



A SOS BASED APPLICATION FOR TRAVELERS TO TRAVEL ALONE

Pratiksha Angchekar¹, Bhagyashree Gangan², Nikhil Ghadshi³, Prof. Reshma Chaudhari⁴

¹(Computer Engineering, VIVA Institute of Technology, India)

²(Computer Engineering, VIVA Institute of Technology, India)

³(Computer Engineering, VIVA Institute of Technology, India)

⁴(Computer Engineering, VIVA Institute of Technology, India)

Abstract : A traveler is a person who is traveling different places and enjoy the personal growth that occurs within the experience and people they meet. Now a days travelling in historical places and wild nature is more trending for travelers specially the solo traveler is attracted the most towards it. To interact with people, know and learn the cultures of different places, making friends solo travelling is something interesting to do, meeting People, nature, weather, etc. But at a same time, it is really dangerous to travel alone in unknown places and being a stranger all around, it is like doing something out of comfort zone which is dangerous and also expensive. There are no certain applications built for solo travelers with multiple functionalities like exploring places due to help rating security and cab sharing which can reduce their expenses. To overcome the problem's, we are building an application name 'Smart Travel' application where all these functionalities will be implemented.

Keywords - Travel Alone, Travelers, Solo, SOS

I. INTRODUCTION

The developing pattern towards globalization lately has been joined by an uncommon increment in neighborhood travel portrayed by an affinity to visit various spots in a similar excursion. Gradually, the idea of solo voyaging is expanding among individuals to investigate places, interreact with individuals of various culture and set aside effort for themselves. Solo travel pushes individuals past their customary range of familiarity and draws out their inward traveler. The fundamental issue of individuals who travel is distinguishing novel spots and objective to investigate, plan the schedule of course and how to interreact with neighborhood individuals. Solo voyager consistently faces troubles to discover an amigo or gathering to investigate. Voyaging solo sets, the stage to invest energy with, converse with, and warm up to those one may not in any case approach. furthermore, appreciate the self-awareness that happens inside the experience and individuals they meet. To keep the recollections experienced by the voyager, they protect pictures utilizing computerized cameras, video by convenient cameras or get some 2 keepsake. Cell phones movability is one element that can support explorers. Being a cutting edge of most cell phones, the necessities of bringing diverse device are decreasing, and it has the attributes of electronic gadgets. Individuals these days are depending more on their cell phones and versatile applications as modes for recording and sharing their movement encounters. Cell phones can help in intervening the mental parts of movement or touristic mastery of explorer, through the assistance of data search, preparing, and sharing. Explorers will have the option to learn new travel prospects, data, and better travel objections by sharing pictures or any type of shareable media in the event of social exercises during movements. Voyagers like and request to plan and book their visit bundles and agendas. Voyagers are the person who picks their outing objective, and they are utilizing a web-based intending to save their courses. In visit arranging, explorers need to distinguish and assess the spot they need to visit. It is fundamental to have a review of an objective to get some more data. Utilizing planning administrations, explorers may utilize this to design their movement objective. This capacity assumes a basic part in trip arranging and dynamic cycle. It will turn out to be more viable and productive in the arranging cycle by giving some more data and thought regarding your itinerary. Web map administrations might be truly reasonable for the voyagers to give more venture out data to sort out their agendas and to design

their outing objections precisely. Outing arranging should be possible oftentimes and cooperatively by utilizing a cycle of six collective assignments: issue distinguishing proof; where the age of thoughts and choices for voyaging was incorporate, data search, data assessment; the exchange and appraisal included, decision, book, and the post decision. Guides may enable the explorers to help and encourage their dynamic in trip arranging and picking their movement objective. Explorers may utilize a guide to find puts that they might need to go.

II. RELATED WORK

Emeliza R Yabut, Charles Michael C. Te, Ermarie Nicole L. Faeldonea, Cyril M. Lepiten, Jan Patrick A. Villadores Marilou N. Jamis Rosauo E. Manuel, [1] This age, individuals are more into voyaging (visit better places) more than anything. Individuals like to catch their encounters in places they had been to; share their encounters through recounting their accounts. PhilTrip is a portable application that is by and large for the individuals who have enthusiasm for seeing new places and are energetic, and excited about going in the Philippines. The proposed portable application will assist the clients with sharing their movement encounters, all while advancing the objections and the Philippines itself.

Maoguo Gong, Guanjun Li, Zhao Wang, Lijia Ma, Dayong Tian, [2] In this paper, we utilized(propose) a briefest way calculation dependent on network recognition by incorporating network discovery calculation with conventional hunt strategies. It develops a diagram by utilizing this chart structure to limit the looking through extension. In this paper, we proposed a productive technique for P2P most brief way issue on informal community. The strategy utilized depends on network structure, which could characterize the edges into two sections as indicated by cost. Broad exploratory outcomes on five true organizations of coordinated effort networks showed the proficiency and estimate mistake. For limit, this calculation has splendid execution. Specifically, different location strategies could be utilized in this calculation.

Sih-Ting Zeng, Ching-Min Lee, [3] as of late, numerous applications for cell phones are intended to improve our living quality and manage house care issues under Android system. Fundamentally, in this paper a crisis warning application for cell phones will be planned named APP Inventor. In the application, the position capacity of GPS and a simple utilized interface, skilled for sending crisis notice messages or calls to companions or group of the client are incorporated. The primary elements of this application incorporate Record, Search, Locate, and Emergency Contact. In this paper, essentially, we will utilize a SOS button in the application through which we will have the option to send crisis message or SMS to choose Persons or Members.

Ngu Phuc Huy, do van Thanh, [4] The notoriety of cell phones these days is generally because of the chance of choosing versatile applications that suit one's needs. It is trying for a designer to presume that the advancement of portable applications is basic. Surely, there are so a wide range of versatile application designs and the decision for the ideal (fitting) one could be a difficult assignment. Actually, understanding which portable application design fits best to a particular improvement condition is troublesome and could have direct impact on quality, advancement cost and in this manner deal income of the applications. The principal objective of this paper is to add to the choice of reasonable portable application designs in their turn of events. Five versatile ideal models in particular local applications, stage-based applications, portable gadgets, Web applications and HTML versatile applications are distinguished and depicted. They are assessed from designer perspective dependent on a lot of chosen rules. The result of the assessment proposes which example fits best to particular kind of applications and furthermore designers. So as to guarantee the objectiveness and exactness of the assessment.

Bernie S. Fabito, Francis F. Balahadia, Jade Devin N. Cabatlo, [5] A portable application that exploited the GPS is the AppLERT. AppLERT is a versatile application informing the reacting unit about the episode utilizing the underlying PDA's GPS. It has modules educating appropriate specialists to convey salvage right away. The client can report the sort of catastrophe; the occurrence occurred, an image of the scene and the area dependent on the GPS information. The GPS information will be persistently sent to the war room until the rescuers reacted. All modules use GPS information to send area, send salvage and to send a report to the ideal community.

Dhrubajyoti Gogoi, Rupam Kumar Sharma, [6] Android is a java-based working framework it's lightweight and full included. Android applications are created utilizing Java and Kotlin and can be change to new stage effectively in this manner empowering a more prominent number of portable applications. In this paper, we portrayed about a SOS application being created and its fruitful execution with tried outcomes (trials). This application has target clients those areas of the individuals who shockingly falls into a circumstance where moment correspondence of their whereabouts gets key to be educated to certain approved people at distant end. In this paper, we utilized a SOS System for individuals who fall into inconvenience.

Amrah Maryam, Nadia Siddiqui, Mohammed A. Qadeer, M. Sarosh Umar, [7] In this paper, Android is utilized for accepting data about specific city's, cafés, authentic spots, and so forth. This App gives the current area of the client. This kind of utilization's is generally be utilized by going offices to deal with their client trips

VIVA Institute of Technology
9th National Conference on Role of Engineers in Nation Building – 2021 (NCRENB-2021)

data, procure data, and so on This application will likewise give notebook to add significant undertaking to do. This will likewise give assistance focus to the client to talk with manager to illuminate the questions. Travel Portal application depends on the possibility that voyagers rely upon other explorer audits to design their excursions. This task Travel Portal helps assemble solid web empowered arrangements that are altered to the necessities of individual clients.

James Biagioni, Jakob Eriksson, [8] because of the accessibility of Global Positioning System sensors in an assortment of ordinary gadgets, GPS following information are getting massively expanding. The utilization of this information is to deduce and refresh the calculation and availability of guides using what are known as guide age or guide surmising calculations. These calculations offer a favorable position when no current guide information are available. Rather than the charge of a total street review, GPS follow information can be utilized to create altogether new segments of the guide at a small amount of the expense. In occasions of existing guides, guide derivation may not just assistance to expand the exactness of accessible guides however may likewise assist with recognizing new street development.

D. Sudha, Y. Narasimha Rao, G. Dayanandam, V. Roopa, [9] In this paper, a tweaked schedule arranging framework is given to the clients. Clients can get ready for k-day itinerary items picking their intrigued POIs. It will permit the clients to choose their inclination of spots to visit. With this new detailing, all the clients can make a financial itinerary and this will fulfill the desires for the knapsack voyagers. With the assistance of a changed bunching calculation, a redid excursion can be furnished with the predefined cost and number of long periods of movement. The framework will dig the incessant spots for every objective from the information base and present it to the clients. By this usage clients can pick their modified itinerary with the predefined cost.

Uriwan Angkaway, Veera Muangsin, [10] In this paper we propose a technique to consequently decide the two boundaries for DBSCAN bunching calculation by considering the thickness conveyance of each dataset. The technique has been applied to taxi pickup/drop-off areas in Bangkok to distinguish Points of Interest. This paper proposes the strategies to consequently decide the fundamental boundaries for DBSCAN calculation by thinking about the dissemination of point thickness and apply it to get/drop-off areas of taxicabs in Bangkok. The examination results show that trial boundaries influenced a shape and size of a group and the proposed technique can decide boundaries of DBSCAN for bunching region and has capacity to bunch information on both the single-thickness appropriation region and multi thickness dissemination region. We have checked the bunch region results and discovered POIs, for example, markets, college, eateries, and shopping centers, and so on Later on, we will apply this strategy to different zones to identify new POIs to examine the bearing of metropolitan turn of events.

Afiza Ismail, Syed Abdullah Syed Abdul Kadir, Azhar Abdul Aziz, Mudiana Mokshin, Anitawati Mohd Lokman, [11] This iTourism application is significant for Tourism Malaysia to additional effort its presentation in advancing Malaysia both locally and universally. The travel industry should exploit this application to get guests' criticism on their items or potentially benefits. The application likewise offers traveler a made sure about excursion, as they can reconfirm the data and the spots while coordinating it with the information from GPS. The application could profit Tourism Malaysia, vacationers, and the travel industry administrators, particularly in monitoring the continuous the travel industry occasions and refreshed spots. They can allude to the guide inside the versatile applications that show the refreshed vacationer hotspots and offer the data with their loved ones, who intend to visit Malaysia. The e-Advertisement that is likewise installed inside this application empowers the business to business (B2B) commercial center. Food and Beverages, convenience, amusement, and other related organizations can share this favorable position in broadening and improving their potential by promoting their organizations in the application in the push to grab travelers' eye. It is with this capacity close by different highlights of the iTourism application is anticipated to help the travel industry business in Malaysia.

Ayu Ratna Lalitya Sudjana, Hilda Oktavianni JM, Fenita Suprpto, Elizabeth Husin, Ahmad Nurul Fajar, [12] Jalan.com is a one-stop travel arrangement that causes individuals to look for one objective for each sort of movement needs adequately. It likewise assists with lessening human mistake in looking through the objective by giving auto search from the keep going objective dependent on the last pursuit. A wide scope of movement arrangements from flight, 8 lodging, visit, train, move, and a lot more can be gotten to through the site and versatile applications. As referenced above, numerous examinations have been done, Service Oriented Architecture to portray the framework and the application usefulness of Jalan.com. A few holes in the business that are found later on could be made as renewal from existing organizations. After doing research, the usage of Jalan.com is focusing on mass-market where it is overwhelmed by center until low class. Jalan.com opens associations with movement merchant administration who might want to interface with our framework to offer their support of our market. We trust later on; more individuals are web educated and can get to Jalan.com as their movement arrangement.

III. METHODOLOGY

The Travel Application is a system used for people who like to travel alone. It visually observing pick up and drop-off locations on the map, we can easily find that most points are on the roadsides but some points form dense clusters around POIs. These clusters are varying in terms of size (diameter) and density. In order to identify these clusters automatically, we need an algorithm that is able to adapt to the differences. Moreover, most POIs are relatively small and can be closely located. We prefer an algorithm that is good at separating small clusters rather than gathering into large clusters. The proposed method automatically determines both Eps and Minimum Points for DBSCAN corresponding to the density of data in the area. Appropriate Eps values define from the range of minimum distance that calculates a distance between points and all of its neighbors by Haversine function. This function determines the great-circle distance between two points on a sphere given their longitudes and latitudes. Moreover, this approach calculates the optimal parameters with the Sturge’s rule which statistical packages are widely used to produce reasonable histograms.

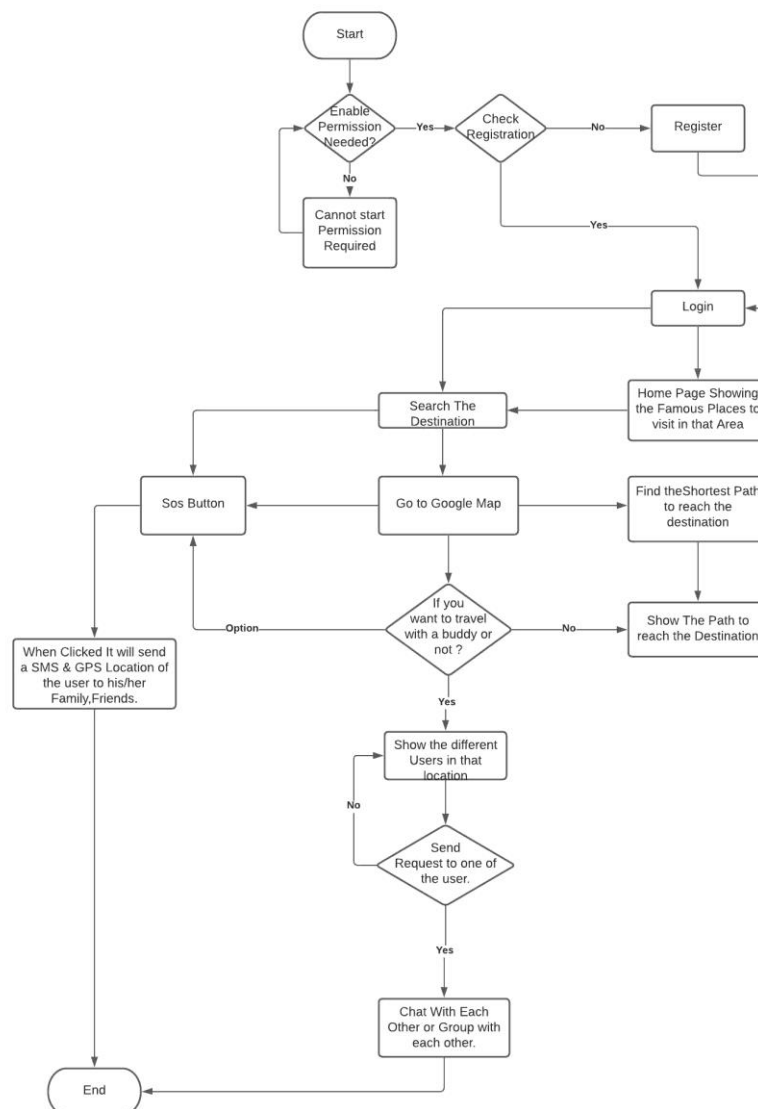


Figure 1: System Flow Diagram.

Figure 2 depicts the block diagram of the proposed system. The user will request for the information, the request will be forwarded to the TRIP PLANNER ENGINE by the mobile application. The ENGINE will gather all the required information from database and it will provide organized result to the user.

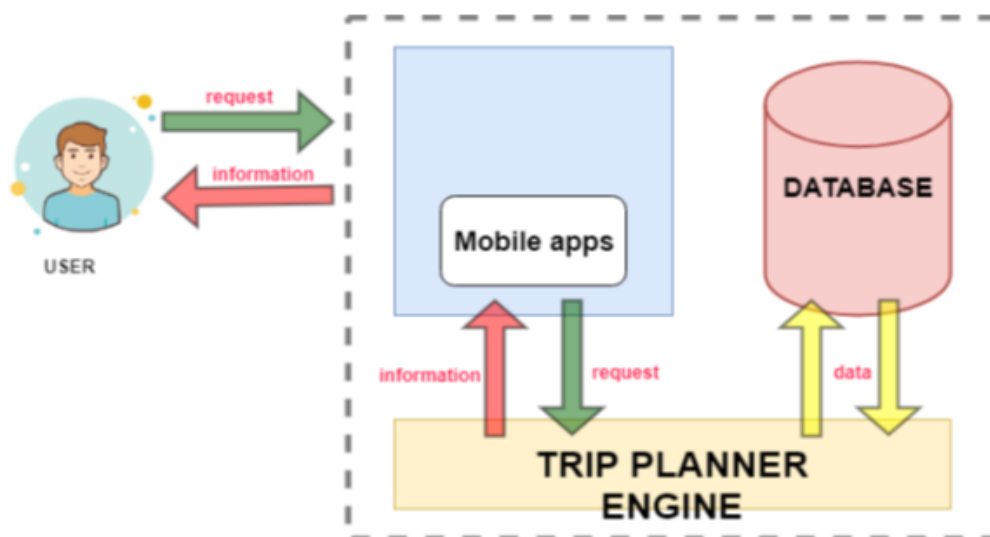


Figure 2: Block Diagram.

IV. CONCLUSION

We aim to provide a modern Travel Guide that provides tourists with huge possibilities for searching information and planning their activities with huge success. We intent to connect travelers to connect to each other, for a wonderful experience and adventures. Using this application will give an improved idea to plan travel itineraries properly and to visit places that are worth to visit on the traveler's destination.

Acknowledgements

We would like to express a deep sense of gratitude towards our mentor Prof. Reshma Chaudhari, Department of Computer Engineering for his constant encouragement and valuable suggestions. The work that we have been able to present is possible because of timely guidance and support.

REFERENCES

- [1] Roopa.Venkatakrishnan, Customized Trip planning using Modified Clustering Algorithm with Personalized Points of Interests & Association Rule Generation researchgate, 2016, p 7.
- [2] Charles Michael C. Te , Jan Patrick A. Villadores , Marilou N. Jamis ,“A Framework for Guiding Travelers and Promoting of Different Tourist Destinations in the Philippines Using Mobile Platform”,IEEE,2017,p 5.
- [3] Afiza Ismail, Syed Abdullah Syed Abdul.Kadir, AzharAbdul.Aziz, Mudiana Mokshin, Anitawati Mohd Lokman,“iTourism Travel Buddy Mobile Application”,IEEE,2016,p 6.
- [4] Maoguo Gong, Guanjun Li, Zhao Wang, Lijia Ma, Dayong Tian, “An efficient shortest path approach for social networks based on community structure”, ScienceDirect,2016, p 10.
- [5] Rupam.sharma, “Android Based Emergency Alert Button”, researchget,2013, p 2.
- [6] Uriwan Angkhawey, Veera Muangsin ,“Detecting Points of Interest in a City from Taxi GPS with Adaptive DBSCAN”,IEEE,2018,p 6.
- [7] Bernie S. Fabito, Francis F. Balahadia , Jade Devin N. Cabatlaos ,“AppLERT: A Mobile Application for Incident and Disaster Notification for Metro Manila”,IEEE,2016,p 5.
- [8] Sih-Ting. Zeng, Ching-Min. Lee,“Personal Emergency Notification Application Design for Mobile Devices”,IEEE,2014,p 2.
- [9] James. Biagioni, Jakob. Eriksson, “Inferring Road Maps from Global Positioning System Traces Survey and Comparative Evaluation”, CiteSeer,p 11.
- [10] Ayu Ratna Lalitya Sudjana , dHilda Oktavianni JM, Fenita Suprpto, Elizabeth Husin, “Design of Travel Service System in Indonesia Based on Service-Oriented Architecture”,IEEE,2019,p 3. 25
- [11] Amrah.maryam, nadia.siddiqui , mohammad A.Qadeer, M.sarosh umar,“Travel Management System using GPS & Geo Tagging on Android Platform”,IEEE,2016,p 6.
- [12] Nqu phuc huy,do van thanh,“Developing Apps for Mobile Phones”,IEEE,2012,p 6.
- [13]E. M. Tan, H. G. Dion, “An Analysis of Services for the Mobile Tourist,” 2007.
- [14]T. Chang , E. Kaasinen, K. Kaipainen, ”What Influences Users’ Decisions to Take Apps into Use? A Framework for Evaluating Persuasive and Engaging Design in Mobile Apps for Well-Being,” 2012.