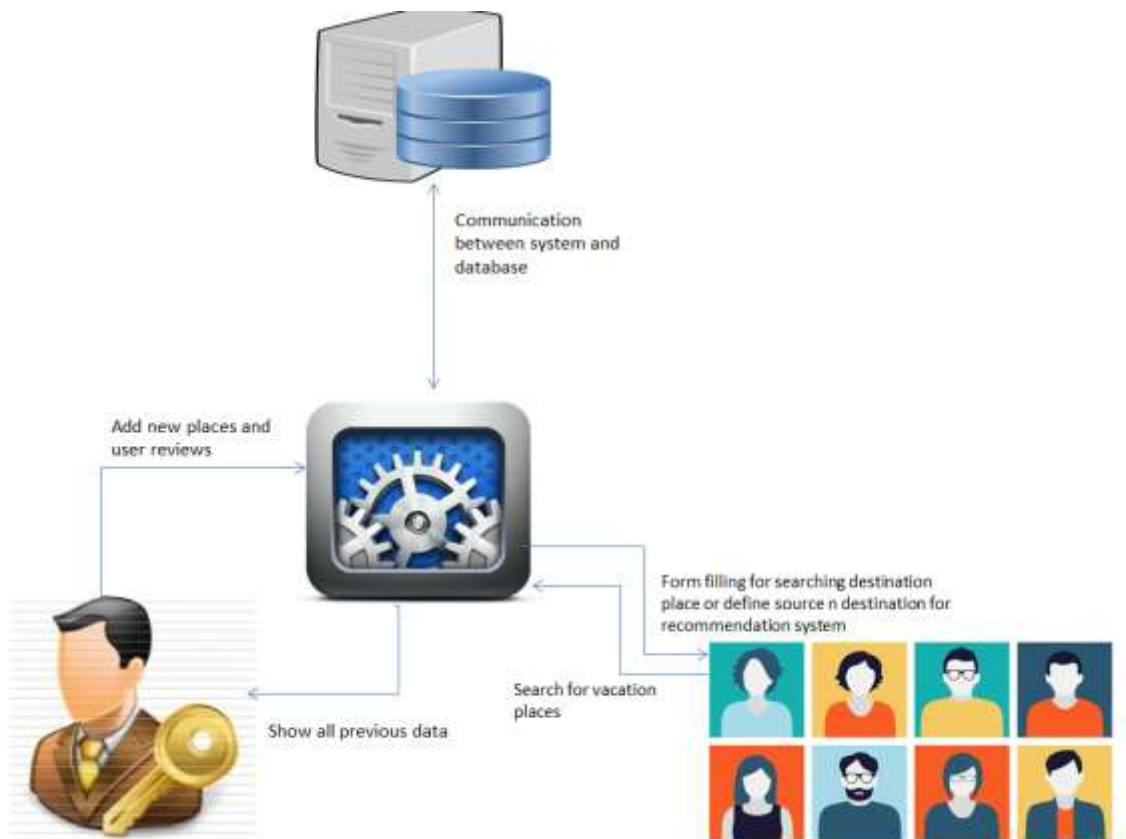
### I. INTRODUCTION

Tourism has become one of the blooming sectors. But it still lacks quality system which will help people in general with all the aspects which one require while travelling and exploring. There are numerous recommendation systems but we are aiming here to fulfil the drawback of current system such as either they only provide hotel bookings or travelling packages as per their company policies. Thus a traveller or user when consults a travel agency while planning for tour, he is bound to choose between available packages which are provided by travel agency. User does not have freedom to select as per his schedule or plans or vacations or office leaves or children's leaves. Moreover packages are also high and most of the time have hidden cost and conditions. Keeping in mind all these drawbacks we have proposed a recommendation and suggestion system for easy and hassle free tourism. This system also encourages and gives vital importance to collaborative filtering.

### II. PROPOSED SYSTEM

In this project we are aiming to build an easy, user friendly tourism recommendation system which aims to automatically recommend by taking user inputs. It uses this information and generates suggestions according to user preferences. They also use information from various sources and predict a search result which is best suitable for user. Here we will generate customized result for each user. It's not necessary that two persons travelling to same destinations have same choices of food or site seeing. Generally current system will show same set of result for two differently aged group persons travelling on the same place. Thus we aim to provide a set of unique customized search for each individual even if they are travelling at same place at same time. Also if due to any circumstances an individual is not able to travel and has to cancel plan then system can automatically keep a record in database and later recommend and advise to person when it's possible for him. Thus even though we as a human generally pay and forget about packages due to any family or work emergency but system will surely will not do it.

### III. SYSTEM ARCHITECTURE



### IV. ADVANTAGES OF PROPOSED SYSTEM

- User get result in his/her respective interest only.
- Results will be as per user's personal interest and age group instead of a generalized result.
- Easy hassle free and user friendly recommendation system which will help user on their trips.
- User can easily choose from different places, sites, locations, budgets and various other filters.
- More user control rather than travel agency controlling your vacations

### V. HARDWARE REQUIREMENTS

- |                     |                      |
|---------------------|----------------------|
| ➤ System Processors | : Core2Duo and above |
| ➤ Speed             | : 2.4 GHz and above  |
| ➤ Hard Disk         | : 150 GB and above   |

## **VI. SOFTWARE REQUIREMENTS**

- Operating system : 32bit Windows 7 and on words
- Coding Language: : Java J2EE\Android
- IDE : Eclipse Kepler
- Database : MYSQL\XAMP Server

## **VII. MATHEMATICAL MODULE**

Let S be the system  
Where

$S = I, O, P$

Where,  
I = Set of input (information related to user interest)  
O = Set of output (recommended places along with information)  
P = Set of technical processes

Let S is the system

$S = \text{Identify the input data } S_1, S_2, \dots, S_n$

$I = (\text{types of places, activity, budget, start date, distance, number of vacation days, number of people})$

Identify the output applications as O.

$O = \text{Places, Activity, Hotel, Travelling option, nearby attraction, distance}$  Identify the Process as P

Haversine algorithm for distance calculation

Places  $j$  area distance

$R_p = \text{Resultant Places}$

Distant from source to  $R_p$   $j$  distance mention by user.

## **VIII. CONCLUSION**

In this paper we have successfully demonstrated and proposed a recommendation and suggestion of easy travelling system. It covers the drawback of current travelling tour packages and the fraud which happens after selecting packages with hidden cost and conditions. Each and every users or persons have different taste and likings when it comes to food travel and site seeing. Thus our system will not show a generalized result but a customized one keeping every aspect into consideration. Its implementation is easy and does not require any cost of external devices. Algorithms used are simple and easy to understand. Thus it aims at making user vacation more happy and memorable one.

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