Trajectory Search by Region

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ABSTRACT

With the increasing availability of moving-object tracking data, trajectory search is increasingly important. We propose and investigate a novel query type named trajectory search by regions of interest (TSR query). Given an argument set of trajectories, a TSR query takes a set of regions of interest as a parameter and returns the trajectory in the argument set with the highest spatial density correlation to the query regions. This type of query is useful in many popular applications such as trip planning and recommendation, and location based services in general. TSR query processing faces three challenges: how to model the spatial-density correlation between query regions and data trajectories, how to effectively prune the search space, and how to effectively schedule multiple so-called query sources. To tackle these challenges, a series of new metrics are defined to model spatial-density correlations. An efficient trajectory search algorithm is developed that exploits upper and lower bounds to prune the search space and that adopts a query-source selection strategy, as well as integrates a heuristic search strategy based on priority ranking to schedule multiple query sources. "TSR Query" Application is used to search the famous places in the cities which we want to visit.in this application having all cities in India and famous place in the relevant cities. The user can choose the cities and view the famous places in the cities and view the reviews and ratings to plan the tour, the user view the current places in the map and view the trajectories in the map for riding by the road. The existing user information is useful for the places to visit and know the weather and road condition of the places

Keyword – php, Android studio,Mysql,

1. INTRODUCTION

.   The development of mobile applications has been on the rise for more than half a decade, ever since the first appearance of the very first app store in July 2008 (Apple, 2008). While overall the mobile evolution has contributed to enhancing the travel factor at large, only little is known about how it has affected the on the go travel experience. This lack of intelligence is critical because gaining deeper knowledge in the field of how travelers are using travel-related applications during their trip could provide meaningful insights to fill untapped opportunities for tourism companies and solve problems of travelers having insufficient access to resources enhancing their travel experience on the go. In order to address this problem, the author aims to uncover unfulfilled needs of travelers during their journey and present suggestions of how travel-related companies could respond.

1.1 Objective

.The objective of this project is to develop an Android app for a tourist extending their interests and give the best of best places to go. The application is a skinnable framework that interfaces the best places in an area. The app is module based so the it can be extended easily in the future by developing additional modules in the future. We have developed a simple and best single version of this app for Android. The application has been constructed using standard android for Android users. The linking of google API is the main heads up to the project and overall android app. This gives the app best shape as it gives the user, proper co-ordinates for the places to visit.The creation of modules to give the best output for user or even admin. Code in the app must be at a very

effective to its tip for each module and languages used should come up with our needs. At getting a deeper understanding of the current on-site travel experience of users at a large scale and at exploring to further improve this stage of mobile travelling. This type of query cans benefit popular services, such as travel planning and recommendation, and location-based services in general. For example, when planning a trip to multiple places in an unfamiliar city, a tourist may benefit from the experience of previous visitors. In particular, visitors with similar interests may have visited nearby land marks that the user may not know, but may be interested in. Or others in terms of distance. Such experiences are captured in trajectories shared by previous visitors.

1.2 Organization of the report
            The report is divided into 4 parts and each part deals with the different aspects of the system.
(i)System Design: This part talks about the existing system, how they are designed and the issues associated with them. Furthermore, it describes the features of the system proposed and the requirements for operating it.
(ii)Module Description: This part describes each module implemented in the system, i. e., how the data is processed in each and what are the steps involved from the user's point of view . Each module is diagrammatically represented so that there is a clear understanding about what happens at that particular step.
(iii)System Implementation: This part deals with an overview of the platform for which the system is developed for. It also talks about the parameters needed for running the system and provides a sample of code used, along with screenshots of the output.
(iv)Conclusion: This part concludes the report and discusses the possible enhancement that can be implemented in the future improve the quality.

2. Existing System

    In existing system the user doesn't know the famous places in the cities which we want to see, and how far it is located from the user current location. The user can't find the exact route for the destination of our travels, and it leads more time consumption, the user faces many problems while travelling one place to another places, in-between many problem were occurred because of road conditions and weather condition. In existing system the user can face many problems while they travelling, the user can't know that what is happening in those travelling places, and user doesn't know that how famous is the place in the city is the difficult job.
    The apps provided by the government has many flaws as mentioned and some are not even available for free. The maps API is not even linked in 90% of the present apps which is a main flaw for the Exciting system.

    These flaws in the existing system is a great deal to any tourist at any place all over the world.

2.1 Proposed System
In the proposed system the can get how famous is the place in the city and now they can know the weather condition in the place that they are going to visit and they can get the rout map to that place it will save ample of time.

3. MODULES

3.1 Introduction

Our complete project deals with the different modules based on the working. The project consists of various modules as described below:

3.2 List of modules

The list of modules to performed are given below

- Planning tour module
- Existing Visitors Reviews Module
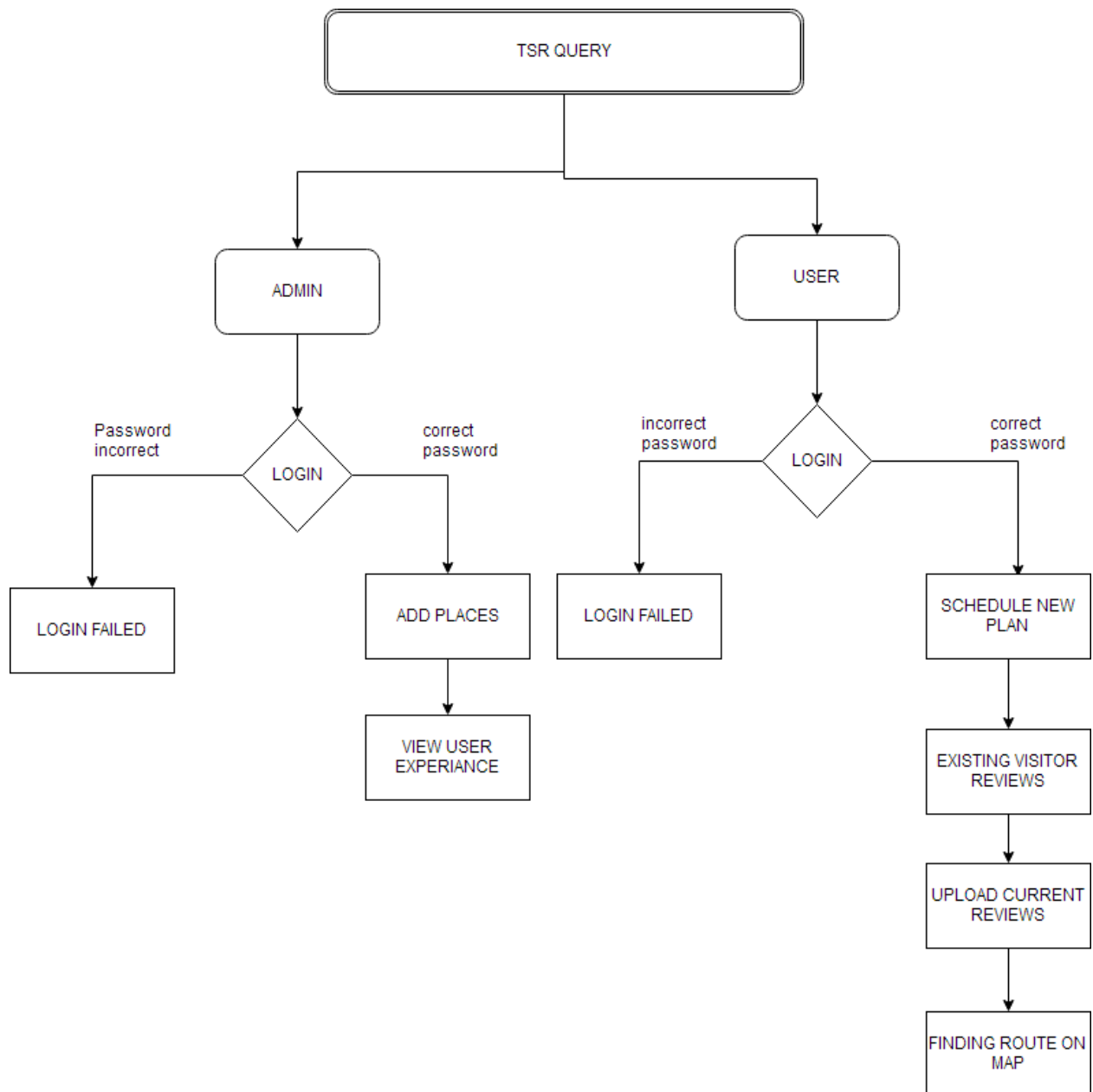- Current Visitor Upload Information Module
- Routing Module

Fig 1:- Architecture Diagram

3.3 Description of architecture

The system architecture of our project as shown above gives a complete map on the project. This guides through the different modules and stages of the application. A module is a collection of source files and build settings that allow you to divide your project into discrete units of functionality. Your project can have one or many modules and one module may use another module as a dependency. Each module can be independently built, tested, and debugged. But a system architecture has almost all modules in it combined

Additional modules are often useful when creating code libraries within your own project or when you want to create different sets of code and resources for different device types, such as phones and wearables, but keep all the files scoped within the same project and share some code. This can be mapped through the architecture diagram.
As shown in our diagram the project is divide into two different parts which are :-
- Admin
- User

Admin :-

In admin there is a login interface in which the admin can login. The password is checked, if the password is matched with the database credentials then it will move further displaying add place and view user experience. In add places, the admin can add the places in the database for users to access and in the view user experience the admin can see the reviews and rating upload by the user in the database provided. This gives the user to help update the places and to improve services.
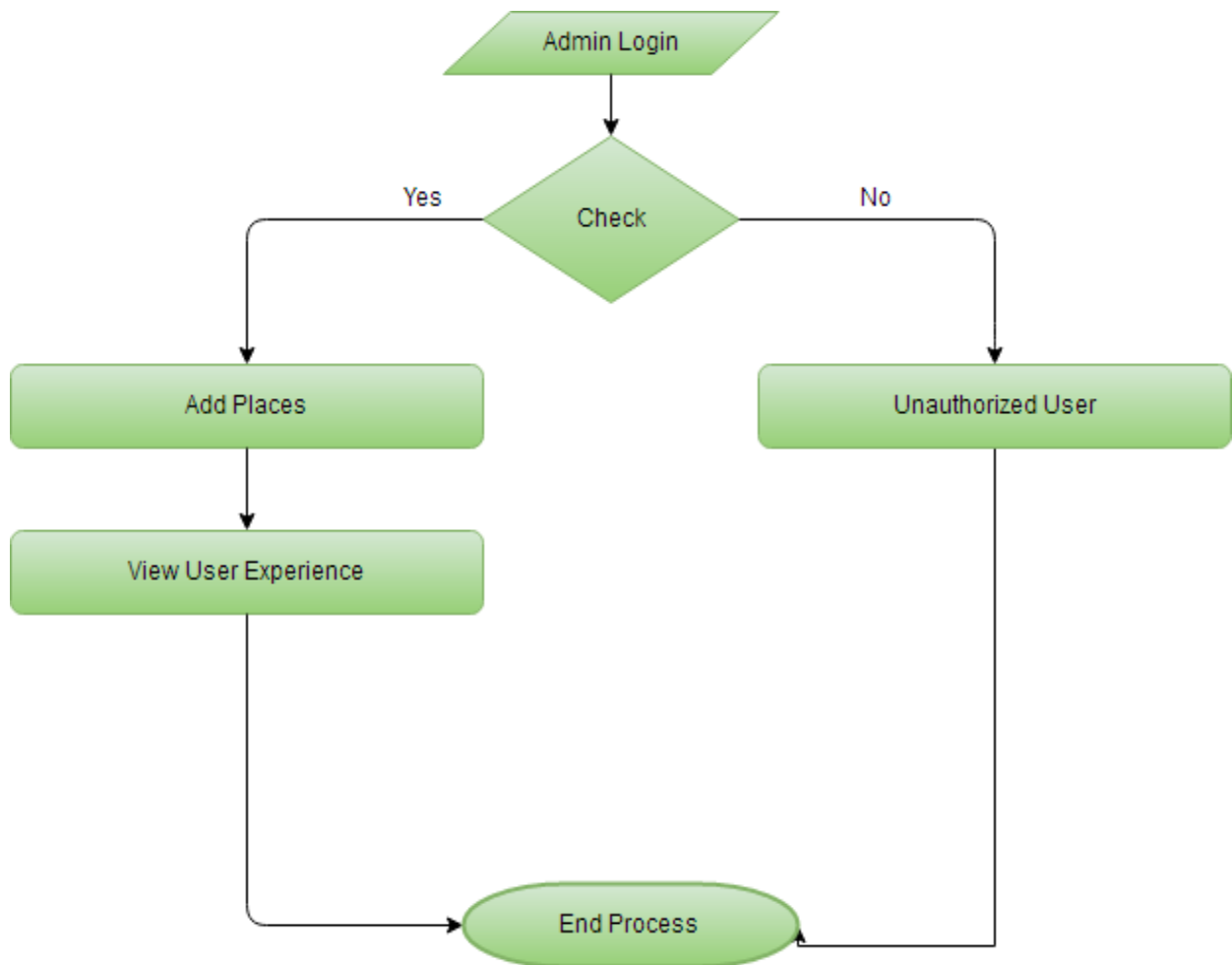
Fig 2:- Admin end

User   :-

In the user login interface, the user must login with his/her password. if correct, user will login in to the application finding:-

- schedule new plan
- existing visitor review
- upload current review
- find route on map

In schedule new plan we can schedule a plan for destination you want.in existing visitor review the user who want to go to a place can find a review of that place such as about the place and about weather condition and about the user experience and in the upload current review we can upload the current place review of yours and about your experience of yours finding rout on map in which we can find the root map to the city in which you want to visit.

These different interfaces present in user point guide the user in this application for their requirements.
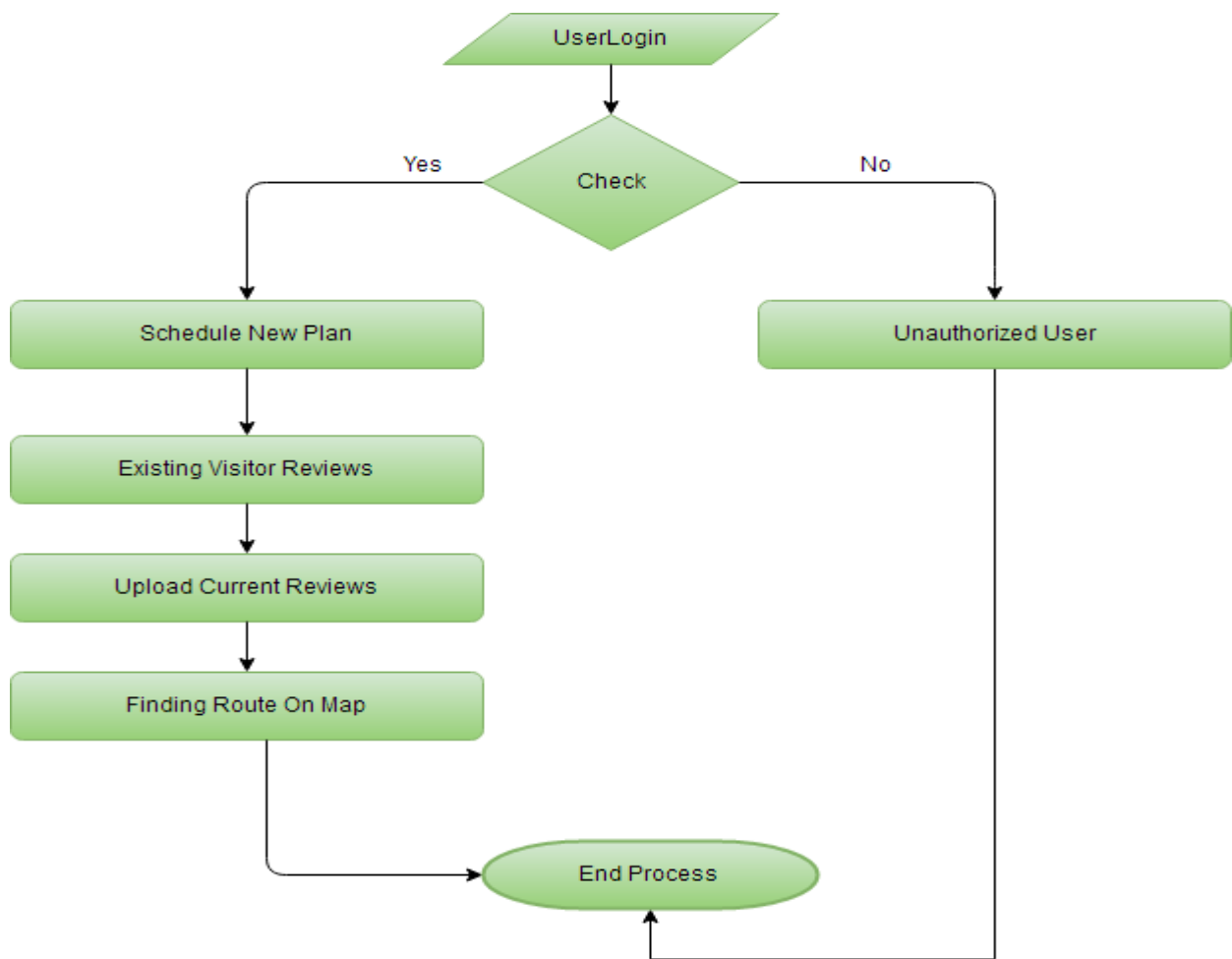

Fig.4.3. User end

4. SYSTEM IMPLEMENTATION

- **JavaScript**

    JavaScript often abbreviated as JS, is a high-level, dynamic, weakly typed, object-based, multi-paradigm, and interpreted programming language. Alongside HTML and CSS, JavaScript is one of the three core technologies of Web content. It is used to make webpages interactive and provide online programs, including video games. The majority of websites employ it, and all modern web browsers support it without the need for plug-ins by means of a built-in JavaScript engine. Each of the many JavaScript engines represent a different implementation of JavaScript, all based on the ECMAScript specification, with some engines not supporting the spectrum fully, and with many engines supporting additional features beyond ECMA.

    Although there are strong outward similarities between JavaScript and Java, including language name, syntax, and respective standard libraries, the two languages are distinct and differ greatly in design; JavaScript was influenced by programming languages such as Selfand Scheme.

- **PHP**

    php is a server-side scripting language designed primarily for web development but also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Development Team.PHP originally stood for Personal Home Page, but it now stands for the recursive acronym PHP: Hypertext Preprocessor.

PHP code may be embedded into HTML or HTML5 markup, or it can be used in combination with various web template systems, web content management systems and web frameworks. PHP code is usually processed by a PHP interpreter implemented as a module in the web server or as a Common Gateway Interface (CGI) executable. The web server software combines the results of the interpreted and executed PHP code, which may be any type of data, including images, with the generated web page. PHP code may also be executed with a command-line interface (CLI) and can be used to implement standalone graphical applications.

The standard PHP interpreter, powered by the Zend Engine, is free software released under the PHP License. PHP has been widely ported and can be deployed on most web servers on almost every operating system and platform, free of charge.

The PHP language evolved without a written formal specification or standard until 2014, leaving the canonical PHP interpreter as a de facto standard. Since 2014 work has gone on to create a formal PHP specification.

- **MySQL**

MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various web-based software applications. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. This tutorial will give you a quick start to MySQL and make you comfortable with MySQL programming.

A database is a separate application that stores a collection of data. Each database has one or more distinct APIs for creating, accessing, managing, searching and replicating the data it holds.

Other kinds of data stores can also be used, such as files on the file system or large hash tables in memory but data fetching and writing would not be so fast and easy with those type of systems.

Nowadays, we use relational database management systems (RDBMS) to store and manage huge volume of data. This is called relational database because all the data is stored into different tables and relations are established using primary keys or other keys known as **Foreign Keys**

5. CONCLUSIONS

In system implementation, all the details regarding the creating and implementation of the project have been mentioned. Thus, the proposed system has been executed successfully.

6. ACKNOWLEDGEMENT

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