My City Information Mobile Application

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ABSTRACT

My City Information Mobile Application, as its name suggests, is a clever app that considers both the user's preferences and the time period. This technique is mostly used to assist visitors who are unfamiliar with the city or anyone who wants to explore a city in the allotted amount of time. It works by gathering all the locations and sites with all of their information and then sorting it. According to the highest rankings, the locations are sorted and chosen. When registering as a user, the user is asked a few questions that assist them narrow down their search for locations. The locations are then displayed on maps, providing the user a clear understanding of their position and the routes between them from one spot to the next. The Travel Plan you choose is saved just for a single day and will be dissolved if the Time exceeds 22 hours. The system needs a functioning internet connection to run the software constantly.

Keywords: City Information App, GPS Maps, Tourist Guide App, User Preferences

INTRODUCTION

In order to maximise enjoyment, visitors and travellers currently spend a lot of time planning and selecting their excursions. By use of a simple mobile application proposal, this application seeks to identify the primary computing requirements to assist the improvement of tourist points of promotion for the traveller. Most tourists typically like seeing both well-known tourist attractions and locally distinctive attractions. In order to do this, we suggest a system that can offer the user a travel route and plan automatically. Making decisions on where to go can be done more quickly as a result of this application. This approach is mostly designed to assist visitors who are unfamiliar with the city or anyone who wishes to experience the city in a limited amount of time. When signing up, the user is required to input his or her hobbies and preferences. Once the account has been set up, the user has the option of manually selecting the starting and ending

points of the trip or letting the system utilise his or her present position as the starting point. The user must then enter the trip's beginning and ending times. A user can access previous trips because all of their trips are stored. As the name suggests, Smart City Traveller uses clever methods to analyse users' interests, preferences, and the amount of time they have available to explore a location before creating an itinerary and route that includes the best tourist attractions in the area so that the user returns to the starting location by the end time specified. Algorithms for finding the shortest path are used in this.

Literature Review

Sl No.	Title	Author's	Description
	Tour-Guide: Providing	Xiaoyu Shi Ting Sun YTing	In those emerging
1	Location- Based Tourist	Sun Keqiu Li Wenyu Qu	applications, location
	Information on Mobile		dependent systems have been
	Phones		identified as an important
			component. This paper
			presents the architecture and
			implementation of such a
			location-based application,
			called Tour-Guide.
			Implemented on iPhone, the
			system is designed to provide
			tour information services;
			therefore people can get tour
			guidance information that
			they need anytime and
			anywhere.
2	Building Mobile Tourist	Sawsan Alshattnawi	In this paper, we build a
	Guide Applications using		tourist guide application
	Different Development		customized to user
	Mobile Platforms		preferences using J2ME in
			Android Studio. The system
			is built to be a tourist guide

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			for Jordan and, at the same
			time, it is built to be flexible
			by allowing to change the
			information at any time
			according to a desired city.
3	Tourism Guide for	P.K. Jithin	This application is used to
	Tamilnadu (Android	P. Prasath	find the details of the tourist
	Application)	M. Vishnuram	place which the user wants to
		J.T. Thirukrishna	visit. This project is
			developed by using Java as
			front end and SQL as back
			end.
			Tamil Nadu Tourism E-
			Guide propose architecture
			of mobile tourist guide
			system for android mobile
			phones that is able to provide
			tourism information to the
			mobile users conveniently.
4	A Novel method for the	Michael Kenteris Damianos	This paper presents a
	development of		"mobile tourism" research
	personalized mobile		prototype. It enables the
	tourist applications		creation of portable tourist
	tourist applications		applications with rich
			content that matches user
			preferences. The users may
			download these
			customizable applications
			either directly to their mobile
			device or first to a PC and
			then to a mobile terminal.

5	Smart Travel Guide:	Dadape Jinendra R Jadhav	Provides tourism
	Application for Android	Bhagyashri R Gaidhani Pranav	information to the mobile
	Mobile	Y Vyavahare Seema U	users conveniently. This
		AchaliyaParag N	system takes advantage of
			light-weighted mashup
			technology that can combine
			more than one data sources to
			create value-added services.

Proposed System

We provide approach skills to evaluate tourist behaviour critically and their ability to behave responsibly when faced with native Indian repercussions. It is difficult for the consumer to accurately plan and carry out a particular journey. "Smart City Traveler"s main goal is to provide a user-friendly path. The objective of this project is to develop a system that automates plan operations and procedures.

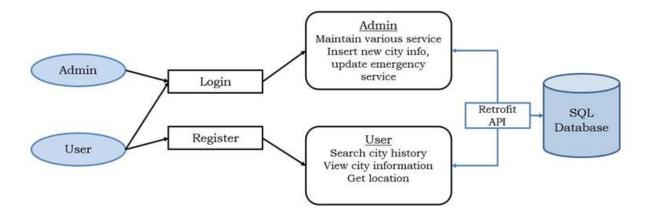
Advantages

- Since we use Foursquare to source all of the data, it is extremely accurate and real.
- The user can also locate the routes to take to go to their location on a map, giving them a greater perspective.
- The user can even zoom in and out to obtain a better picture since the location can be shown on a map.
- The time spent looking for a space is significantly reduced while using this application.
- Additionally, the programme speeds up the decision-making process while choosing destinations.

Implementation

Admin: The Admin is responsible for maintaining the details, by logging to the application. Admin will be able to add the list of cities and the city details along with the image, tourists spots, most popular restaurants and public transport details. All the details updated by the admin will be stored in the database and can be accessed by the user.

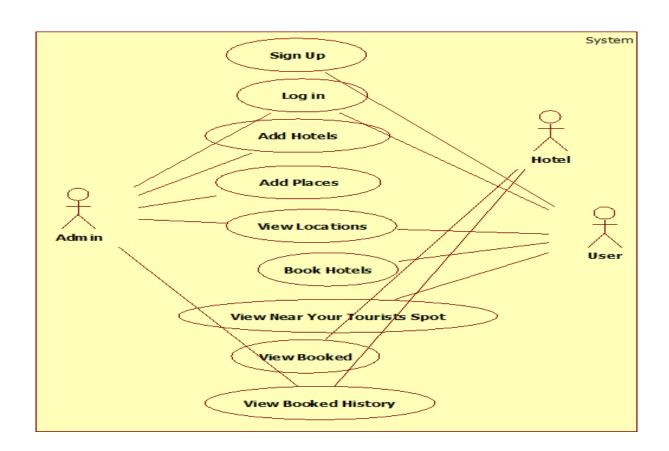
User: In order to get the access to the application, the user has to register first and then login. Here the user can see the various services provided by the application, where the user can select a city and get the information. And the user can reach the selected place with the help of application which will be redirected to the Google maps. The user can may use of the services provided by the application.



Implementation Flow Diagrams

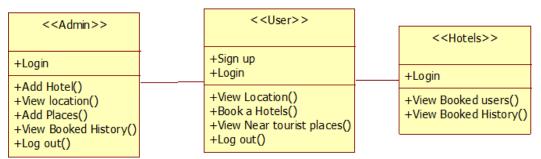
Use Case

In the Unified Modelling Language (UML), a use case diagram is a specific kind of behavioural diagram that results from and is defined by a use-case analysis. Its objective is to provide a graphical picture of a system's functionality in terms of actors, their objectives (expressed as use cases), and any dependencies among those use cases. A use case diagram's primary objective is to identify which system functions are carried out for which actor. The system's actors' roles can be illustrated.



Class

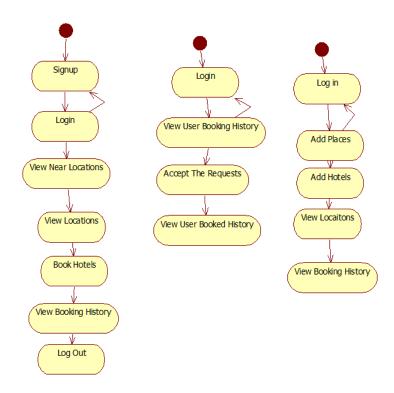
A class diagram is a form of static structure diagram used in software engineering that displays the classes, attributes, operations (or methods), and interactions between the classes to illustrate the structure of a system. It describes what kind of information is included.



Class Diagram

Activity

Activity diagrams are visual depictions of workflows with choice, iteration, and concurrency supported by activities and actions. Activity diagrams can be used to depict the operational and business workflows of system components in the Unified Modelling Language. The whole control flow is shown in an activity diagram.



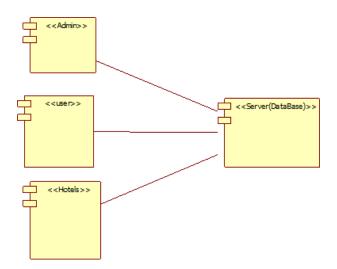
Activity Diagram

Component

A specific type of UML diagram is a component diagram. In addition, the goal is distinct from the previous diagrams mentioned. Although it does not describe the system's functionality, it does describe the parts that go into creating that functionality. Therefore, from that perspective, component diagrams are utilised to represent the actual physical parts of a system. These parts include files, libraries, and packages, among others. Another way to think of component diagrams is as a static implementation perspective of a system. Static implementation depicts how the components are arranged at a specific time. A collection of diagrams is used to illustrate the full system because a single component diagram is unable to do so.

The component diagram's goal can be summed up as

- Identify the parts of a system visually.
- Utilise both forward and reverse engineering to build an executable.
- Describe how the components are arranged and their connections.

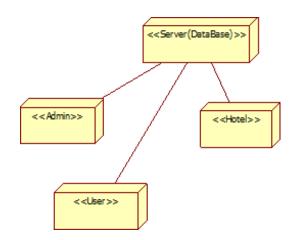


Component Diagram

Deployment

An execution architecture of a system is represented by nodes, such as hardware or software execution environments, and the middleware linking them, in a deployment diagram, a form of UML diagram. To display the actual hardware and software of a system, deployment diagrams are widely used. By using it, you may learn how the hardware will really support the system. Contrary to other UML diagram types that primarily display the logical components of a system, deployment diagrams assist in representing the physical structure of a system. An execution architecture of a system is represented by nodes, such as hardware or software execution environments, and the middleware linking them, in a deployment diagram,

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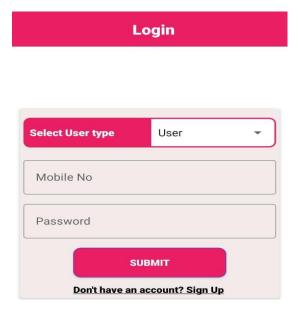
Deployment Diagram

Application Design

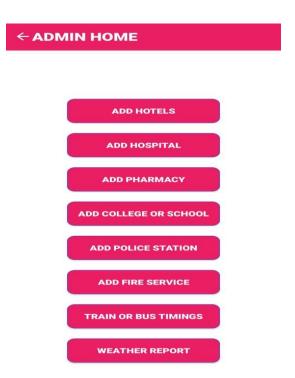
In order to access the information made available by the application, the user must log in.

User Login Page

The user can choose a state from the list after logging in, and then they are given the list of cities in that state. The user will then be taken to the application's home page, where we can find a list of all the services it offers.



Admin Home Page



CONCLUSION

This project's designers wanted to give visitors important information about the city, which is quite beneficial. Everyone can use the application because of its user-friendly design. By highlighting the most desirable hotels, appealing locations, and surrounding attractions, the application provides comfort to visitors to a new city. The application offers its services via the Google Map API, GPS, Internet, and cellular data.

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