

SAVITRIBAI PHULE PUNE UNIVERSITY

A PROJECT REPORT ON

**PERSONAL ASSISTANT WITH VOICE FOR TOUR
RECOMMENDATION**

SUBMITTED TOWARDS THE
PARTIAL FULFILLMENT OF THE REQUIREMENTS OF

BACHELOR OF ENGINEERING (Computer Engineering)

BY

Dahiwal Aishwarya Keshav

Exam No:B150844212

Deokar Mansi Mahendra

Exam No:B150844214

Gadge Ankita Sunil

Exam No:B150844222

Under The Guidance of

Prof. Bangar A.P.



DEPARTMENT OF COMPUTER ENGINEERING
Jaihind College of Engineering (Kuran)
Narayangoan-Junner Rd ,Narayangoan,
Maharashtra 410502

2021-22



DEPARTMENT OF COMPUTER ENGINEERING
Jaihind College of Engineering (Kuran)

CERTIFICATE

This is to certify that the Project Entitled
Personal Assistant with Voice for Tour Recommendation

Submitted by

Dahiwal Aishwarya Keshav

Exam No: B150844212

Deokar Mansi Mahendra

Exam No: B150844214

Gadge Ankita Sunil

Exam No: B150844222

is a bonafide work carried out by Students under the supervision of Prof. Bangar A.P.
and it is submitted towards the partial fulfillment of the requirement of Bachelor of
Engineering (Computer Engineering) Project.

Prof. Bangar A.P.
Internal Guide
Department of Computer Engg

Dr. Gunjal S.D.
Project Co-ordinator
Department of Computer Engg

Dr. Khatri A.A
HOD
Department of Computer Engg

Dr. Garkal D.J.
Principal
JCOE, Pune

Signature of Internal Examiner

Signature of External Examiner

PROJECT APPROVAL SHEET

A Project Title

Personal Assistant with Voice for Tour Recommendation

Is successfully completed by

Dahiwal Aishwarya Keshav

Exam No: B150844212

Deokar Mansi Mahendra

Exam No: B150844214

Gadge Ankita Sunil

Exam No: B150844222

at

DEPARTMENT OF COMPUTER ENGINEERING

Jaihind College of Engineering, Kuran

SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE

ACADEMIC YEAR 2021-2022

Prof. Bangar A.P.

Dr. Khatri A.A.

Internal Guide

H.O.D

Dept. of Computer Engg.

Dept. of Computer Engg.

Abstract

Today when we want to plan a trip for holidays or general visit, very first we take a help from travel agencies then we need to plan according to travel agencies. But, because of this we face some difficulties like our vacation is start but travel agency package date is in the end of our holiday or in working time. Because of this limitation sometime we change the plan or drop the plan. A representative set of recommended travel places is needed. Prior works have explained on mining and ranking existing places from check-in data. To meet the need for automatic trip organization, we claim that more features of Places of Interest (POIs) should be extracted. In our system we propose a system in which user define its holiday starting date and ending date then system provide some recommendation like points according to season, schedule, hotels and specialities about the places to visit. Tourist will filter according to its need. We have designed a place recommendation in the form of voice algorithm to recommend place that fulfills the requirements.

Keywords: Time-aware routes; time-aware transition patterns; visiting time; route planning; check-in data

Acknowledgments

*It gives us great pleasure in presenting the preliminary project report on **Personal Assistant with Voice for Tour Recommendation** .*

*We would like to take this opportunity to thank our internal guide **Prof. Bangar A.P.** and Project co-ordinator **Dr. Gunjal S.D.** for giving us all the help and guidance we needed. We are really grateful to them for their kind support. Their valuable suggestions were very helpful.*

*We are also grateful to **Dr. Khatri A.A.** Head of Computer Engineering Department, Pimpri Chinchwad College of Engineering and Research for indispensable support and suggestions.*

*In the end our special thanks to **Prof. Pawar S.H.** for providing various resources such as laboratory with all needed software platforms, continuous Internet connection for our project.*

Dahiwal Aishwarya Keshav Exam No:B150844212

Deokar Mansi Mahendra Exam No:B150844214

Gadge Ankita Sunil Exam No:B150844222

INDEX

1	Synopsis	1
1.1	Project Title	2
1.2	Project Option	2
1.3	Internal Guide	2
1.4	Sponsorship and External guide	2
1.5	Technical Keywords (As per ACM Keywords)	2
1.5.1	A. Categories and Subject Descriptors:	2
1.5.2	B. General Terms:	2
1.5.3	C.Database Management:	2
1.6	Problem Statement	2
1.7	Abstract	3
1.8	Goals and Objectives	3
1.9	Relevant mathematics associated with the Project	4
1.10	Names of Conferences / Journals where papers can be published . .	4
1.11	Review of Conference/Journal Papers supporting Project idea	5
1.12	Plan of Project Execution	6
2	Introduction	7
2.1	Project Idea	8
2.2	Motivation of the Project	8
2.3	Literature Survey	8
3	Problem Definition and scope	14
3.1	Problem Statement	15
3.2	Goals and Objectives	15
3.3	Software Context.....	15

3.4	Major Constraints.....	15
3.5	Methodology Used for Problem solving.....	15
3.6	OUTCOME.....	16
3.7	APPLICATIONS	17
3.8	Hardware Resources Required.....	17
3.9	Software Resources Required	17
4	Project Plan	18
4.1	Project Estimates	19
4.1.1	Reconciled Estimates	19
4.1.2	Project Resources	20
4.1.3	Risk Analysis	20
4.2	Risk Management	21
4.2.1	Overview of Risk Mitigation, Monitoring, Management . .	21
4.2.2	Project Resources	21
4.3	Risk Management w.r.t. NP Hard analysis	21
4.3.1	Risk Identification	21
4.4	Task network	22
4.5	Timeline Chart	24
4.6	Team Organization	25
4.6.1	Team structure	26
4.6.2	Managment Reporting and Communication	26
5	Software requirement specification (SRS is to be prepared using relevant mathematics derived and software Engg. Indicators in Annex A and B)	27
5.1	Introduction	28
5.1.1	Purpose and Scope of Document	28
5.1.2	Overview of responsibilities of Developer	28
5.2	Usage Scenario	28

5.2.1	Use-cases	28
5.2.2	Use Case View	29
5.3	Data Model and Description	30
5.3.1	Data Description	30
5.3.2	Data objects and Relationships	30
5.3.3	Data Flow Diagram	31
5.3.4	Activity Diagram:	32
5.3.5	Sequence Diagram:	33
5.3.6	Non Functional Requirements:	35
5.3.7	Design Constraints	35
5.3.8	Software Interface Description	35
6	Detailed Design Document using Appendix A and B	36
6.1	Introduction	37
6.2	Architectural Design	38
6.3	Data design (using Appendices A and B)	38
6.3.1	Internal software data structure	38
6.3.2	Global data structure	39
6.3.3	Database description	39
6.4	Component Design	39
6.4.1	Class Diagram	39
7	Project Implementation	41
7.1	Introduction	42
7.2	Tools and Technologies Used	42
7.3	Methodologies	43
7.3.1	Algorithm used:	43
7.3.2	Analysis Models: SDLC Model to be applied	43
8	Software Testing	46
8.1	Type of Testing Used	47
8.1.1	Testing Strategy	47

9 Results	49
9.1 Outcome:	50
9.2 Screen shots.....	50
10 Deployment and Maintenance	57
10.1 Installation and un-installation	58
11 Summary	60
12 Conclusion and Future Scope	62
12.1 Conclusion	63
12.2 Future Scope	63
13 REFERENCES:	64
Annexure A Laboratory assignments on Project Analysis of Algorithmic Design	67
A.1 What is P?	68
A.1.1 NP Hard:.....	70
A.2 Relevant mathematics associated with the Project.....	71
Annexure B Laboratory assignments on Project Quality and Reliability	
Testing of Project Design	73
B.1 The objects involved in the projects are:	74
B.1.1 User / Admin:-.....	74
B.1.2 Database:-	74
B.1.3 Morphism:-.....	74
Annexure C Project Planner	75
C.1 Plan of Project Execution	76
C.2 Timeline Chart	77
Annexure D Reviewers Comments of Paper Submitted	78
Annexure E Plagiarism Report	82

List of Figures

4.1	Timeline Chart	25
5.1	Use case diagram	30
5.2	Level 0 Data Flow Diagram	31
5.3	Level 1 Data Flow Diagram	32
5.4	Activity Diagram.....	33
5.5	Sequence Diagram	34
6.1	Architecture diagram.....	38
6.2	Class Diagram	40
7.1	Waterfall Model	44
8.1	Test Case diagram	48
9.1	This is Home Page of our Application.	50
9.2	This is admin login page. Here admin can enter predefined user name and password and can login into the system.....	51
9.3	This is Admin Home page.....	51
9.4	Here Admin can view the list of all registered users	51
9.5	Here admin can add the places with details	52
9.6	This is the list of all added places, here user can add speciality's as well.....	52
9.7	Here user can update the information of places	52
9.8	This is form of registration, Here user can enter all details and create new account.....	53

9.9	This is form of registration, Here user can enter all details and create new account.....	53
9.10	Here User will enter interest for the tour	54
9.11	: System will suggest the places as per the user's interest	55
9.12	Once user is reached at the place he can select the place, then system will recommend the plan and activities which he can do.....	55
9.13	Once tour is done use can give rating for place in the form of stars .	55
9.14	This is graphical representation of rating base on reviews, this will be useful for new user for creating tour plan	56
A.1	Idea Matrix	68
C.1	Time line Chart	77

List of Tables

3.1	Hardware Requirements	17
3.2	Software Requirements	17
4.1	Risk Table	21
4.2	Risk Probability definitions [?]	21
7.1	Tools and Technologies Used	42

CHAPTER 1

SYNOPSIS

1.1 PROJECT TITLE

Personal Assistant with Voice for Tour Recommendation

1.2 PROJECT OPTION

Final Year Project

1.3 INTERNAL GUIDE

Prof. Bangar A.P.

1.4 SPONSORSHIP AND EXTERNAL GUIDE

NA

1.5 TECHNICAL KEYWORDS (AS PER ACM KEYWORDS)

Virtual Assistant, Tour Recommendation, User Interest, K-Means, Social Network, Personal Assistant

1.5.1 A. Categories and Subject Descriptors:

K-Means Algorithm

1.5.2 B. General Terms:

Smart cities, smart traveler, traveler, feature detection, Tourism, route choice.

1.5.3 C. Database Management:

MYSQL

1.6 PROBLEM STATEMENT

To build system based on tourists can defined its need , date, interest through that system recommend packages with schedule, hotel, point with respect to season. As well

as system recommend user according their place of interest. because, Tourist plan according to travel agencies, which is not match to tourist schedule and however, tourist manage its own schedule and ready to go. Different travel agencies sometime offer packages which is too much costly which is not affordable by tourist. Some-time travel agencies promising good quality service to tourist, but that not happen actually.

1.7 ABSTRACT

- Today when we want to plan a trip for holidays or general visit, very first we take a help from travel agencies then we need to plan according to travel agencies. But, because of this we face some difficulties like our vacation is start but travel agency package date is in the end of our holiday or in working time. Because of this limitation sometime we change the plan or drop the plan. A representative set of recommended travel places is needed. Prior works have explained on mining and ranking existing places from check in data. To meet the need for automatic trip organization, we claim that more features of Places of Interest (POI) should be extracted. In our system we propose a system in which user define its holiday starting date and ending date then system provide some recommendation like cost of package, points according to season, schedule, hotels and different packages. Tourist will filter according to its need. We have designed a route recommendation algorithm to recommend route that fulfills the requirements.

1.8 GOALS AND OBJECTIVES

- To make tourist travelling plan more scheduled and convenient for them. So they can enjoy their trips with any hesitation.
- The whole preplanned as per the tourist seasonal places and available days for the trip

1.9 RELEVANT MATHEMATICS ASSOCIATED WITH THE PROJECT

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

$S = \dots\dots\dots$

Identify the input data $S_1, S_2, \dots\dots, S_n$

I = (types of places, activity, budget, start date, distance, number of vacation days, number of people) Identify the output applications as O

O = Places, Activity, Hotel, Travelling option, Nearby attraction, distance Identify the Process as P

Haversine algorithm for distance calculation

Places j area distance

R_p = Resultant Places

Distant from source to R_p j distance mention by user

1.10 NAMES OF CONFERENCES / JOURNALS WHERE PAPERS CAN BE PUBLISHED

- **IRJET** International Research Journal of Engineering and Technology (Artificial Intelligence based Personal Voice Assistant)
- **IJSREM** International Journal of Scientific Research in Engineering and Management (Personal Assistant with Voice for Tour Recommendation)
- **IJRPR** International Journal of Research Publication and Reviews (Personal Assistant with Voice for Tour Recommendation)

1.11 REVIEW OF CONFERENCE/JOURNAL PAPERS SUPPORTING PROJECT IDEA

- [1]. “Urbis: A touristic virtual guide” Ivaldir de Farias; Nelson Leitão; Marcelo M. Teixeira (2017)
- [2] “Smart traveler guide: A model for guiding traveler with image matching algorithm” J. Sindhu Sri; N. V. Sri Sravani; P. Suresh Kumar (2016)
- [3]. Barry Brown Mathew Chalmers, “Tourism and Mobile Technology”, University of Glasgow, Glasgow, 2012
- [4] Route choice decision-marking analysis based on congestion charging “Zheng-gang Li; Jian Wang; Qiu Yan; Ling Zhou (2011)
- [5].” A Model of Risk-Sensitive Route-Choice Behavior and the Potential Benefit of Route Guidance “J. Illenberger; G. Flotterod; K. Nagel (2011)
- [6] “KAMO - mobile guide for the city traveller “J. Liikka; J. Lahti; P. Alahuhta; M. Rosenberg (2008)
- [7]. D. Buhalis , R. Law, “Progress in information technology and tourism management: 20 years on and 10 years after the Internet - The state of e Tourism research”. 2008, Tourism Management, 29, 609–623. [8]. C. Bettini; X. S. Wang; S. Jajodia, “Protecting Privacy Against Location-Based Personal Identification”, In: SECOND VLDB WORKSHOP SECURE DATA MANAGEMENT (SDM), 2005, Trondheim, Noruega.

1.12 PLAN OF PROJECT EXECUTION

Sr. No.	Month Sheduled	Phase
1	June-August	Topic Seraching
2	August-September	Topic Selection
3	August-September	Project Confirmation
4	August-September	Literature Survey
5	September-October	Requirement Analysis
6	September-October	Requirement Gathering
7	November-December	Designing
8	November-December	Designing Test
9	November-December	Database Creation
10	January-February	Coding
11	January-February	Database And Module Connectivity
12	March	Testing of Project
13	April	Result Analysis

CHAPTER 2

INTRODUCTION

2.1 PROJECT IDEA

Location-Based social network (LBSN) services allow users to perform check-in and share their check-in data with their friends. In particular, when a user is traveling, the check-in data are in fact a travel places with some nearest places and their specialties information. As a result, a massive number of routes are generated, which play an essential role in many well-established research areas, such as mobility prediction, urban planning and traffic management. In this project, we focus on trip planning and intend to discover travel experiences from shared data in location-based social networks. To facilitate trip planning, provide an interface in which a user could submit the query region and the total travel time. In contrast, we consider a scenario where users specify their preferences with keywords. For example, when planning a trip in Sydney, one would have “Opera House”. As such, we extend the input of trip planning by exploring possible keywords issued by users. In this project, we develop a Keyword-aware Representative Travel Route (KRTR) framework to retrieve several recommended places where keyword means the personalized requirements that users have for the trip. The places dataset could be built from the collection of low-sampling check-in records.

2.2 MOTIVATION OF THE PROJECT

There are many different sites and application which provide numbers of different packages. But, they are not plan according to tourist schedule. That's why, we are developing a system in which tourist defined its need date, interest, through that system recommend packages schedule, hotel, point with respect to season. As well as system recommend user according their place of interest.

2.3 LITERATURE SURVEY

1. KSTR: Keyword-aware skyline travel route recommendation

Author:Y.-T. Wen, K.-J. Cho, W.-C. Peng, J. Yeo, and S.-W. Hwang (2015)

Description:

With the popularity of social media (e.g., Facebook and Flickr), users can easily

share their check-in records and photos during their trips. In view of the huge number of user historical mobility records in social media, we aim to discover travel experiences to facilitate trip planning. When planning a trip, users always have specific preferences regarding their trips. Instead of restricting users to limited query options such as locations, activities, or time periods, we consider arbitrary text descriptions as keywords about personalized requirements. Moreover, a diverse and representative set of recommended travel routes is needed. Prior works have elaborated on mining and ranking existing routes from check-in data. To meet the need for automatic trip organization, we claim that more features of Places of Interest (POIs) should be extracted. Therefore, in this paper, we propose an efficient Keyword-aware Representative Travel Route framework that uses knowledge extraction from users' historical mobility records and social interactions. Explicitly, we have designed a keyword extraction module to classify the POI-related tags, for effective matching with query keywords. We have further designed a route reconstruction algorithm to construct route candidates that fulfill the requirements. To provide befitting query results, we explore Representative Skyline concepts, that is, the Skyline routes which best describe the trade-offs among different POI features. To evaluate the effectiveness and efficiency of the proposed algorithms, we have conducted extensive experiments on real location-based social network datasets, and the experiment results show that our methods do indeed demonstrate good performance compared to state-of-the-art works.

2. Exploring social influence on location-based social networks

Author:Y.-T. Wen, P.-R. Lei, W.-C. Peng, and X.-F. Zhou (2014)

Description:

In recent years, with the popularization of mobile network, the location-based service (LBS) has made great strides, becoming an efficient marketing instrument for enterprises. For the retail business, good selections of store and appropriate marketing techniques are critical to increasing the profit. However, it is difficult to select the retail store because there are numerous considerations and the analysis was short

of metadata in the past. Therefore, this study uses LBS, and provides a recommendation method for retail store selection by analyzing the relationship between the user track and point-of-interest (POI). This study uses regional relevance analysis and human mobility construction to establish the feature values of retail store recommendation.

3 . Towards indexing representative images on the web

Author:X.-J. Wang, Z. Xu, L. Zhang, C. Liu, and Y. Rui (2013)

Description:

Even after 20 years of research on real-world image retrieval, there is still a big gap between what search engines can provide and users expect to see. To bridge this gap, we present an image knowledge base, ImageKB, a graph representation of structured entities, categories, and representative images, as a new basis for practical image indexing and search. ImageKB is automatically constructed via a both bottom-up and top-down, scalable approach that efficiently matches 2 billion web images onto an ontology with millions of nodes. Our approach consists of identifying duplicate image clusters from billions of images, obtaining a candidate set of entities and their images, discovering definitive texts to represent an image and identifying representative images for an entity. To date, ImageKB contains 235.3M representative images corresponding to 0.52M entities, much larger than the state-of-the-art alternative ImageNet that contains 14.2M images for 0.02M synsets. Compared to existing image databases, ImageKB reflects the distributions of both images on the web and users' interests, contains rich semantic descriptions for images and entities, and can be widely used for both text to image search and image to text understanding.

4. Entity synonyms for structured web search

Author:T. Cheng, H. W. Lauw, and S. Paparizos (2012)

Description:

Nowadays, there are many queries issued to search engines targeting at finding values from structured data (e.g., movie showtime of a specific location). In such scenarios, there is often a mismatch between the values of structured data (how content

creators describe entities) and the web queries (how different users try to retrieve them). Therefore, recognizing the alternative ways people use to reference an entity, is crucial for structured web search. In this paper, we study the problem of automatic generation of entity synonyms over structured data toward closing the gap between users and structured data. We propose an offline, data-driven approach that mines query logs for instances where content creators and web users apply a variety of strings to refer to the same webpages. This way, given a set of strings that reference entities, we generate an expanded set of equivalent strings (entity synonyms) for each entity. Our framework consists of three modules: candidate generation, candidate selection, and noise cleaning. We further study the cause of the problem through the identification of different entity synonym classes. The proposed method is verified with experiments on real-life data sets showing that we can significantly increase the coverage of structured web queries with good precision.

5. Exploiting geographical influence for collaborative point-of-interest recommendation

Author: M. Ye, P. Yin, W.-C. Lee, and D.-L. Lee (2011)

Description:

In this paper, we aim to provide a point-of-interests (POI) recommendation service for the rapid growing location-based social networks (LBSNs), e.g., Foursquare, Whrrl, etc. Our idea is to explore user preference, social influence and geographical influence for POI recommendations. In addition to deriving user preference based on user-based collaborative filtering and exploring social influence from friends, we put a special emphasis on geographical influence due to the spatial clustering phenomenon exhibited in user check-in activities of LBSNs. We argue that the geographical influence among POIs plays an important role in user check-in behaviors and model it by power law distribution. Accordingly, we develop a collaborative recommendation algorithm based on geographical influence based on naive Bayesian. Furthermore, we propose a unified POI recommendation framework, which fuses user preference to a POI with social influence and geographical influence. Finally, we conduct a comprehensive performance evaluation over two large-scale datasets

collected from Foursquare and Whrrl. Experimental results with these real datasets show that the unified collaborative recommendation approach significantly outperforms a wide spectrum of alternative recommendation approaches.

6. Mining interesting locations and travel sequences from GPS trajectories

Author: Y. Zheng, L. Zhang, X. Xie, and W.-Y. Ma (2009)

Description:

The increasing availability of GPS-enabled devices is changing the way people interact with the Web, and brings us a large amount of GPS trajectories representing people's location histories. In this paper, based on multiple users' GPS trajectories, we aim to mine interesting locations and classical travel sequences in a given geospatial region. Here, interesting locations mean the culturally important places, such as Tiananmen Square in Beijing, and frequented public areas, like shopping malls and restaurants, etc. Such information can help users understand surrounding locations, and would enable travel recommendation. In this work, we first model multiple individuals' location histories with a tree-based hierarchical graph (TBHG). Second, based on the TBHG, we propose a HITS (Hypertext Induced Topic Search)-based inference model, which regards an individual's access on a location as a directed link from the user to that location. This model infers the interest of a location by taking into account the following three factors. The interest of a location depends on not only the number of users visiting this location but also these users' travel experiences. Users' travel experiences and location interests have a mutual reinforcement relationship. The interest of a location and the travel experience of a user are relative values and are region-related. Third, we mine the classical travel sequences among locations considering the interests of these locations and users' travel experiences. We evaluated our system using a large GPS dataset collected by 107 users over a period of one year in the real world. As a result, our HITS-based inference model outperformed baseline approaches like rank-by-count and rank-by-frequency. Meanwhile, when considering the users' travel experiences and location interests, we achieved a better performance beyond baselines, such as rank-by-count and rank-by-interest, etc.

CHAPTER 3

PROBLEM DEFINITION AND SCOPE

3.1 PROBLEM STATEMENT

To build system based on tourists can defined its need , date, interest through that system recommend packages with schedule, hotel, point with respect to season. As well as system recommend user according their place of interest. because, Tourist plan according to travel agencies, which is not match to tourist schedule and however, tourist manage its own schedule and ready to go. Different travel agencies sometime offer packages which is too much costly which is not affordable by tourist. Sometime travel agencies promising good quality service to tourist, but that not happen actually.

3.2 GOALS AND OBJECTIVES

- To make tourist travelling plan more scheduled and convenient for them. So they can enjoy their trips with any hesitation.
- The whole preplanned as per the tourist seasonal places and available days for the trip

3.3 SOFTWARE CONTEXT

We require software's like Eclipse, Xampp along with which we use the MySQL database for storage and used web browsers for that we used Apache tomcat Servers.

3.4 MAJOR CONSTRAINTS

To find perfect match for the user place of interest from recommendation system.

3.5 METHODOLOGY USED FOR PROBLEM SOLVING

The single problem can be solved by different solutions. This considers the performance parameters for each approach. Thus considers the efficiency is-

sues. Use of divide and conquer strategies to exploit distributed/ parallel/ concurrent processing of the above to identify objects, morphisms, overloading in functions and functional relations and any other dependency.

3.6 OUTCOME

- Proposed system improve the handing of service requests and issues raised by peoples in regard to network issues and efficiently by the service providers
- It will help to review and analyze the operational performance.
- System recommend user according to their place of interest.

3.7 APPLICATIONS

Application used by anyone who loves to travel, who want to explore. Those who plan for vacation for them this application is useful

3.8 HARDWARE RESOURCES REQUIRED

Sr. No.	Parameter	Minimum Requirement
1	Processor	Core I5
2	RAM	4 GB.

Table 3.1: Hardware Requirements

3.9 SOFTWAREWARE RESOURCES REQUIRED

Sr. No.	Parameter	Minimum Requirement
1	OPERATING SYSTEM	Windows 7/8.
2	CODING LANGUAGE	JAVA/J2EE
3	IDE	Eclipse Kepler
4	DATABASE	SQLYog community/XAMPP Server.
5	Web Server	Apache Tomcat.

Table 3.2: Software Requirements

CHAPTER 4

PROJECT PLAN

4.1 PROJECT ESTIMATES

4.1.1 Reconciled Estimates

4.1.1.1 Cost Estimate

The project cost can be found using any one of the model.

COCOMO-1 Model

COCOMO-2 Model

Model -1: The basic COCOMO model computes software development efforts as a function of program size expressed in estimated lines of code.

Model-2: The intermediate COCOMO model computes software development efforts as a function of program size and a set of cost drivers that include subjective assessment of the product, hardware, personnel, project attributes

Model-3: The advanced COCOMO model incorporates all characteristics of the intermediate version with a assessment of the cost drivers impact on each step of the software engineering process. Following is the basic COCOMO -2 model.

The basic COCOMO -2 model equations take form:

$$E=A(b)KLOC^b$$

$$D=C(b)E^b$$

Where E is the effort applied in person months. D is development time in chronological month. KLOC is estimated number of delivered lines of code for the project. This project can be classified as Semidetached software project.

The rough estimate of number of lines of this project is 9.072k. Applying the above formula

$$E=3.0*(9.072)^{1.22}$$

$$= 44.20 \text{ person- months}$$

$$D=2.5* 44.35$$

$$= 9.40 \text{ months}$$

Hence according COCOMO -2 model the time required for completion of the project is 9 (9.40) months. Cost of Project:

Equation for calculation of cost of project using COCOMO - 2 model is: $C =$

$D * C_p$ Where,

C = Cost of project

D = Duration in month

C_p = Cost incurred per person-month, $C_p = \text{Rs.}5000/-$ (per person-month) (approx.)

$C = 9 * 2000$

$= 18000/-$

Hence according COCOMO - 2 model the cost of project is 18000/-(approx.)

4.1.1.2 Time Estimate

Approximately 10 months

4.1.2 Project Resources

Team consists of Three members and proper planning mechanisms are used and role are defined.

Below are the Roles:

Dahiwal Aishwarya Keshav - Developer.

Deokar Mansi Mahendra - Developer.

Gadge Ankita Sunil - Developer.

4.1.3 Risk Analysis

The risks for the project can be analyzed within the constraints of time and quality.

ID	Risk Description	Probability	Impact		
			Schedule	Quality	Overall
1	Description 1	Low	Low	High	High
2	Description 2	Low	Low	High	High

Table 4.1: Risk Table

Probability	Value	Description
High	Probability of occurrence is	> 75%
Medium	Probability of occurrence is	26 – 75%
Low	Probability of occurrence is	< 25%

Table 4.2: Risk Probability definitions [?]

4.2 RISK MANAGEMENT

4.2.1 Overview of Risk Mitigation, Monitoring, Management

4.2.2 Project Resources

Windows , eclipse , 4 GB RAM, High speed internet connection.

4.3 RISK MANAGEMENT W.R.T. NP HARD ANALYSIS

This section discusses Project risks and the approach to managing them.

4.3.1 Risk Identification

For risks identification, review of scope document, requirements specifications and schedule is done. Answers to questionnaire revealed some risks. Please refer table for all the risks. You can refereed following risk identification questionnaire.

1. Have top software and customer managers formally committed to support the project?

Ans-All the required software's are freely available and hence development

will be possible

2. Are end-users enthusiastically committed to the project and the system/product to be built

Ans-The end user will be developers itself.

3. Are requirements fully understood by the software engineering team and its customers

Ans-Yes. All the requirements are fully understand by our team

4. Have customers been involved fully in the definition of requirements?

Ans-This is academic level of project. So that whatever requirement be specify it should be by our team members and our guide.

5. Do end-users have realistic expectations?

Ans-Yes.

6. Does the software engineering team have the right mix of skills?

Ans-yes. We have.

7. Are project requirements stable?

Ans-Yes. All the basic requirements for this project are stable, from through some being variable but can be fulfilled.

8. Is the number of people on the project team adequate to do the job?

Ans-Yes

9. Do all customer/user constituencies agree on the importance of the project and on the requirements for the system/product to be built?

Ans-Yes

4.4 TASK NETWORK

Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Following this step, the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. Project planning is often used

to organize different areas of a project, including project plans, work loads and the management of teams and individuals. The logical dependencies between tasks are defined using an activity network diagram that enables identification of the critical path. Project planning is inherently uncertain as it must be done before the project is actually started. Therefore the duration of the tasks is often estimated through a weighted average of optimistic, normal, and pessimistic cases. The critical chain method adds "buffers" in the planning to anticipate potential delays in project execution. Float or slack time in the schedule can be calculated using project management software. Then the necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. At this stage, the project schedule may be optimized to achieve the appropriate balance between resource usage and project duration to comply with the project objectives. Once established and agreed, the project schedule becomes what is known as the baseline schedule. Progress will be measured against the baseline schedule throughout the life of the project. Analyzing progress compared to the baseline schedule is known as earned value management. The inputs of the project planning phase 2 include the project charter and the concept proposal. The outputs of the project planning phase include the project requirements, the project schedule, and the project management plan. The Project Planning can be done manually. However, when managing several projects, it is usually easier and faster to use project management software.

Phase	Task	Description
Phase 1	Analysis	Analyze the information related to Project Topic
Phase 2	System Design	Assign the module and design the process flow Control
Phase 3	Implementation	Implement the code for all the modules and integrate all the modules
Phase 4	Testing	Test the code and overall process weather the process works properly Test the code and over all process weather the process works properly
Phase 5	Maintenance	Modification of a software product after delivery to improve performance or maintainability.

4.5 TIMELINE CHART

A Gantt chart is constructed with a horizontal axis representing the total time span of the project, broken down into increments (for example, days, weeks, or months) and a vertical axis representing the tasks that make up the project (for example, if the project is outfitting your computer with new software, the major tasks involved might be: conduct research, choose software, install software). Horizontal bars of varying lengths represent the sequences, timing, and time span for each task. Using the same example, you would put "conduct research" at the top of the vertical axis and draw a bar on the graph that represents the amount of time you expect to spend on the research, and then enter the other tasks below the first one and representative bars at the points in time when you expect to undertake them. The bar spans may overlap, as, for example, you may conduct research and choose software during the same time span. As the project progresses, secondary bars, arrowheads, or darkened bars may be added to indicate completed tasks, or the portions of tasks that have been completed. A vertical line is used to represent the report date. Gantt charts give a clear illustration of project status, but one problem with them is that they don't indicate task dependencies - you cannot tell how one task falling behind schedule affects other tasks.

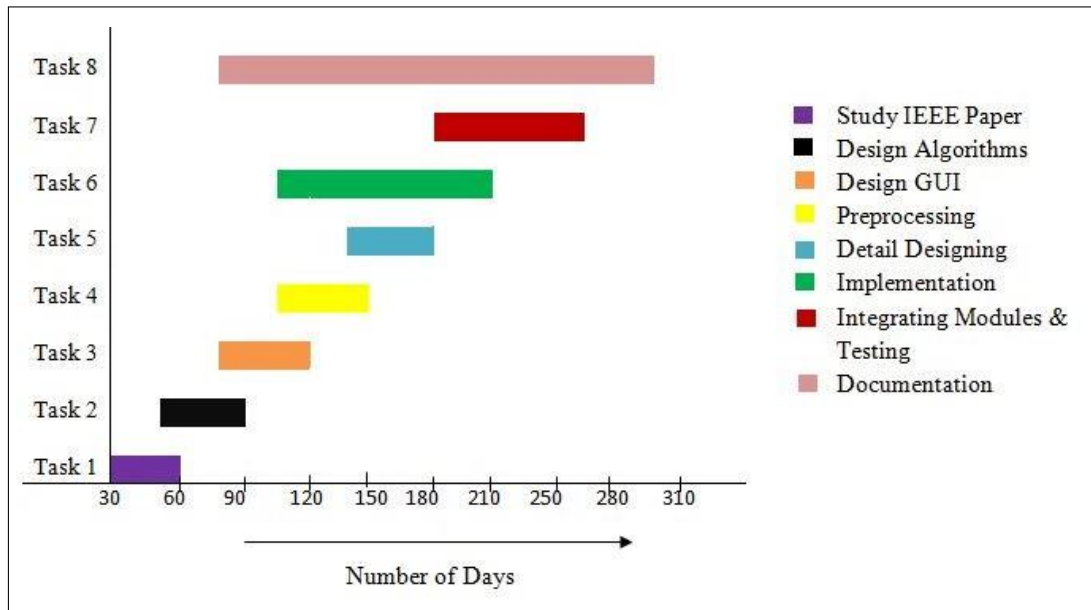


Figure 4.1: Timeline Chart

4.6 TEAM ORGANIZATION

Team consists of only Three members and proper planning mechanisms are used and role are defined.

Name	Role
• DahiwalAishwarya	Schedule all plan of project. Manage the team. Divide the work in team. The deadline are assign. Consider the all requirements and as per requirement gathering divide the module to each team members.
• Deokar Manasi	Arrange the developing tool i.e platform, language, software, hardware and make the system architecture. Write the code of every module and apply the appropriate use case to test the plan.
• Gadge Ankita	Test the each module if result is correct then combine all module and again test. After deployment manages the feedback report and correct some corrections.

4.6.1 Team structure

The team structure for the project is identified. Roles are defined.

4.6.2 Managment Reporting and Communication

Mechanisms for progress reporting and inter/intra team communication are identified as per assesment sheet and lab time table.

CHAPTER 5

**SOFTWARE REQUIREMENT
SPECIFICATION (SRS IS TO BE
PREPARED USING RELEVANT
MATHEMATICS DERIVED AND
SOFTWARE ENGG. INDICATORS IN
ANNEX A AND B)**

5.1 INTRODUCTION

5.1.1 Purpose and Scope of Document

we propose a system in which tourist define its holiday starting date and ending date then system provide some recommendation like points according to season, schedule, hotels and places according to their specialities. Tourist will filter according to its need. Recommend user mid station places which coming in between the places of their travelling, which is covered in the vacation days, as well as user rating is also consider .

5.1.2 Overview of responsibilities of Developer

1. To have understanding of the problem statement.
2. To know what are the hardware and software requirements of Proposed system.
3. To have understanding of proposed system.
4. To do planning various activities with the help of planner.
5. Designing, programming, testing etc.

5.2 USAGE SCENARIO

This section provides various usage scenarios for the system to be developed.

5.2.1 Use-cases

A use case diagram in the Unified Modeling Language (UML) is a type of behavioral diagram defined by and created from a Use-case analysis. Its purpose is to present a graphical overview of the functionality provided by a system in terms of actors, their goals (represented as use cases), and any dependencies between those use cases. The main purpose of a use case diagram is to show what system functions are performed for which actor. Roles of the actors in the system can be depicted.

5.2.2 Use Case View

Use Case Diagram. Example is given below

- A use case diagram is a way to summarize details of a system and the users within that system. It is generally shown as a graphic depiction of interactions among different elements in a system. In class diagram of our system there are two classes user and admin. As shown in above user case diagram, there are two main users in our project i.e. User and Admin. Admin user can login can login into the application. once logged in admin can add places and information of places and then admin can logout. Another user can fill registration form and create the account. once account is created user can login. Then user can will enter requirements for tour, our system will suggest the places as per the requirement to user.

user: User can Does registration and then login for search places, then select travelling type and also location details and also view predictions .

Admin : By login admin can view user. Upload places into the system .Add prediction details .Add details also can view by users.

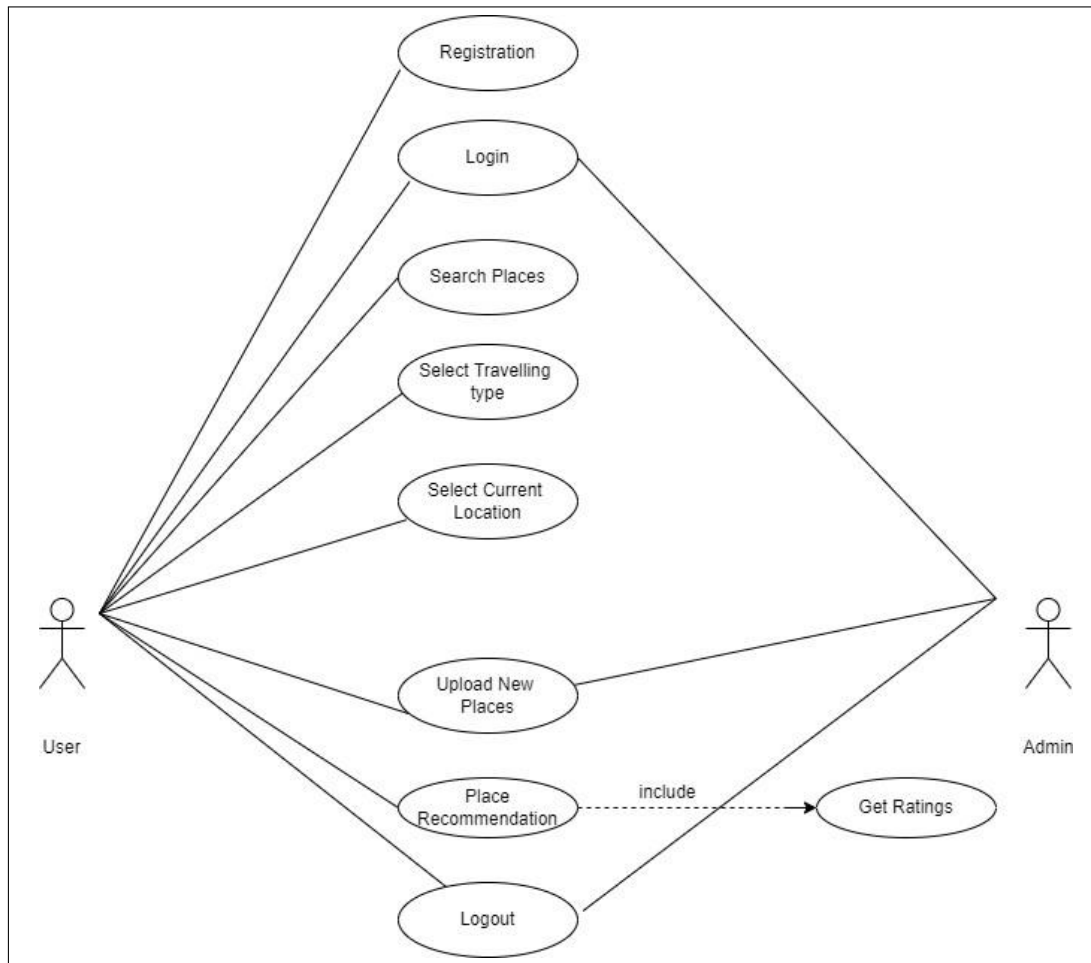


Figure 5.1: Use case diagram

5.3 DATA MODEL AND DESCRIPTION

5.3.1 Data Description

Describing and documenting data is essential in ensuring that the researcher, and others who may need to use the data, can make sense of the data and understand the processes that have been followed in the collection, processing, and analysis of the data. Research data are any physical and/or digital materials that are collected, observed, or created in research activity for purposes of analysis to produce original research results or creative works.

5.3.2 Data objects and Relationships

A data object is a part of the repository whose content can be addressed and interpreted by the program. All data objects must be declared in the ABAP program and

are not persistent, meaning that they only exist while the program is being executed. Before you can process persistent data (such as data from a database table or from a sequential file), you must read it into data objects first. Conversely, if you want to retain the contents of a data object beyond the end of the program, you must save it in a persistent form.

5.3.3 Data Flow Diagram

This is Data Flow level 0 Diagram. Here we have shown user can enter the inputs for tour and our system will provide recommendation for tout to user. First user login into the system then this login details search in the database. If the details inside the database is same as login details then system recommend to the system. System gives the successfullogin message to the user.

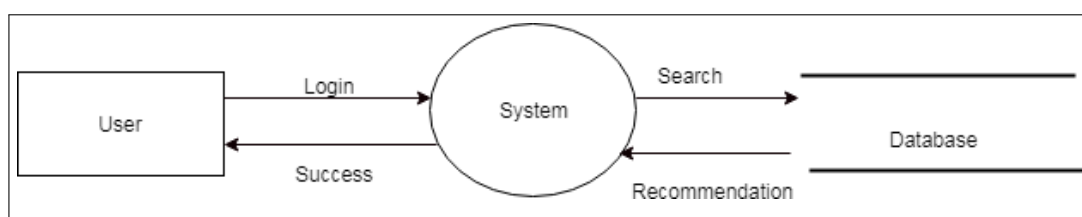


Figure 5.2: Level 0 Data Flow Diagram

5.3.3.1 Level 1 Data Flow Diagram

This is Data Flow level 1 Diagram. In this diagram we have shown complete flow of the project in detail. how admin can add places in database and how user can get tour recommendation as per the interest. User login into the system. After successful login user can choice type of places they want to visit based on date, travelling type, current location and no of peoples. If it needs any updation in the system then user take updation done by admin. Admin can upload the places into database and also check for the updation. Now all data is present in the database that can be access by user when admin recommend to user.

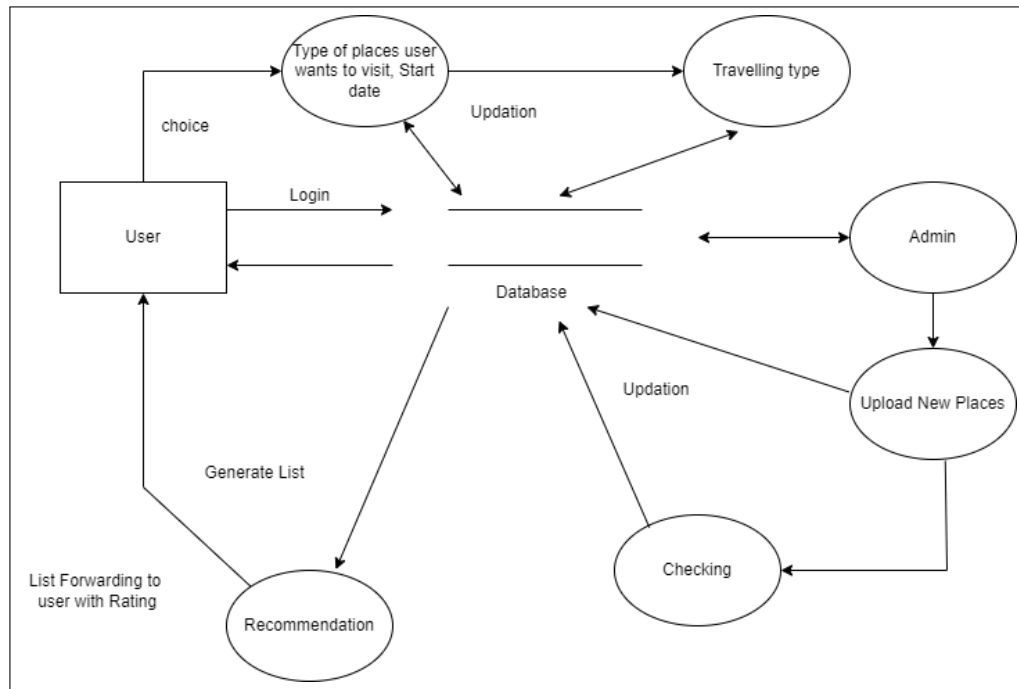


Figure 5.3: Level 1 Data Flow Diagram

5.3.4 Activity Diagram:

- Activity diagrams are graphical representations of workflows of step wise activities and actions with support for choice, iteration and concurrency. In the Unified Modeling Language, activity diagrams can be used to describe the business and operational step-by-step workflows of components in a system. An activity diagram shows the overall flow of control. In above activity diagram we have shown activities of admin and user and how system will show the output i.e. tour recommendation using reference of K-NN and K-means algorithm Both User and Admin first register in the system then login into the system after successful registration user and admin have separate works. Admin can upload the places also upload their specialties and if the visiting places is not suitable to visit then admin will provides the alert message. admin can upload all this data into the system. on the other hand Admin recommend this data to user and user visit places and gives rating to the places. System shows fetch seasonal places and show plan to the user. Then logout.

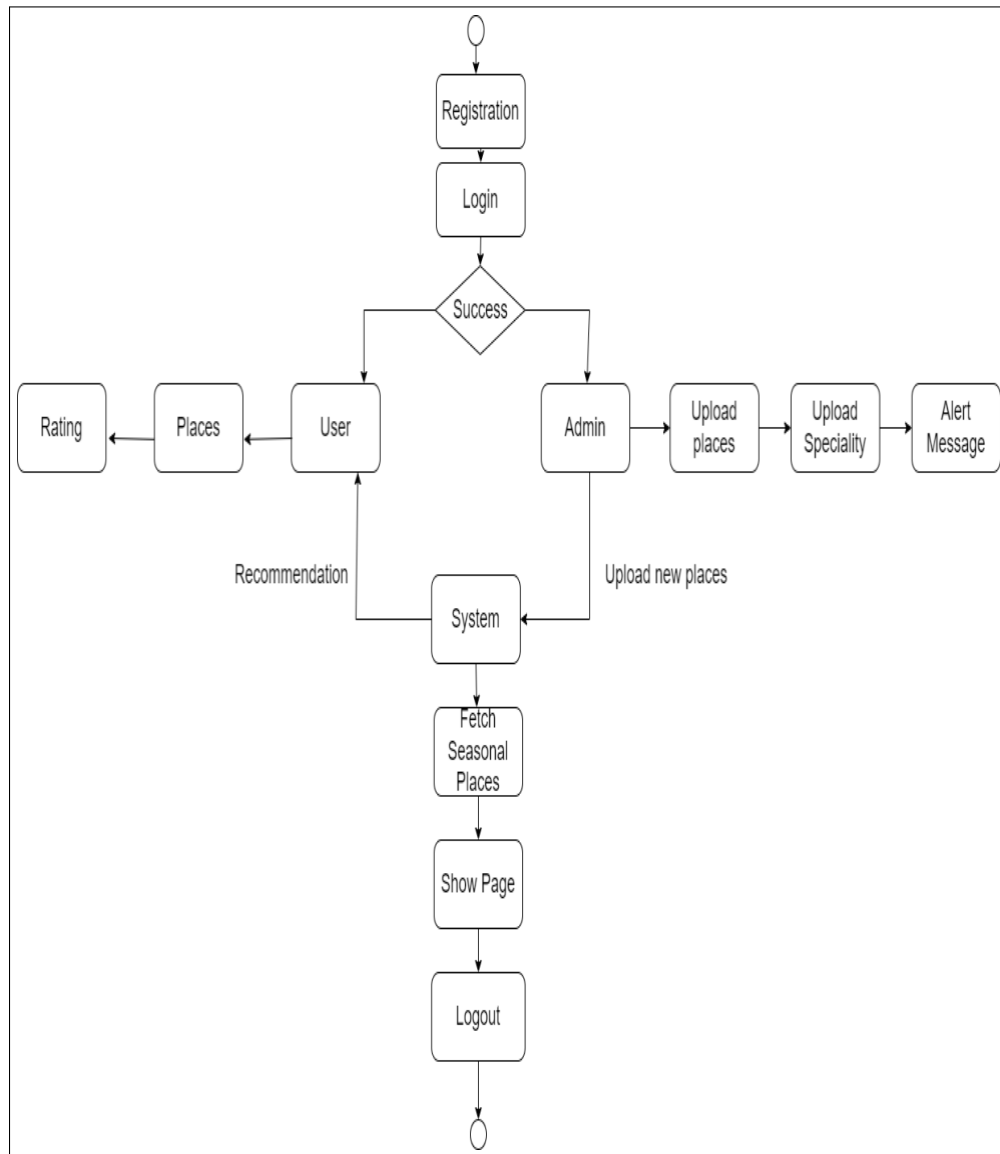


Figure 5.4: Activity Diagram

5.3.5 Sequence Diagram:

- Sequence diagrams can be used to provide a graphical representation of object interactions or object coordination over the time. These basically displays a actor or user, and the objects and components they interact with in the execution of a use case. The sequence diagram below gives the sequence of activities preform by user ,admin and system .this diagram gives step by step flow of all activities. The sequence diagrams displays the own of messages from one object to another object, and as such correspond to the methods and events supported by a class/object. There are three objects present in the system as User, System and Admin. User register into the system this login details is

stored by admin into the database. By verifying the details entered by user and details present in the system it shows login successful to user. After login user search for places and admin can upload the new places and recommend this places to the users. User also search for routes, provide source destination and type of interest. system generates the different routes and recommend details to users.

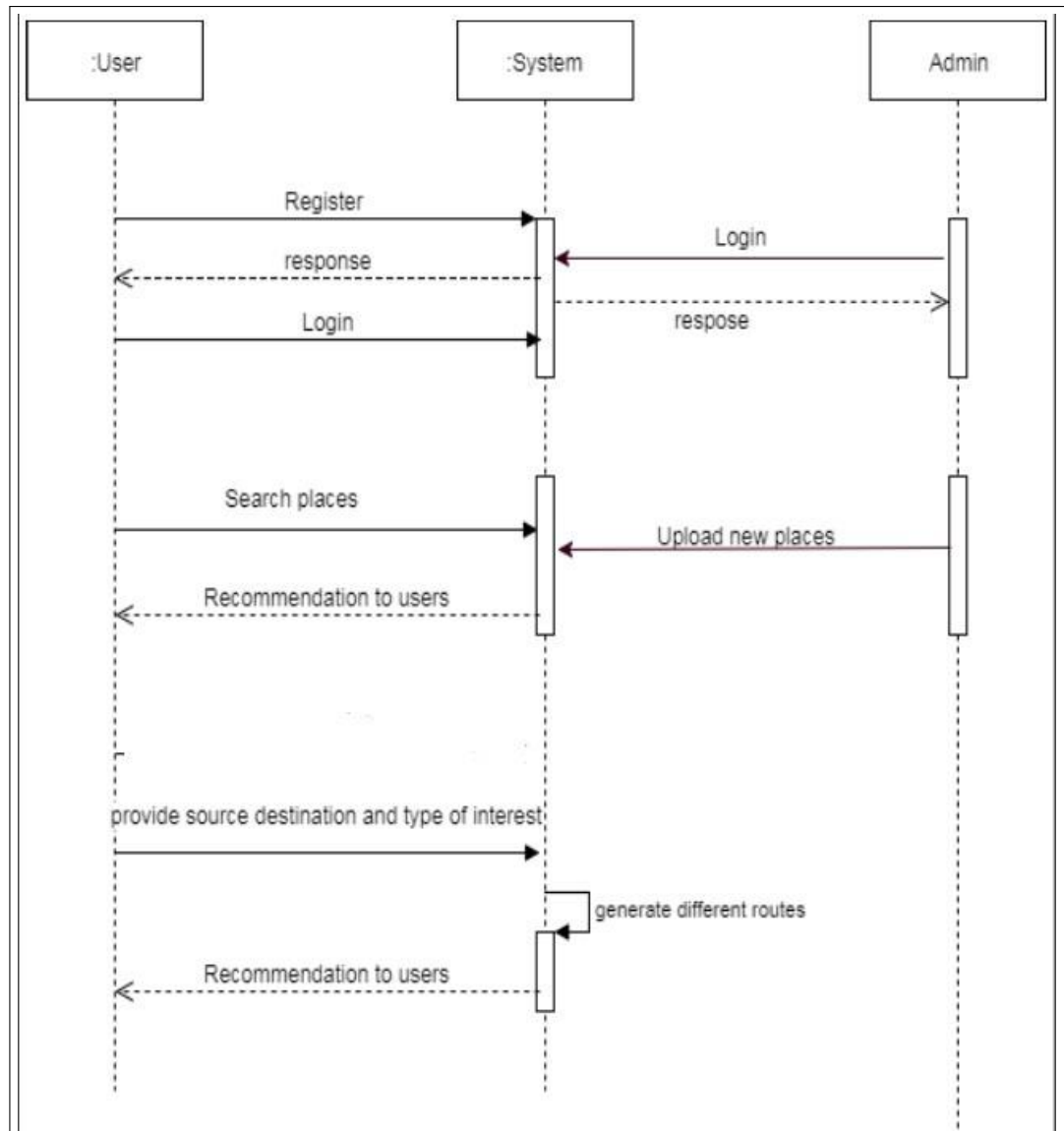


Figure 5.5: Sequence Diagram

5.3.6 Non Functional Requirements:

5.3.6.1 Interface Requirements

- High Speed Internet
- Router

5.3.6.2 Performance Requirements

- Laptops with latest configuration

5.3.7 Design Constraints

1. Apache Tomcat webserver.
2. SQLYog community/XAMPP Server.

5.3.8 Software Interface Description

The software interface(s) to the outside world is(are) described. The requirements for interfaces to other devices/systems/networks/human are stated.

CHAPTER 6

DETAILED DESIGN DOCUMENT USING

APPENDIX A AND B

6.1 INTRODUCTION

Location-Based social network (LBSN) services allow users to perform check-in and share their check-in data with their friends. In particular, when a user is traveling, the check-in data are in fact a travel places with some nearest places and their specialities information. As a result, a massive number of routes are generated, which play an essential role in many well-established research areas, such as mobility prediction, urban planning and traffic management. In this project, we focus on trip planning and intend to discover travel experiences from shared data in location-based social networks. To facilitate trip planning, provide an interface in which a user could submit the query region and the total travel time. In contrast, we consider a scenario where users specify their preferences with keywords. For example, when planning a trip in Sydney, one would have “Opera House”. As such, we extend the input of trip planning by exploring possible keywords issued by users. In this project, we develop a Keyword-aware Representative Travel Route (KRTR) framework to retrieve several recommended places where keyword means the personalized requirements that users have for the trip. The places dataset could be built from the collection of low-sampling check-in records.

6.2 ARCHITECTURAL DESIGN

We propose an efficient Keyword-aware Representative Travel Route framework that is knowledge extraction from User interest. In this system there are two main users i.e. Admin and traveller. Admin User can login into the application and He/She can maintain the data set of places. In the data set admin can upload location name and specialities, type, best time for visit of that place. Traveller user can register and create new account. once account is created traveller user can login can make plan of tour. Traveller can enter the inputs like tour date, tour type etc.. as per his interest. then this system will re command the tour places using reference of K-means and knn algo to the User. and when traveller reached at the tour place this system will suggest the activity and plan using info which is added by the admin.

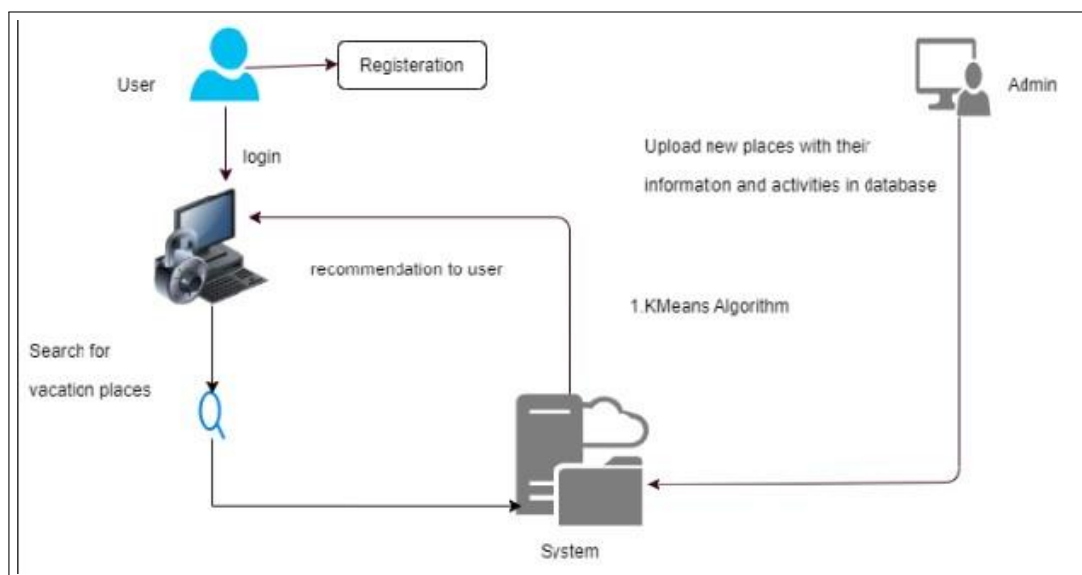


Figure 6.1: Architecture diagram

6.3 DATA DESIGN (USING APPENDICES A AND B)

A description of all data structures including internal, global, and temporary data structures, database design (tables), file formats.

6.3.1 Internal software data structure

Protects the data confidentiality and integrity .

6.3.2 Global data structure

No global data structure used

6.3.3 Database description

Database(s) / Files created/used as part of the application is(are) described.

6.4 COMPOENT DESIGN

6.4.1 Class Diagram

This is the class diagram of our project. in this diagram we have mentioned the classes which we created. In each class we have mentioned the attributes of that class. There are seven objects in the system namely User, Places, Ratings, Recommendation, K-means, Admin. Class User have the attributes as email, mobile no, name, address and password. Operation of the class User are login and logout. Class Places have the attributes as type of classes, start date, no of days, travelling type, current location, no of people. Operation of the class Places are search. Class Ratings have the attributes as find places, hotel available. Class Recommendation have the attributes as find places, hotel available. Class K-Means have the attributes as clustering. Class Admin have the attributes as upload places and Operation of the Admin classes are log in and log out.

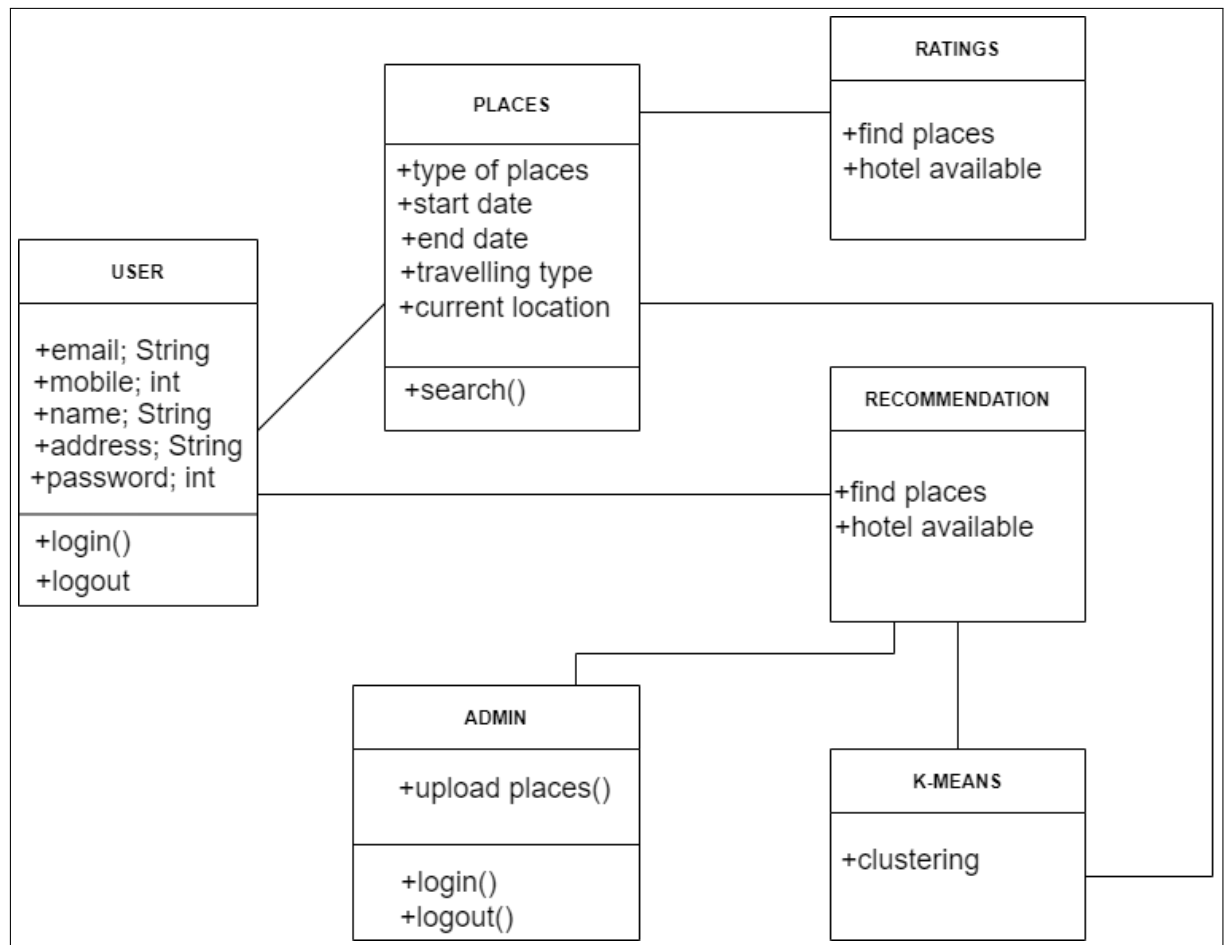


Figure 6.2: Class Diagram

CHAPTER 7

PROJECT IMPLEMENTATION

7.1 INTRODUCTION

There are many different sites and application which provide numbers of different packages. But, they are not plan according to tourist schedule. Thats why, we are developing a system in which tourist defined its need , time, date, interest through that system recommend schedule, hotel, point with respect to season. As well as system recommend user according their place of interest.

7.2 TOOLS AND TECHNOLOGIES USED

Sr. No.	Parameter	Requirement
1	OPERATING SYSTEM	Windows 7/8/10.
2	CODING LANGUAGE	JAVA/J2EE
3	IDE	Eclipse Kepler,Android SDK
4	DATABASE	SQLYog community/XAMPP Server.
5	Web Server	Apache Tomcat.

Table 7.1: Tools and Technologies Used

7.3 METHODOLOGIES

7.3.1 Algorithm used:

7.3.1.1 K-Means Clustering Algorithm

This algorithm we have used while adding the places into the database. When admin add the place in database we have given category, season to visit, etc.. for the location. and we are saving the data based on that. So here we are using clustering concept for storing places are per the category, season to visit, etc..and we have taken reference of K means algorithm for the clustering and storing the locations are per the category.

7.3.2 Analysis Models: SDLC Model to be applied

SDLC model to be applied

Waterfall Model:

The Waterfall Model was first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. It is very simple to understand and use. In a waterfall model, each phase must be completed fully before the next phase can begin. This type of model is basically used for the project which is small and there are no uncertain requirements. At the end of each phase, a review takes place to determine if the project is on the right path and whether or not to continue or discard the project. In this model the testing starts only after the development is complete. In waterfall model phases do not overlap.

1. Requirement gathering and analysis:

In this step of waterfall we identify what are various requirements are need for our project such are software and hardware required, database, and interfaces.

2. System Design:

In this system design phase we design the system which is easily understood for end

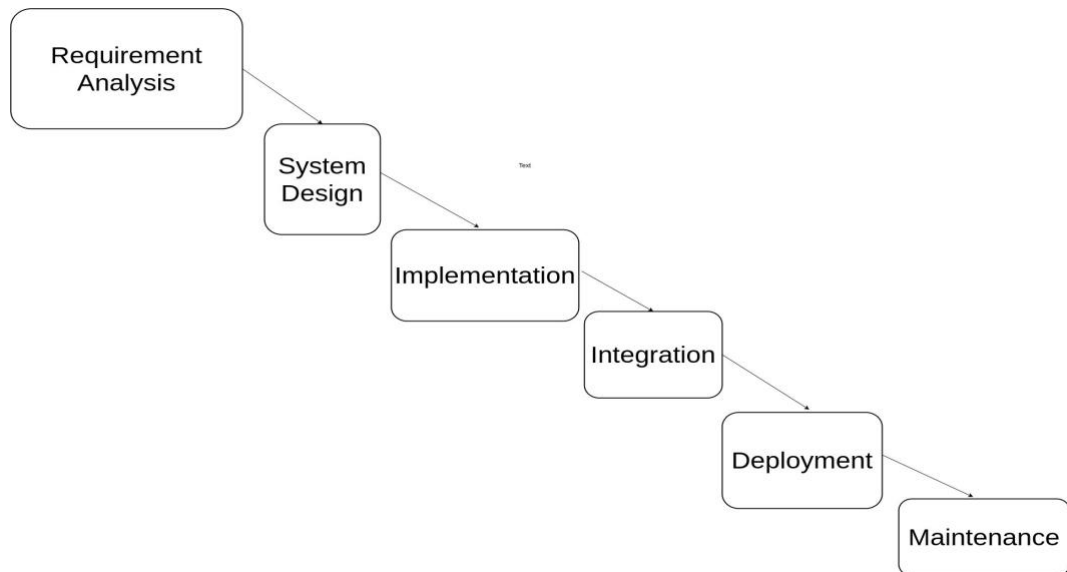


Figure 7.1: Waterfall Model

user i.e. user friendly. We design some UML diagrams and data flow diagram to understand the system flow and system module and sequence of execution.

3. Implementation:

In implementation phase of our project we have implemented various module required of successfully getting expected outcome at the different module levels. With inputs from system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality which is referred to as Unit Testing.

4. Testing:

The different test cases are performed to test whether the project module are giving expected outcome in assumed time. All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.

5. Deployment of System:

Once the functional and non-functional testing is done, the product is deployed in the customer environment or released into the market.

6. Maintenance:

There are some issues which come up in the client environment. To fix those issues patches are released. Also to enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment. All these phases are cascaded to each other in which progress is seen as flowing steadily downwards like a waterfall through the phases. The next phase is started only after the defined set of goals are achieved for previous phase and it is signed off, so the name "Waterfall Model". In this model phases do not overlap.

CHAPTER 8

SOFTWARE TESTING

8.1 TYPE OF TESTING USED

8.1.1 Testing Strategy

8.1.1.1 Unit testing

It is the testing of individual software units of the application .it is done after the completion of an individual unit before integration. Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. All decision branches and internal code flow should be validated. This is a structural testing, that relies on knowledge of its construction and is invasive. Unit tests perform basic tests at component level and test a specific business process, application, and/or system configuration. Unit tests ensure that each unique path of a business process performs accurately to the documented specifications and contains clearly defined inputs and expected results.

8.1.1.2 Integration testing

Integration tests are designed to test integrated software components to determine if they actually run as one program. Testing is event driven and is more concerned with the basic outcome of screens or fields. Integration tests demonstrate that although the components were individually satisfaction, as shown by successfully unit testing, the combination of components is correct and consistent. Integration testing is specifically aimed at exposing the problems that arise from the combination of components.

8.1.1.3 Functional test

Functional tests provide systematic demonstrations that functions tested are available as specified by the business and technical requirements, system documentation, and user manuals.

Functional testing is centered on the following items:

Valid Input : identified classes of valid input must be accepted.

Invalid Input : identified classes of invalid input must be rejected.

Functions : identified functions must be exercised.

Output : identified classes of application outputs must be exercised.

Systems/Procedures: interfacing systems or procedures must be invoked.

Organization and preparation of functional tests is focused on requirements, key functions, or special test cases. In addition, systematic coverage pertaining to identify Business process flows; data fields, predefined processes, and successive processes must be considered for testing. Before functional testing is complete, additional tests are identified and the effective value of current tests is determined.

8.1.1.4 System Test

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. An example of system testing is the configuration oriented system integration test. System testing is based on process descriptions and flows, emphasizing pre-driven process links and integration points.

Sr. No.	Test Case	Expected Result	Actual Result	Status
1	Admin login	Valid Credentials	login successfully	Pass
2	Admin login	Invalid Credentials	login not successfully	Pass
3	Add Places	Upload places	Upload successfully	Pass
4	Add Speciality	Upload Speciality	Upload successfully	Pass
5	User Registration	Register User	Register successfully	Pass
6	User login	Valid Credentials	login successfully	Pass
7	User login	Invalid Credentials	login not successfully	Pass
8	Place Suggestion	Search interest	Places show	Pass
9	Tour Recommendation	Select place	show Recommendation	Pass
10	Voice output	Voice Click	Recommendation in voice	Pass

Figure 8.1: Test Case diagram

CHAPTER 9

RESULTS

9.1 OUTCOME:

We propose a novel keyword extraction module to identify the semantic meaning and match the measurement of routes, and have designed a route reconstruction algorithm to aggregate route segments into travel routes in accordance with query range and time period.

9.2 SCREEN SHOTS

Outputs / Snap shots of the results

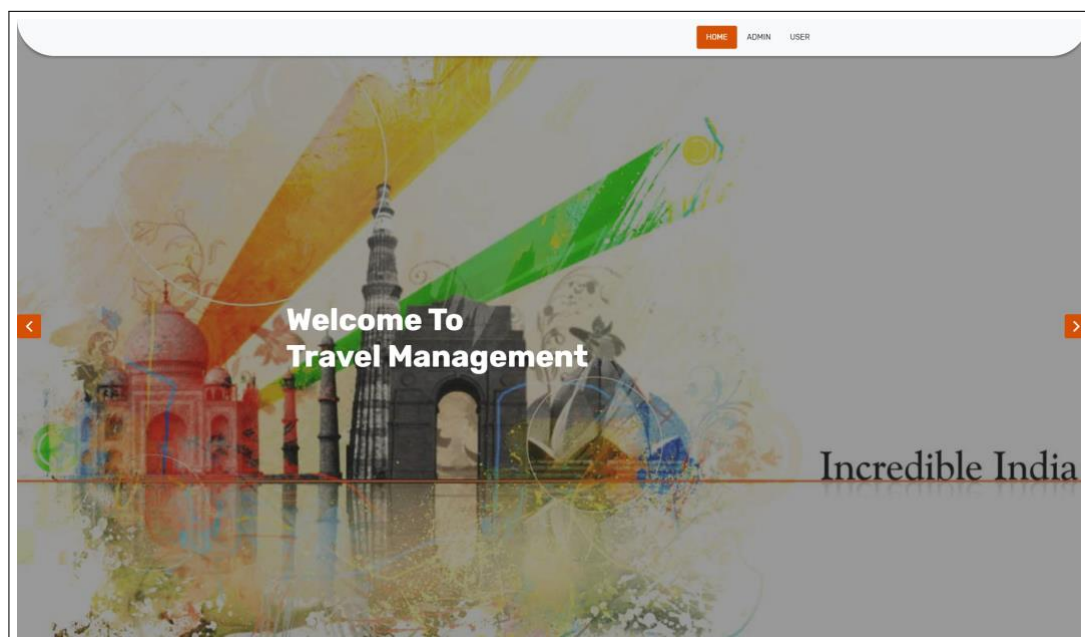
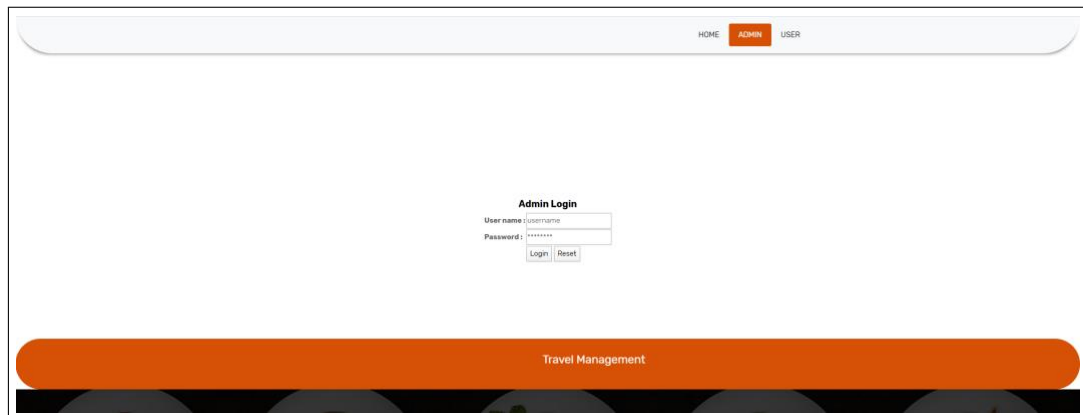


Figure 9.1: This is Home Page of our Application.



HOME ADMIN USER

Admin Login

User name:

Password:

Travel Management

Figure 9.2: This is admin login page. Here admin can enter predefined user name and password and can login into the system.

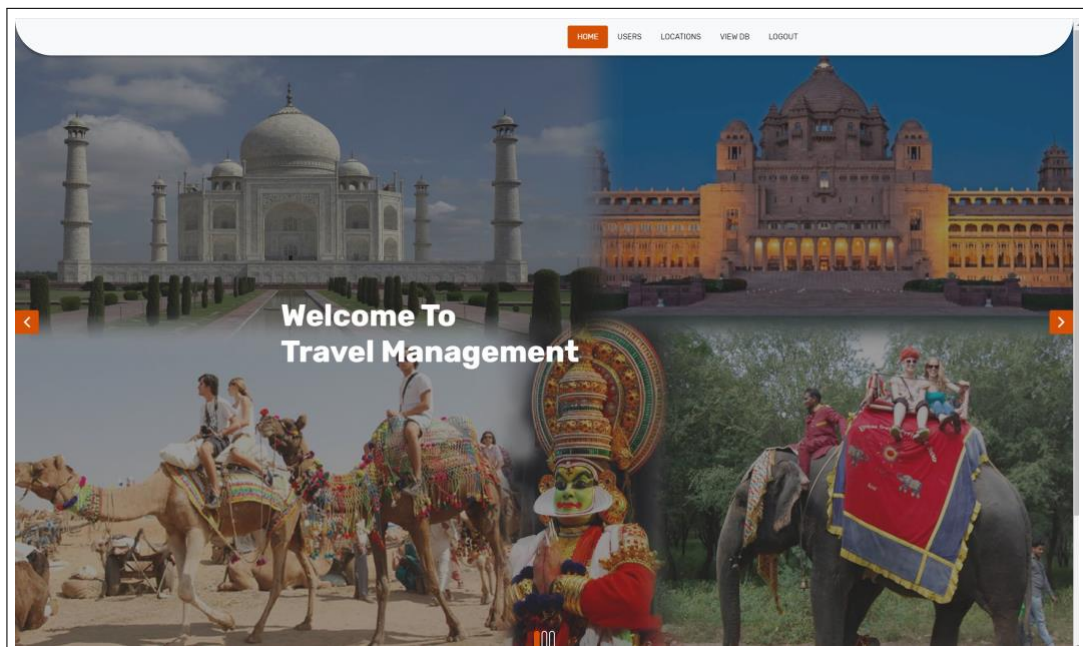
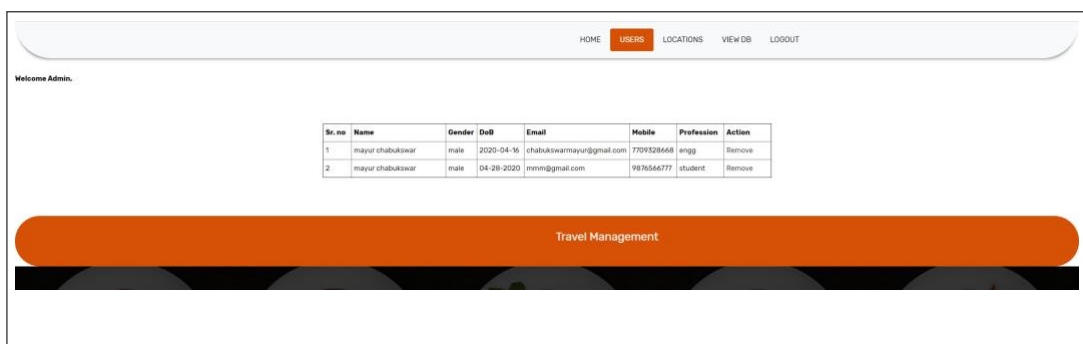


Figure 9.3: This is Admin Home page



HOME **USERS** LOCATIONS VIEW DB LOGOUT

Welcome Admin.

Sr.no	Name	Gender	DoB	Email	Mobile	Profession	Action
1	majur chabukswar	male	2020-04-16	chabukswarmajur@gmail.com	7709528668	engg	Remove
2	majur chabukswar	male	04-28-2020	mmmm@gmail.com	9876566777	student	Remove

Travel Management

Figure 9.4: Here Admin can view the list of all registered users

HOME USERS **LOCATIONS** VIEW DB LOGOUT

Add New Location into database

Location :

Category :

Season to visit :

Date :

Travel Management

Figure 9.5: Here admin can add the places with details

HOME USERS LOCATIONS **VIEW DB** LOGOUT

Sr. no	Location	Category	Season	Action	Remove
1	lonavala	Natural	All time	View	Remove
2	mumbai	Other	All time	View	Remove
3	Mumbai, Maharashtra, India	Historic	All time	View	Remove
4	new sangli	Natural	All time	View	Remove
5	Pune Station Bus Stand, Agarkar Nagar, Pune, Maharashtra, India	Devotional	All time	View	Remove
6	Pune, Maharashtra, India	Historic	All time	View	Remove
7	taligavi	Other	All time	View	Remove
8	Thermax Chowk, MIDC, Chinchwad, Pimpri-Chinchwad, Maharashtra	Devotional	All time	View	Remove

Travel Management

Figure 9.6: This is the list of all added places, here user can add speciality's as well

HOME USERS **DATABASE** VIEW DB LOGOUT

Update Location Speciality details

Location :

Category :

Season to visit :

Speciality :

Speciality Type :

Visitors Type :

Travel Management

Figure 9.7: Here user can update the information of places

HOME ADMIN **USER**

User Registration !!

First name :

Last name :

DOB :

Gender : ☐ Male ☐ Female

Email :

Mobile :

Profession :

Password :

Already SingUp? Click here for Singin

Welcome To

Figure 9.8: This is form of registration, Here user can enter all details and create new account

Hi Dipak Rokade.

HOME **PROFILE** TOUR REACHED AT TASK LOGOUT

Home > profile

Name	Dipak Rokade
Email	dipak@gmail.com
Gender	male
Date of Birth	1998-06-09
Mobile	8767545678
Profession	student

Welcome To Travel Management

Figure 9.9: This is form of registration, Here user can enter all details and create new account

Hi Dipak Rokade,
HOME
PROFILE
TOUR
REACHED AT
TASK
LOGOUT

Journey From: 13-05-2020
Journey To: 14-05-2020

Interest: Natural
Season: Ramp
Submit
Reset

Travel Management

Hi Dipak Rokade,
HOME
PROFILE
TOUR
REACHED AT
TASK
LOGOUT

Journey From: dd-mm-yyyy
Journey To: dd-mm-yyyy

Interest: ----- Select -----
Season: ----- Select -----
Submit
Reset

Continuous Search

Sr.No	Place Name	Location Type	Season
0	lonavala	Natural	All time
1	new sangavi	Natural	All time

Travel Management

Figure 9.10: Here User will enter interest for the tour

Hi Dipak Rokade, HOME PROFILE **TOUR** REACHED AT TASK LOGOUT

Location

[see ratings by others visitors](#)

Sr.No	Place Name	Location Type	Visitor Type
1	Chikki	food	all
2	Bhushi Dam	Waterfalls	all

Travel Management

Figure 9.11: : System will suggest the places as per the user's interest

Hi Dipak Rokade, HOME PROFILE **TOUR** TASK LOGOUT

Home> Tours > ratings

	One	Two	Three	Four	Five
0.00000					
0.00016					
0.00032					
0.00048					
0.00064					
0.00080					
0.00096					
0.00112					
0.00128					
0.00144					
0.00160					
0.00176					
0.00192					
0.00208					
0.00224					
0.00240					
0.00256					
0.00272					
0.00288					
0.00304					
0.00320					
0.00336					
0.00352					
0.00368					
0.00384					
0.00400					
0.00416					
0.00432					
0.00448					
0.00464					
0.00480					
0.00496					
0.00512					
0.00528					
0.00544					
0.00560					
0.00576					
0.00592					
0.00608					
0.00624					
0.00640					
0.00656					
0.00672					
0.00688					
0.00704					
0.00720					
0.00736					
0.00752					
0.00768					
0.00784					
0.00800					
0.00816					
0.00832					
0.00848					
0.00864					
0.00880					
0.00896					
0.00912					
0.00928					
0.00944					
0.00960					
0.00976					
0.00992					
0.01008					
0.01024					
0.01040					
0.01056					
0.01072					
0.01088					
0.01104					
0.01120					
0.01136					
0.01152					
0.01168					
0.01184					
0.01200					
0.01216					
0.01232					
0.01248					
0.01264					
0.01280					
0.01296					
0.01312					
0.01328					
0.01344					
0.01360					
0.01376					
0.01392					
0.01408					
0.01424					
0.01440					
0.01456					
0.01472					
0.01488					
0.01504					
0.01520					
0.01536					
0.01552					
0.01568					
0.01584					
0.01600					
0.01616					
0.01632					
0.01648					
0.01664					
0.01680					
0.01696					
0.01712					
0.01728					
0.01744					
0.01760					
0.01776					
0.01792					
0.01808					
0.01824					
0.01840					
0.01856					
0.01872					
0.01888					
0.01904					
0.01920					
0.01936					
0.01952					
0.01968					
0.01984					
0.02000					
0.02016					
0.02032					
0.02048					
0.02064					
0.02080					
0.02096					
0.02112					
0.02128					
0.02144					
0.02160					
0.02176					
0.02192					
0.02208					
0.02224					
0.02240					
0.02256					
0.02272					
0.02288					
0.02304					
0.02320					
0.02336					
0.02352					
0.02368					
0.02384					
0.02400					
0.02416					
0.02432					
0.02448					
0.02464					
0.02480					
0.02496					
0.02512					
0.02528					
0.02544					
0.02560					
0.02576					
0.02592					
0.02608					
0.02624					
0.02640					
0.02656					
0.02672					
0.02688					
0.02704					
0.02720					
0.02736					
0.02752					
0.02768					
0.02784					
0.02800					
0.02816					
0.02832					
0.02848					
0.02864					
0.02880					
0.02896					
0.02912					
0.02928					
0.02944					
0.02960					
0.02976					
0.02992					
0.03008					
0.03024					
0.03040					
0.03056					
0.03072					
0.03088					
0.03104					
0.03120					
0.03136					
0.03152					
0.03168					
0.03184					
0.03200					
0.03216					
0.03232					
0.03248					
0.03264					
0.03280					
0.03296					
0.03312					
0.03328					
0.03344					
0.03360					
0.03376					
0.03392					
0.03408					
0.03424					
0.03440					
0.03456					
0.03472					
0.03488					
0.03504					
0.03520					
0.03536					
0.03552					
0.03568					
0.03584					
0.03600					
0.03616					
0.03632					
0.03648					
0.03664					
0.03680					
0.03696					
0.03712					
0.03728					
0.03744					
0.03760					
0.03776					
0.03792					
0.03808					
0.03824					
0.03840					
0.03856					
0.03872					
0.03888					
0.03904					
0.03920					
0.03936					
0.03952					
0.03968					
0.03984					
0.04000					
0.04016					
0.04032					
0.04048					
0.04064					
0.04080					
0.04096					
0.04112					
0.04128					
0.04144					
0.04160					
0.04176					
0.04192					
0.04208					
0.04224					
0.04240					
0.04256					
0.04272					
0.04288					
0.04304					
0.04320					
0.04336					
0.04352					
0.04368					
0.04384					
0.04400					
0.04416					
0.04432					
0.04448					
0.04464					
0.04480					
0.04496					
0.04512					
0.04528					
0.04544					
0.04560					
0.04576					
0.04592					
0.04608					
0.04624					
0.04640					
0.04656					
0.04672					
0.04688					
0.04704					
0.04720					
0.04736					
0.04752					
0.04768					
0.04784					
0.04800					
0.04816					
0.04832					
0.04848					
0.04864					
0.04880					
0.04896					
0.04912					
0.04928					
0.04944					
0.04960					
0.04976					
0.04992					
0.05008					
0.05024					
0.05040					
0.05056					
0.05072					
0.05088					
0.05104					
0.05120					
0.05136					
0.05152					

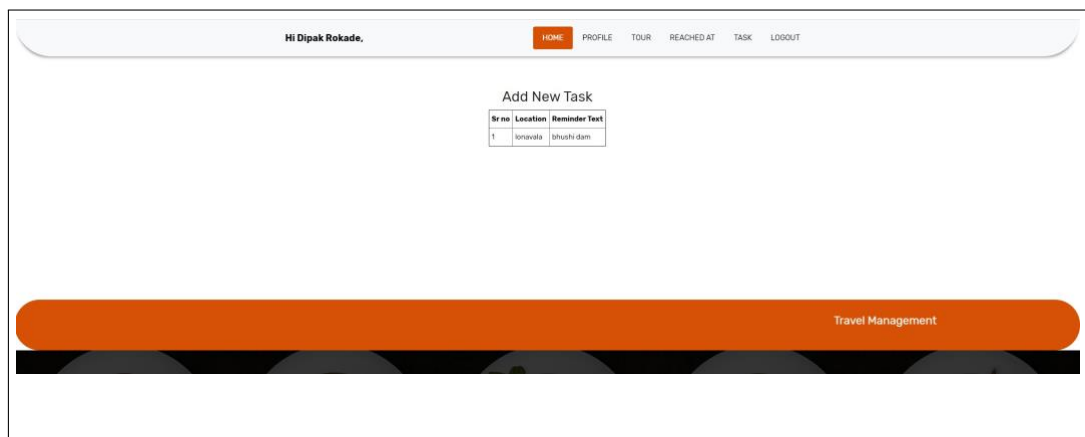


Figure 9.14: This is graphical representation of rating base on reviews, this will be useful for new user for creating tour plan

CHAPTER 10

DEPLOYMENT AND MAINTENANCE

10.1 INSTALLATION AND UN-INSTALLATION

Software Requirement

- 1) JDK 7
 - 2) Apache tomcat 7.0
 - 3) Eclipse keplar
 - 4) i) MySQL 5.1 (Enter Password root) ii) SqlYog community.
- OR
- 5) XAMPP (which doesn't any password for mysql while installing)

Following are the steps to run the Projects.

- 1) Add apache Tomcat server

File - > new others- >server- >server- >next- >select Tomcat v7.0 Server
— >next- >click- >browse button and select apache tomcat v7.0 path where are
you install- >finish

- 2) If you use SqlYog Community About sql file.

- a) Select sql file - >open in wordpad- >cntr+A- >cntr+C- >close word file.
- b) Open sqlyog community and past all copy content in query area and select execute
all query button(top in left side)
- c) If your query is executed then close and open or refresh window.

- 3) If you used XAMPP

- a) Select database - > Enter Database Name - >select create button.(Your Database
Created Successfully)
- b) Select your database- >select import option- >click on browse- >select your
sql file- >open- >select Go button Run Your Project Select project Name- >Right
Click- > Run As- > Run On Server- >Next- >finish.

See your project output • Open Eclipse IDE • Import war file – Click on Files(Top left corner of eclipse)– >“Import” – >Web folder– > war – > next WAR file browse go on that drive and folder where you store your Project file– >select “(Project Name).war” of your project and click “open” button. • Target Runtime – >new– >Apache Tomcat v7.0 • Then double click on “Project folder” project in Eclipse IDE(Left part Project Explorer)– > “Java Resources”– > “src”– > “com.util” package– >“DbConnection.java” class– >then see this line Connection con=DriverManager.getConnection (“jdbc:mysql://PCName:3306/database name”,”username”,”password”); Change underlined red word as compared to your PC Name(Dell) MYSQL(username)(password)– >ctrl+s • Right click on “project folder”– > “Build Path”– > “Configure Build Path”– >“libraries”– > “Add Library”– > “JRE System Library”– > “Next”– >select “Alternate JRE:”(installed version of JDK package will be here)– > “Finish”.click on “Add Library”—¿“Server Runtime”– > “Next”– >select “Apache Tomcat v7.0”– > “Finish”– >“Ok” . Again Right click on “project folder– > “Run As”– >“Run On Server”– >select “Tomcat v7.0 server at local host”– > “Next” – >“Finish” button. • When you run the project you can see output window on browser Note: check for all Java and JSP pages for change in connection.. (“jdbc:mysql://PCName:3306/database name”,”username”,”password”); Or only for PC name change.

CHAPTER 11

SUMMARY

These travel routes are related to all or partial user preference keywords, and are recommended based on

- (i) The attractiveness of the POIs it passes,
- (ii) Visiting the POIs at their corresponding proper arrival times,

The routes generated by influential users. We propose a novel keyword extraction module to identify the semantic meaning and match the measurement of routes, and have designed a route reconstruction algorithm to aggregate route segments into travel routes in accordance with query range and time period.

CHAPTER 12

CONCLUSION AND FUTURE SCOPE

:

12.1 CONCLUSION

In this project, we propose a personalized travel route recommendation algorithm based on the user's active interest changes. The user's active interest by weighting the user interest vector and target area feature, and we use the OP orientation problem to conduct a personalized travel route recommendation. The method of this project fully considers the dynamic change factors of user's interest in an unfamiliar city tour. The experiments verify the performance superiority of this method and the experimental results show the effectiveness of the method

12.2 FUTURE SCOPE

In this project we include only specific area. In future we can develop system for other parts of india as well as other contries. This system is very useful for the user's who willingly wish to visits the parts of india.

CHAPTER 13

REFERENCES:

- [1] H.-P. Hsieh and C.-T. Li, Mining and planning time-aware routes from check-in data, in Proc. 23rd ACM Int. Conf. Conf. Inf. Knowl. Manage., 2014, pp. 481490.
- [2] V. S. Tseng, E. H.-C. Lu, and C.-H. Huang, Mining temporal mobile sequential patterns in location-based service environments, in Proc. Int. Conf. Parallel Distrib. Syst., 2007, pp. 18.
- [3] W. T. Hsu, Y. T. Wen, L. Y. Wei, and W. C. Peng, Skyline travel routes: Exploring skyline for trip planning, in Proc. IEEE 15th Int. Conf. Mobile Data Manage., 2014, pp. 3136.
- [4] Y. Zheng, L. Zhang, X. Xie, and W.-Y. Ma, Mining interesting locations and travel sequences from GPS trajectories, in Proc. 18th Int. Conf. World Wide Web, 2009, pp. 791800.
- [5] Q. Yuan, G. Cong, and A. Sun, Graph-based point-of-interest recommendation with geographical and temporal influences, in Proc. 23rd ACM Int. Conf. Conf. Inf. Knowl. Manage., 2014, pp. 659 668.
- [6] M. Ye, P. Yin, W.-C. Lee, and D.-L. Lee, Exploiting geographical influence for collaborative point-of-interest recommendation, in Proc. 34th Int. ACM SIGIR Conf. Res. Develop. Inf. Retrieval, 2011, pp. 325334.
- [7] Y.-T. Wen, P.-R. Lei, W.-C. Peng, and X.-F. Zhou, Exploring social influence on location-based social networks, in Proc. IEEE Int. Conf. Data Mining, 2014, pp. 10431048.
- [8] Y.-T. Wen, K.-J. Cho, W.-C. Peng, J. Yeo, and S.-W. Hwang, KSTR: Keyword-aware skyline travel route recommendation, in Proc. IEEE Int. Conf. Data Mining, 2015, pp. 449458.

ANNEXURE A

LABORATORY ASSIGNMENTS ON

PROJECT ANALYSIS OF ALGORITHMIC

DESIGN

Today when we want to plan a trip for holidays or general visit, very first we take a help from travel agencies then we need to plan according to travel agencies. But, because of this we face some difficulties like our vacation is start but travel agency package date is in the end of our holiday or in working time. Because of this limitation sometime we change the plan or drop the plan. In our system we propose a system in which user define its holiday starting date and ending date then system provide some recommendation like cost of package, points according to season, schedule, hotels and different packages. Tourist will filter according to its need.

- To develop the problem under consideration and justify feasibility using concepts of knowledge canvas and IDEA Matrix.

Refer for IDEA Matrix and Knowledge canvas model. Case studies are given in this book. IDEA Matrix is represented in the following form. Knowledge canvas represents about identification of opportunity for product. Feasibility is represented w.r.t. business perspective.

<u>I</u>	<u>D</u>	<u>E</u>	<u>A</u>
<u>INCREASE :</u> Increase accuracy.	<u>DRIVE:</u>	<u>EDUCATE :</u> The user to send query request to the system and user can get proper Result.	<u>ACCELERATE :</u> Interaction between the User query and the Dataset.
<u>IMPROVE:</u> deep web grows at a very fast pace	<u>DELIVER:</u> High Performance Searching entered query.	<u>EVALUATE :</u> Efficient Searching on web pages.	<u>ASSOCIATE:</u>
<u>IGNORE :</u>	<u>DECREASE :</u> Time and cost of this process is decreased.	<u>ELIMINATE :</u> The waiting time for searching entered query for long time.	<u>AVOID :</u> Searching <u>large</u> number of pages.

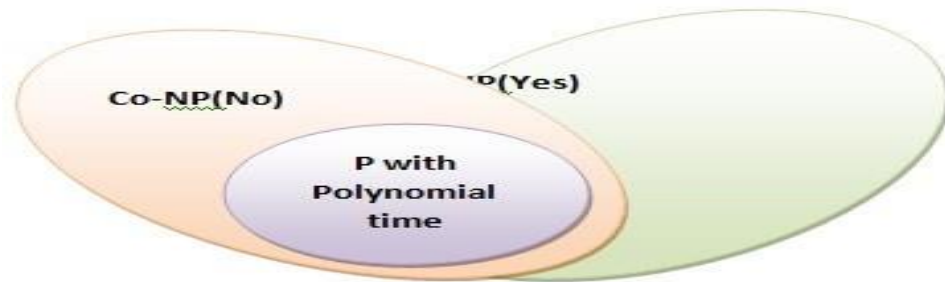
Figure A.1: Idea Matrix

A.1 WHAT IS P?

- P is set of all decision problems which can be solved in polynomial time by a deterministic.

- Since it can be solved in polynomial time, it can be verified in polynomial time.
- Therefore P is a subset of NP.

P: To design and implement the application Key-Recovery Attacks on KIDS, a Keyed Anomaly Detection System which will overcome problem of existing system and promote it.



What is NP?

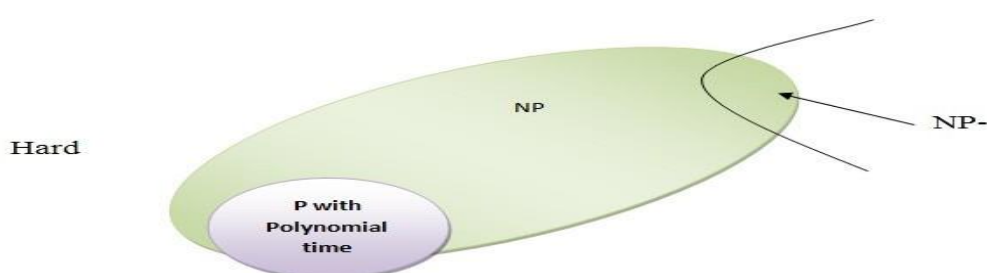
"NP" means "we can solve it in polynomial time if we can break the normal rules of step-by-step computing".

What is NP Hard?

A problem is NP-hard if an algorithm for solving it can be translated into one for solving any NP-problem (nondeterministic polynomial time) problem. NP-hard therefore means "at least as hard as any NP-problem," although it might, in fact, be harder.

A.1.1 NP Hard:

Most anomaly detection systems rely on machine learning algorithms to derive a model of normality that is later used to detect suspicious events. Some works conducted over the last years have pointed out that such algorithms are generally susceptible to deception, notably in the form of attacks carefully constructed to evade detection. Various learning schemes have been proposed to overcome this weakness. One such system is Keyed IDS (KIDS), introduced at DIMVA “10. KIDS” core idea is akin to the functioning of some cryptographic primitives, namely to introduce a secret element (the key) into the scheme so that some operations are infeasible without knowing it. In KIDS the learned model and the computation of the anomaly score are both key-dependent, a fact which presumably prevents an attacker from creating evasion attacks. In this work we show that recovering the key is extremely simple provided that the attacker can interact with KIDS and get feedback about probing requests. We present realistic attacks for two different adversarial settings and show that recovering the key requires only a small amount of queries, which indicates that KIDS does not meet the claimed security properties. We finally revisit KIDS’ central idea and provide heuristic arguments about its suitability and limitations.



What is NP-Complete?

- Since this amazing “N” computer can also do anything a normal computer can, we know that “P” problems are also in “NP”.
- So, the easy problems are in “P” (and “NP”), but the really hard ones are

only in "NP", and they are called "NP-complete".

- It is like saying there are things that People can do ("P"), there are things that Super People can do ("SP"), and there are things *only* Super People can do ("SP-complete").

NP Complete:

We present realistic attacks for two different adversarial settings and show that recovering the key requires only a small amount of queries, which indicates that KIDS does not meet the claimed security properties. We finally revisit KIDS' central idea and provide heuristic arguments about its suitability and limitations.

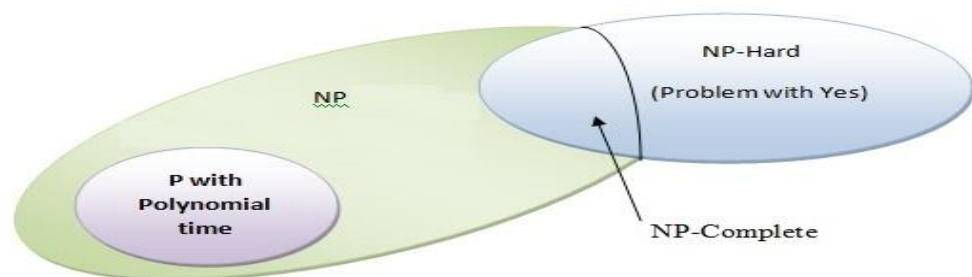


Fig: P and NP Relationship

A.2 RELEVANT MATHEMATICS ASSOCIATED WITH THE PROJECT

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

$S = \dots\dots\dots$

Identify the input data $S_1, S_2, \dots\dots, S_n$

I = (types of places, activity, budget, start date, distance, number of vacation

days, number of people) Identify the output applications as O

O = Places, Activity, Hotel, Travelling option, Nearby attraction, distance Identify the Process as P

Haversine algorithm for distance calculation

Places ; area distance

Rp = Resultant Places

Distant from source to Rp ; distance mention by user

ANNEXURE B

LABORATORY ASSIGNMENTS ON

PROJECT QUALITY AND

RELIABILITY TESTING OF PROJECT

DESIGN

B.1 THE OBJECTS INVOLVED IN THE PROJECTS ARE:

B.1.1 User / Admin:-

Initially, admin will provide places and then our system will recommend the places based on the tourist interest.

B.1.2 Database:-

A database will store the information about the places and their specialities.

B.1.3 Morphism:-

Morphisms are an abstraction derived from the structure preserving mappings between two mathematical structures or two different objects. In set theory, morphisms are functions. Since, our project is represented using set theory, we use morphisms as functions. The following are the morphisms involved:

ANNEXURE C

PROJECT PLANNER

C.1 PLAN OF PROJECT EXECUTION

Sr. No.	Month Sheduled	Phase	Work Done
1	June-August	Topic Seraching	Topic Searched
2	August-September	Topic Selection	Topic Selected
3	August-September	Project Confirmation	Project Confirmed
4	August-September	Literature Survey	Literature Survey Done
5	September-October	Requirement Analysis	Requirement Analysis Done
6	September-October	Requirement Gathering	Requirements Gathered
7	November-December	Designing	Architecture Design
8	November-December	Designing Test	GUI Tested
9	November-December	Database Creation	Database Tested
10	January-February	Coding	Coded Different modules
11	January-February	Database And Module Connectivity	Connectivity Done
12	March	Testing of Project	Project Tested
13	April	Result Analysis	Result Analysis

C.2 TIMELINE CHART

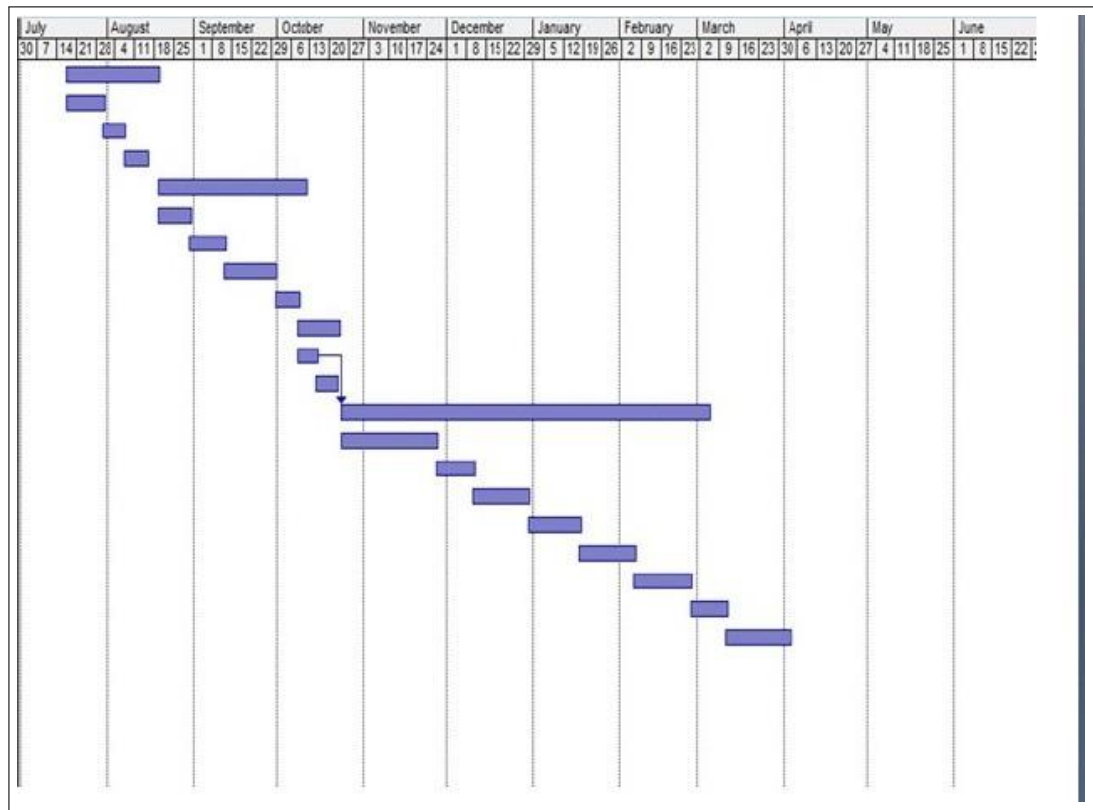


Figure C.1: Time line Chart

ANNEXURE D

REVIEWERS COMMENTS OF PAPER

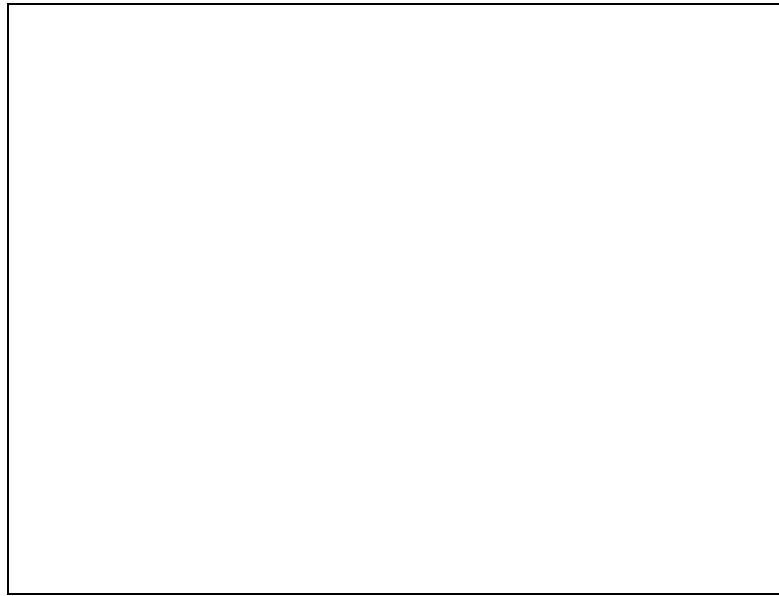
SUBMITTED

Paper 1

1. Paper Title:Personal Assistant with voice for Tour Recommendation
2. Name of the Conference/Journal where paper submitted :International Journal of Scientific Research in Engineering and Managment
3. Status : Accepted

Paper 2

1. Paper Title:Personal Assistant with Voice for Tour Recommendation
2. Name of the Conference/Journal where paper submitted :International Journal of Research Publication and Reviews
3. Status : Accepted



ANNEXURE E

PLAGIARISM REPORT

al Marketing S.S. Acharya ISBN - 81-7188-387-7 Pages-259

Report Title:	plagiarism
Report Link: (Use this link to send report to anyone)	https://www.check-plagiarism.com/plag-report/54066e600e0553f6f435c2bb44e634a79de9d1639904750
Report Generated Date:	19 December, 2021
Total Words:	1983
Total Characters:	13696
Keywords/Total Words Ratio:	0%
Excluded URL:	No
Unique:	87%
Matched:	13%

Sentence wise detail:

Common Detail: A Machine Learning Based Plagiarism Detection Using Deep Learning Model

ANNEXURE F

INFORMATION OF PROJECT GROUP

MEMBERS

