

# Multitasking Travel Companion Android Application for Geo-Locator, Weather Forecaste & Window Shopping

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**Abstract:** This entire venture helps the client as a manual for movement around in another city. To get to the application, you need to initially join and afterward need to login to the framework. From that point, you can choose the spots to visit. When you click the ideal city, it will naturally show the celebrated destinations to visit around there. Additionally, you can go out on the town to shop with the assistance of this application. We propose design of versatile local escort framework for Android Mobile Phones that can give the travel industry data to the portable clients advantageously. Our framework exploits light-weighted blend innovation that can join more than one information sources to make esteem added administrations, while beats the constraints of cell phones. The Mobile application introduced on the portable of vacationer can go about as a guide. Furthermore, the application would assist client with discovering the climate estimate of the spot.

**KEYWORDS:** venture, escort, blend, esteem, spot



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## INTRODUCTION

It is blast time for India's Tourism and Hospitality area. Driven by a flood in business voyager appearances and a taking off interest in India as a vacationer location, As per worldwide lodging and neighborliness counseling firm, HVS International, the solid execution in traveler appearances in 2005 can be credited to a solid sense of business and venture trust in India propelled by:

India's solid GDP execution Strengthening of binds with the created world, and Opening of areas of the economy to private area/unfamiliar venture.

Foreign traveler appearances are required to observe a development of around 78 % in the coming years. According to gauges, on a normal, about 3.1 million extra positions each year have been made straightforwardly and by implication in the travel industry area in the last four years.

The travel industry topography is the investigation of movement and the travel industry, as an industry and as a social and social action. The travel industry topography covers a wide scope of interests including the ecological effect of the travel industry, the geologies of the travel industry and relaxation economies, noting the travel industry and the executives concerns and the social science of the travel industry and areas of the travel industry. The travel industry topography is that part of human geology that arrangements with the investigation of movement and its effect on places. Geology is principal to the investigation of the travel industry.

There is tremendous degree in the calling of local area expert. The extent of the local area expert is expanding step by step as the quantities of traveler places are expanding. As we as a whole know, in this day and age, everybody needs to venture to the far corners of the planet visit or intrigued to know the all spots on the planet. Along these lines, it is best freedoms for the individuals who need to venture to every part of the entire world with some great income. It's a wide region for doing the work. In this field you can acquire great compensation while venturing to the far corners of the planet.

The manual treatment of the record is tedious and profoundly inclined to mistake. This project incorporates posting timetables of trains ,all out seats saved for a specific bundle, enrollment of sightseers,

lodgings, guides, Arrival and flight moves, Hotel appointments, Transport by street, train and Landmark passageways, Meals whenever mentioned. Refreshing and Modification framework serves to add or erase record and adjust the current record set. In light of the idea of refreshing it gives proper admittance to the client. Playing out these fundamental exercises physically can be irksome and tedious at some occurrence.

This venture android local escort gives the vacationer city map contingent upon its present area entered by the android telephone client. This data assists the travelers with tracking down the ideal areas to visit. Well it comprises of whole subtleties of those areas or how to arrive at the area just as other crisis conveniences like emergency clinics, foundations, transport stops and so forth however it gives the fundamental data to choose the spots to visit. This venture is chiefly useful for the traveler's having no clue about the spots they need to visit. By giving a geographic based data framework the travelers and individuals moving to new urban communities can improve direction of the spots they need to visit .This proposed application doesn't need any web access and along these lines disposes of the weakness of single point disappointment. By making the application GIS based, it incorporates numerous benefits as the client can see the necessary area in map and as needs be gauge the time that will be needed to arrive at the last objective. The framework gives the fundamental subtleties that will be required, for example, a picture of that spot alongside essential subtleties like the location, contact no and so forth.

attractions around ranked by the recommendation service. When the tourist click to an attraction the following context menu is opened . The tourist can see detailed information about the chosen attraction , browse attraction reaching path that is proposed by the system route to an attraction and/or estimate it . Detailed information about attraction contains a list of images that is associated with this attraction and it description. This information is extracted by the attraction information service from different internet sources (e.g., Wikipedia, Wikivoyage, and Panoramio are used at the moment). The tourist has possibility to estimate images using the following options: "like image", "dislike image", "this image is not applicable" to the attraction . Based on these estimations the

recommendation service will re-order images for this or another tourist next time. The tourist can browse the attraction reaching path by choosing "Show on the map" item in context menu. The routing service that is responsible for calculating attractions reaching path based on developed OpenStreetMap-based web mapping service. Routing service provides the tourist possibility to build pedestrian path, find fellow travelers who go to the same direction, and find public transport to reach chosen attraction. For searching public transport, the Yandex.Schedule API has been used. It allows finding transport threads between the settlements using the following functions:

- Nearest station search for finding public transport stops near the current tourist location. Searching routes schedules by the station. Searching routes schedules between stations. Searching route stops that allows showing all stops by the queried route. Searching information about carrier.

For building attractions reaching path by public transport the routing service uses two of the presented above functions: nearest station search and searching routes between stations. When the server finds request for transport search, the first function searches station in the areas of the tourist current location and the attraction location. Then the second function searches the transport threads between found stations. Search result are sorting by the departure time and shows to the tourist.

#### HELPFUL HINTS

The following groups of applications have been identified based on travel phases (most of applications covers two or all travel phases):

- pre-travel phase, that provides range of services to facilitate travel-related information search, for instance attractions description, hotel and airplane booking, and etc.;
- travel phase, that provides the tourist real-time information about the destination, e.g. information about events, places of interest, advices, and practical recommendations;
- post-travel phase, try to get feedback from the tourist (variety of solutions to collect estimation information about attraction) and share his/her travel experience with others. The first applications group applications provide the tourist possibility to plan his/her trip, get information about attractions for given destination, book hotels and flights. Applications from the second group provide the tourist personalized context-based

information about attraction in destination. The aim of applications from the third group is to collect posts, photos, videos, and/or estimations about attractions attended by the tourist. This information can help other tourists to decide if he/she would like or not to attend this attraction. There are applications that incorporate two or all three groups (e.g., Tripadvisor allows to plan the tourist trip by browsing information in PC before). During the trip, the tourist can use mobile application to see places of interests around. In addition, Tripadvisor allows to make estimations about attended places of interests and post some blogs about them.

### III. TOURIST ASSISTANT – TAIS

A. Application description

Tourist assistant – TAIS is a mobile application, which is related to the "Travel Guides" category (see Section 1) and has been developed based on Smart-M3 platform, that makes possible to significantly simplify further development of the system, include new information sources and services, and to make the system highly scalable. The key idea of this platform is that the formed smart space is device, domain, and vendor independent. Smart-M3 assumes that devices and software entities can publish their embedded information for other devices and software entities through simple, shared information brokers. Platform is open source and accessible for download at Sourceforge2. Implementation of tourist assistant – TAIS application has been developed using Java KPI library3. Mobile clients have been implemented using Android Java Development Kit4. There are client application, attraction information service, recommendation service, region context service, ridesharing service, and public transport service. The tourist can see images extracted from accessible internet sources around, clickable map with his/her location, context situation (weather), and the best

#### METHODOLOGY

##### 1) SystemRequirementsSpecification(SRS)

##### Tourist Guide Project Modules

Given are the modules for android travel guide project:

1. **User Module:** Via user module, user can make account into the application and can use it for future purpose and also get latest updates.
2. **Booklet Module:** In this module, all the information is viewed via this module and user can access these modules and it's really importance.

3. **Database Module:** This module contains all the data related to the system such as users that are registered into the system and so on. Time wise update of the database will lead to timely updation of information in account.

4. **Admin Module:** All the updates and addition and deletion of information related to places and other information are updated via this module. Only admin has the right to access this module.

**Technologies Used**

- Java Core
- SQL Server
- Java Advanced
- Hibernate
- API
- XML
- ANDROID STUDIO

**Hardware Requirements**

- Hard Disk – 4 GB.
- RAM – 2 GB.
- Processor – i3 or higher.
- Mouse
- Keyboard
- Monitor
- Printer

**B. Software Requirements**

- Android debug bridge
- Android software development Kit
- Windows 7
- JDK 6
- Android studio
- Notepad

**ARCHITECTURE OF ANDROID**

Android architecture is a stack of software components. It is in the form of a software application, operating system, run-time environment, middleware, native libraries and services.

**It is categorized into five parts as below:**

1. Linux Kernel
2. Native Libraries
3. Android Runtime

4. Application Framework

5. Applications

Each part of the stack and the elements within each layer are integrated and provide optimal application development and execution environment for mobile devices.

**LINUX KERNEL**

- Linux is the heart of Android architecture.
- It provides a level of abstraction between the hardware devices and the upper layers of the Android software stack.
- The Android operating system is based on the Linux kernel.
- The Linux kernel is responsible for various device drivers such as Camera driver, Display driver, Bluetooth driver, Keypad driver, Memory management, Process management, Power management, etc.

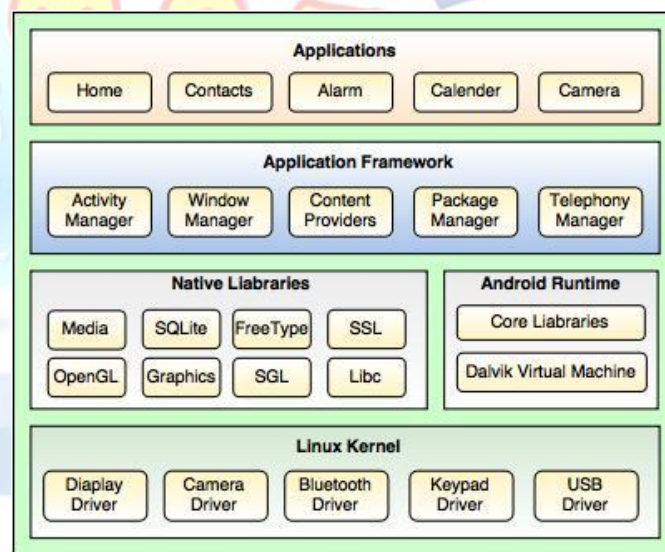


Fig. Android Architecture

**NATIVE LIBRARIES**

- The native libraries such as Media, WebKit, SQLite, OpenGL, FreeType, C Runtime library (libc) etc. are situated on the top of a Linux kernel. Media library is responsible for playing and recording audio and video formats, FreeType is for font support, WebKit is for browser support, SQLite is for database, SSL is for Internet security etc.

**ANDROID RUNTIME**

- Android Runtime is the third section of the architecture and situated on the second layer from the

bottom. Android Runtime includes core libraries and Dalvik Virtual Machine (DVM) which is responsible to run android application.

- Dalvik Virtual Machine (DVM) is like Java Virtual Machine (JVM) in Java, but DVM is optimized for mobile Devices. DVM makes use of the Linux core features like memory management and multi-threading, which are essential in the Java language. DVM provides fast performance and consumes less memory.

#### 4. APPLICATION FRAMEWORK

- Application framework is situated on the top of the Native libraries and Android runtime.

- Android framework provides a lot of classes and interfaces for Android application development and higher level services to the applications in the form of Java classes.

- It includes Android API's such as Activity manager, Window manager, Content Provider, Telephony Manager, etc.

- Activity manager is responsible for controlling all the aspects of the application lifecycle and activity stack, Content provider is responsible for allowing the applications to publish and share the data with the other applications, View system is responsible for creating application user interfaces, etc.

#### 5. APPLICATIONS

- Applications are situated on the top of the Application framework.

- The applications such as Home, Contact, Alarm, Calendar, Camera, Browsers, etc. use the Android framework which uses Android runtime and libraries. Android runtime and Native libraries use Linux kernel.

- The user can write his/her application to be installed on this layer only.

#### FLOW OF STEPS CONSIDER FOR THE PROJECT COMPLETION

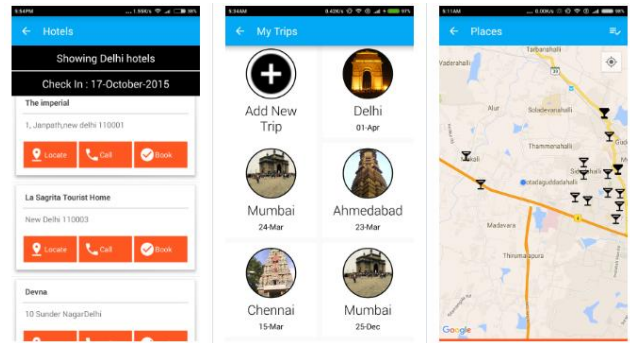
The formal stages of a project are as follows:

1. **Initiation:** project team formation, project chartering, and kick-off.
2. **Planning:** finalizing the project scope, defining the detailed work breakdown, assessing risk, identifying resource requirements, finalizing the schedule, and preparing for the actual work.

3. **Execution:** performing the actual work required by the project definition and scope

4. **Monitor and control:** the actual management, reporting, and control of the resources and budgets during the execution phase.

5. **Project close:** delivery of the project, assessment of lessons learned, adjournment of the project team.



#### Overview Of Emulator

#### CONCLUSION

In this paper, we introduced the plan and execution of a portable application called Smart Travel Companion, with which versatile clients can get the travel industry direction data they need whenever and anyplace. By Smart Travel Companion, clients can get a fascination's point by point data, including text, picture and video. Specifically, Smart Travel Guide can give clients area based data, which can be perused or questioned through a guide. Client can look through the close by attractions after the person arranges the distance between the current area and the view spots. At the point when the client moves out of the current area, the cell phone will consequently. Getting from the goals of this examination, the result of the exploration was advancement of a versatile travel control application with added functionalities to an existing application, and tests for each part were incorporated too. The objective of the movement direct application was to foster elements of area manage, enduring report of objective and online shop administration. The point of the movement manage was to furnish the clients with a more helpful application to clients contrasted and the customary travel direct. The consequences of the survey made a smart response to the exploration question, furthermore, gave helpful data to foster the application

for exhibition halls. It is shown that Android hold a solid client bunch, so the application was planned dependent on Android framework. Moreover, versatile has gotten a sort of essential instrument of present day individuals, and then some and more applications are given to clients to pick. To know client necessities may create the application better.

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