

Running Head: TRIPPIN'

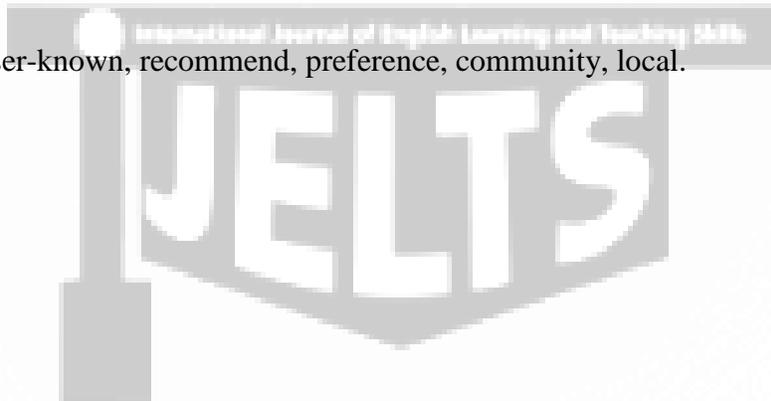
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### Abstract

A personal travel assistant application, that will help you to explore the “lesser- known”, “Rare visits” of the city. Recommends sites and destinations based on your preferences, and connects you with a community that shares your interest. Experience the real essence of the city, like a local.

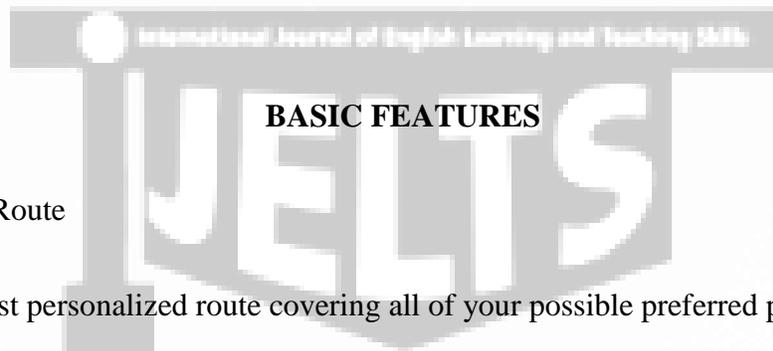
*Keywords* — lesser-known, recommend, preference, community, local.



## Trippin'

**INTRODUCTION**

A personal travel assistant application, that weaves the best possible tour route for you, based on your current location, your preferences, various reviews and recommendation of previous travelers sprawled over the internet. So you can relish the very flavor of the destination like a local resident. Whether or not you are on a budget, this app shall also provide you some of the most economical ways to get started with your trip.

**BASIC FEATURES****A. Best Route**

Builds the shortest personalized route covering all of your possible preferred places starting from your current location. Giving you the option of traveling like a local, i.e., on public transport, in a way taking care of your budget.

**B. Recommendation System**

A well-built recommendation system based on reviews, entries and ratings by different people who either have visited once, or has some prior knowledge about the place from different sources. It's a way for the traveler to avoid any kind of sudden unavoidable situations.

**C.** An extensive use of Machine Learning and its various Algorithms to train the model so that they will be able to build a recommendation system for your preferred places, which will be flexible enough to vary from time to time and also weave a shortest based on your

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current location, and also suggest the user extra places based on his liking falling on or near his route to be taken.

## COMPONENTS

Google API for Maps and its services is the main essence of this application and its various features are implemented presently and will be in future to modify the functionality and user-experience.

### A. Directions API

Provides us with the route for transit, using various modes of communications like biking, driving, walking etc.

### B. Distance Matrix API

Gives us the estimate time of transit and a calculated distance for various locations.

### C. APIs and SDK for Android

This helps us to add niche details for the plethora of places to our android application. Gives us auto complete results for various concerns raised by the users. It also helps us to convert amidst address and geographic coordinates.

### D. Maps Embedded API

It helps us to have an interaction with the user, by the usage of a synergistic map and also by adding a bird's-eye view by using a simple HTTP request.

### E. Street View Static API

Embed real world imagery with 360 degree panoramic view for better visualization experience.

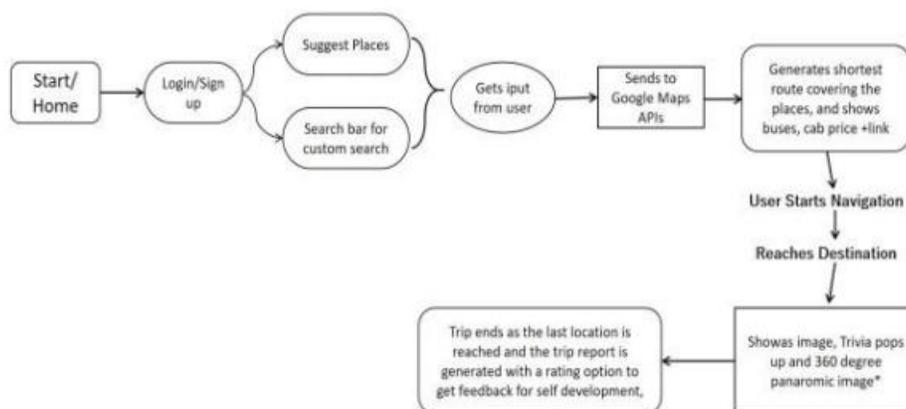
### F. Maps URLs

The maps help us to commence an action, like search destination or routes, using a cross platform URL scheme.

## ALGORITHMS AND WORKING

Presently, at the initial stage the app will be utilizing the Google Maps API and its service APIs to get the live location through GPS and local WiFi network, get coordinates of the places, selection bar for place selection and also Google Maps' shortest path algorithm to generate and find the shortest tour route.

## SCHEMATIC REPRESENTATION



\* Subject to availability

### **FUTURE SCOPE**

There is an immense scope of improvement in personalization, functioning and user end experience that can be done and achieved with time to make the application more immersive and unique one of its kind. We see the scope incorporating a live forum for native and travelers to ask questions, solve queries and suggest places on the go. Also to in-corporate Google Lens in the app to scan and float information regarding a place or structure and also to create a different social media feature for travelers to share images, experiences and also their travel routes with others. Also we aim to develop specific algorithms to divide and combine different transport mode routs for most efficient and economic service.

### **CONCLUSION**

Through this map we would like to create a very personalized travel app that would not only ensure that your preferences are being taken care of, but also provide you with the option of experiencing the authenticity of a particular destination without having to burn a hole in your pocket. The community it aims on building is what you would need as reference and opinions when your endeavors takes you to places less visited. In a nutshell we aim to make travelling more way more fun and affordable.

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## REFERENCE

<https://developers.google.com/maps/documentation/>

Google android support for Maps and Places and location finder.

[www.google.co.in](http://www.google.co.in)

