

## **AN ANDROID APPLICATION FOR KEEPING TRACK AND RECALLING THE JOURNEY DETAILS USING CLOUD**

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### **ABSTRACT**

This paper presents a social network for live tracking and sharing in real time. It is an android application along with corresponding web site for saving images on the cloud with the location, date and time and a location map, after it has been clicked and tracked down. Application starts GPS of mobile as soon as new trip is created and update location at particular interval which help to track route on map. This system contains a web site that allow users to create their individual account, and also allow to create trip on site manually and upload photos clicked during trip. That way user can later go back to a specific day and find out visited locations, view the pictures taken on particular location on map and follow the visited path. User can comment or add description to visited locations, stored pictures and trip albums on web.

**KEYWORDS:** Android, Location, Social Networks, REST API

### **INTRODUCTION**

Nowadays, Social networking service is a platform to build a social relation among the people which is increasing rapidly. And hence several web sites are beginning the tap into powerful social networking model. Adding to it Android has captured the whole market, As number of users possessing and using android phones containing GPS receiver is increased, while their interest for mobile application that enable the storage, analysis and visualization of the collected information is apparent.

There are already plenty of such general purpose application which includes tracking, showing location on map, storing the path, sharing experience. However none of them manage to connect people with helping them to roll back the life by recalling their journey or any trip and storing images clicked during trip and commenting on them. In this there is one android application, when the user starts his journey, he launches the application on phone and set it to record. The application launches the Global Positioning System (GPS) in the phone. After this launching this application on phone it provides GPS tracking on the web for the people with the help of GPS tracking embedded in their phone.

This service keeps the trajectories of current location with latitude and longitude on map with the feature of clicking and storing the images during the journey which will be stored on cloud at real time, it also give the details associated with the journey (eg. Duration, location name, etc.), one can add friends during their travel so that they can share the common trip experience with the images concurrently, manual editing can be done if any problem occurs due to network facility also one can go on the web site and add manually the previous journey (if any). User can share data with friends and rollback the life. This is Application which is able to store GUI information along with images on cloud. As it is kind of social application one can share their experience on the website and other people can tag, share, like and comment on that images. User can suggest suitable time or season to visit specific location based on own and other's experience.

## OBJECTIVES OF THE STUDY

To create an application which will provide social networking feature. The purpose of this application is tracking, showing location on map, storing the path, sharing experience, connect people with helping them to roll back the life by recalling their journey or any trip and storing images clicked during trip and commenting on them.

## SYSTEM ARCHITECTURE

Similar to other application the main functionality of this application is to record a track, visualize it in real time on user selected map. Additionally android app has its own camera activity by using which user can click photos during trip. These images get stored into the cloud. And the whole architecture is divided into three modules as described below:

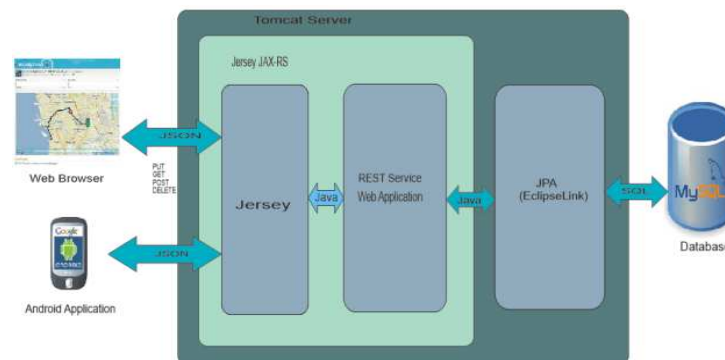


Figure 1

### Website

- Allow users to create their individual account. (Additionally user can provide functionality of synchronizing this account with Facebook account or any other social media , this can be a way for web site to gain popularity).
- Allow users to create trip on site manually and upload photos clicked during trip. User is able to tag locations to pictures and comment on them. (Additionally, user can provide functionality to post these comments to Facebook and if there is any comment through Facebook, project is able to display them on user's site as well).
- Allow users to browse their past trips and promote them to friends.
- It has ability to tag accounts of friends present during that trip will be additional advantage. (User can link their Facebook profile as well).
- This web site is able to plot route using Google map api and locations tagged in pictures and user is able to search trip for route reference.
- Admin account to control all user account and illegal activities.
- Attractive Interface.

### Android App

- It create and View Trip functionality.
- Application starts GPS of mobile as soon as new trip is created.
- It access device camera and is able to store pictures taken during trip tagged with location.

- Application update location at particular interval or on location change, which help to track route on map.
- At the end of trip or at any random time in future we can view route followed during particular trip.
- Social Networking Features be added advantage.

### Rest API

It allows performing all kind on CRUD operations over HTTP. REST API, take care of CRUD operations. Then our android application take care of identifying photos clicked during trip and will upload these photos to database using these REST API's.

The application presented in this paper consists of different layer. The presentation layer consist of android client and web client by which application is responsible for displaying the information in order for user to see and interact with it. The computational layer is responsible to web services which contains business logic of program which accept the input from presentation layer given by the user and communicate with data layer. The data layer is represented by data base storage which holds the information required for this application.

### CONCLUSIONS

The role of this system is to create a social network that allows sharing user location-based information and activities they carry out. For this purpose, available Android location services like GPS technology, wireless and mobile towers are used to find an exact location of user and the photos at the respective latitude and longitude are captured and stored on the map simultaneously, hence the overall operation is performed in real-time.

Android mobile is used for starting a new trip and capturing photos. Captured photos are stored on cloud in real-time. Sharing of photos and including friends in the trip are other features. Website is used to store the details of all the trips, at the same time one can refer its own previous trips as well as he/she can view others trip for getting reviews and then he/she can plan his/her trip accordingly.

### ACKNOWLEDGEMENTS

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APPENDICES

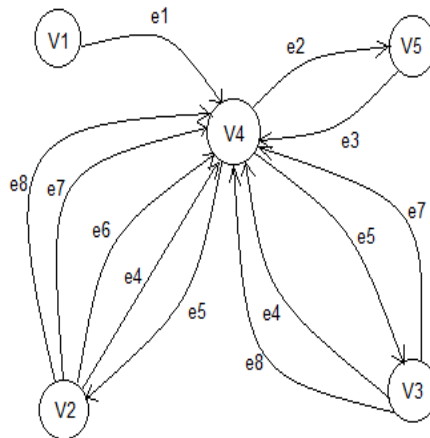


Figure 2: Graph Representation of the System

Table 1

Vertex	Modules
V1	New user
V2	Android user
V3	Web user
V4	Web Services
V5	Database

Table 2

Edges	Input/Output
e1	Register for new user
e2	Store data in database
e3	Retrieve data from database
e4	Login for android and website
e5	Authorization and start user activity
e6	Create and Start trip
e7	View trips and its details
e8	Add and view friends



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