Temple Data Agglomeration System via Mobile Application

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Abstract— The fast multiplication of versatile innovation has tremendous potential for giving access to various sorts of administrations whenever and from anyplace. Reason for this exploration was to build up a looking innovation application in light of the Android working framework and the use of SQLite innovation as principle information stockpiling. The extent of the data looking was restricted to finding sanctuaries inside the areas of Andhra Pradesh. The designer considered the significance of correspondence through nitty gritty information accumulation and assembling so the clients of this application could get brief and finish data. Tourism plays an important economic factor of every country. Sights don't just comprise of the ocean, the mountains, or the woodlands, but also the temples. Each temple can be represented with a variety of information. They have been introduced utilizing an assortment of media, for example, print media or data innovation media. Thus was born the idea to produce media that conveys complete, accurate and up to date information to facilitate the presentation of tourism as well. Due to demand, there is more than a brochure provided at each and every location. Most sightseers require more data from the blurb which was mounted set up. Such Android Mobile Application project which aims at providing the whole information about Temples, Institutions such as Schools and Colleges, Hotels and Restaurant, Hospitals, Markets and Super Markets in Anantapur, Guntur, Krishna, Kadapa, Nellore, Chitoor and East-West Godavari of Andhra Pradesh. The application plans to create point by point writings, pictures, and other direction data is given, thus individuals can better comprehend the vacation destinations and settle on choice impartially. The user can also get the information by simply giving a SMS or by Calling to a specified number which was provided in mobile application.

IndexTerms— Android Software Development Kit (SDK), Hardware Abstraction Layer (HAL), Google Maps Directions, Mobile Data Collection (MDC).

I. INTRODUCTION (HEADING 1)

"Portable tourism" speaks to a generally new pattern in the field of tourism and includes the utilization of cell phones as electronic vacationer guides. While a significant part of the basic innovation is as of now accessible, there are as yet open difficulties regarding outline, movability, and usefulness and execution perspectives. Presently a-days, everything will be accessible in Internet. There is extraordinarily improved travel data gave to the sightseers on the Internet. If we want to know any information about temple in AP, we can search through Internet. But in our busy schedule we may not spend time to search. However, problem is shown that tourists are not able to get travel information timely when they are on the move.

Today's mobile devices are becoming more intelligent, compared with Personal Computers. Therefore, the information presentation is limited in quantity and completely lacks on demand content. For this reason, the researchers initiated the development of temple information retrieval using a Mobile Based App. Through this application everybody can keep up every one of the insights about sanctuaries convenient. It demonstrates the address of city, History of the Temple and many pictures of sanctuaries. We are every one of the insights about sanctuaries in our portable as it were. Our focus was the storage and retrieval of temple information by using their own Smart phones. As a result, visitors could use their android Smart phones to search for any temple information and acquire the temple history even more that they could otherwise. This application allowed clients to get visit direction data they require whenever and anyplace. Specifically, the vacationer information could be perused or questioned through an Internet delineate, for example, Google Maps. The remainder of this paper is organized as follows. Section 2 reviews related work and Section3 first gives problem formulation and followed by proposing an improved mobile application, Section 4 provides Theoretical analysis for the proposed formula. Section 5 discusses experimental results and eventually Section 6 concludes this work.

Mobile Data Collection (MDC) is the utilization of cell phones, tablets or PDAs for programming or information accumulation. It can be very useful to the evaluator who is collecting quantitative data for their evaluation or abstracting data for an evaluation. Since the information is gone into the principle database in the meantime as they are gathered, the long process of transcribing and double-entering responses is eliminated. Data can be analyzed as soon as collection is done. MDC offers moment perception of information, including maps (if GPS organizes are taken) and essential breakdowns of answers to each inquiry. This can be utilized for overseeing information accumulation or to help later investigation [1]. It can be more moderate than standard paper audits, since it decreases the costs related with printing and frame transportation, twofold passage, and information cleaning. Android utilizes Java as its programming dialect.

Data extraction was essential in light of the fact that there was much data in the wake of distinguishing sources, for example, sites, brochures and text; therefore, it was necessary in the system. The specialists would choose just the tried and true data to be removed for the related data to be gathered in the database with the goal that the data could be hunt out down later utilize. Data

extraction is the undertaking of finding organized data from unstructured or semi-organized content. Information about this system is recorded manually in olden days. All the data stored in the paper or a register. Whenever people are interested to examine the information about the temple, Hotels, Markets & Supermarkets, Hospitals like opening-closing time, aarti time, program date, address and other facilities then they must be go to the temple and other places. Existing System is not a programmed framework. This framework is time consuming. Searching facility is difficult in current framework. It takes excessively for information stockpiling. Information can't be kept up for quite a while. When the people come to visit this temple, then he faces some problems like not available for the rooms' facilities, parking facilities.

II. LITERATURE SURVEY

Android is a broad-ranging software stockpile of mobile devices that includes an operating system, middleware and key application. This rich origin of software stack is utilized as a part of Mobile Technology through its advancement module of The Android Software Development Kit (SDK). It is a convenient working framework created by Google, in light of the Linux piece and designed primarily for touch screen mobile devices such as smart phones and tablets. It is a programmed that gives practically anything expected to best in-class application encounters. It gives a solitary application show that enables designers to send applications extensively to a large number of clients crosswise over extensive variety of cell phones.

System Apps and User Apps were present at the top layer. Examples of such applications are Contacts Books, Browser, Games, Dialer, E-mail, Calendar etc. The establishment of the Android software is the Linux kernel. For instance, the Android Runtime (ART) depends on the Linux piece for fundamental functionalities such as threading and low-level memory management. Utilizing a Linux kernel enables Android to exploit key security includes and enables gadget producers to create equipment drivers for an outstanding kernel.

The hardware abstraction layer (HAL) gives standard interfaces that uncover gadget equipment capacities to the more elevated amount Java API system. The HAL comprises of various library modules, each of which executes an interface for a particular kind of equipment segment, for example, the camera or Bluetooth module. At the point when a structure API makes a call to get to gadget equipment, the Android framework stacks the library module for that equipment part. To keep up an abnormal state of value and offer a reliable client encounter, Android requires that all usage meet the prerequisites expressed in the Compatibility Definition Document (CDD) and that all gadgets finish tests in the Compatibility Test Suite (CTS). The hardware abstraction layer (HAL) gives a quality strategy to making programming snares between the Android platform stack and our equipment. The Android operating system is also open source, so one can contribute his own interfaces and enhancements.

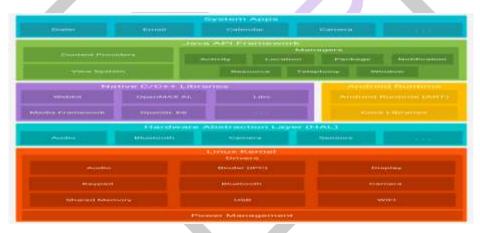


Fig. 1: The Android software stack.

There are Native libraries such as WebKit, OpenGL, FreeType, SQLite, Media, C runtime library (libc), SSL [3] etc. which are incorporated on top of Linux Kernel. The WebKit library is accountable for browser support; SQLite is for database support, FreeType for tex style support, Media for playing and recording sound and video groups. In android runtime (ART), core libraries and DVM (Dalvik Virtual Machine) are incorporated, which are accountable for running mobile android application. DVM resembles JVM however it is enhanced for cell phones. It devours less memory and gives quick execution. Some of the major features of ART [4] include the following:

- Ahead-of-time (AOT) and just-in-time (JIT) compilation
- Optimized garbage collection (GC).

Java API Framework: The entire feature-set of the Android OS is available to you through APIs [5] written in the Java language. These APIs form the building blocks to create Android applications by rationalizing the reuse of core, modular system components and services, which include the following:

- A rich and extensible View System may be availed to build an application's UI components, comprises of lists, grids, text boxes, buttons, and even an embeddable web browser
- A Resource Manager, which provides an access to non-code resources such as localized strings, graphics, and layout files documents
- A Notification Manager that empowers all applications to show custom cautions in the status bar.

- An Activity Manager that deals with the lifecycle of applications and gives a typical route back stack
- Content Providers that empowers applications to access data from other applications, such as the Contacts app, or to share their own data
- Developers have full access to a similar structure APIs that Android framework applications utilize.

III. Proposed Methodology

A new system provides the feature like easy to understand, view information, etc. All the data will be maintained in the Mobile app Database. User can easily view all types of the information about what they really want about the temple. The information can be updated easily using mobile application. It consumes less time. User can easily work with the system through Android Mobile Application. There is another way for the user to get the information by simply giving a SMS or by Calling to a customer Service number which was provided in mobile app.

SQLite is an open-source Structured Query Language (SQL) database that incorporates data to a text file over a device. Android comes in with worked in SQLite database execution. SQLite supports all the relational database features. In order to access this database, one shouldn't need to establish any kind of connections for it like JDBC, ODBC etc. SQLite is an in-process library that actualizes a self-contained, serverless, zero-configuration, transactional SQL database engine. The code for SQLite is in general society space and is therefore free for use for any reason, business or private. SQLite is the most generally sent database on the planet with a bigger number of utilizations than we can check, including a few prominent ventures [7]. SQLite is an embedded SQL database engine. Not in the slightest degree like most other SQL databases, SQLite database not have an alternate server process. SQLite reads and writes immediately to ordinary disk files. A complete SQL database with multiple tables, indices, triggers, and views, is accommodated in a single disk file. The database document format is cross-platform - one can unreservedly duplicate a database between 32-bit and 64-bit systems or between big-endian and little-endian architectures. These highlights settle on SQLite a prevalent decision as an Application File Format. Consider SQLite not as a substitution for Oracle but rather as a swap for fopen().

Android ListView is a type of view which holds several items and displays them in vertical scrolling list. The list items are naturally put into the list through an Adapter that pulls from a source for example, an array or database. An adapter actually acts as bridge between User Interface components and the data source that pushes data into UI Component. Adapter accepts the data and sends the data to adapter view, the view can gets the data from adapter view and populates the data on different views such as Spinner, ListView, GridView etc. The ListView and GridView are the subclasses of Adapter View and they can be populated by attaching them to an Adapter, which retrieves data from an external source and creates a View that represents each data entry. ListView is a subclass of AdapterView, which is an abstract view component [6]. An AdapterView receives its data from an Adapter, which in turn is an interface to be implemented by a concrete adapter class. The Google Maps Directions Application Programming Interface is a web service that Google gives us to get data about a route or direction. A route/direction is getting from a commenced area to a particular goal. This web service furnishes us with data for various transport modes, waypoints and traveling time support.

- App User: In this module, the mobile application user has to login by using valid user name and password. After login successful he can move to the app contents which were provided in this application.
- **Temples:** All information such as temple history, Seva details, Photo Gallery, Contact will be provided. And also a user can navigate to his interested area like Districts (Anantapur, Guntur, Krishna, Kadapa and Nellore) and search about temple. And user can use Switch View option which was provided on the three dots field that switches from ListView to GridView.
- Institutions: Institutions involves Schools and Colleges data like School/College name, Address, Contact. In Contact tab the user may use call or message service through his mobile directly.
- **Hospitals:** Hospitals consists of both Government hospitals details and Private hospital details information of the districts in Andhra Pradesh.
- **Hotels & Restaurant:** Hotels & Restaurant details will be collected and placed in this mobile application.
- Markets and Super Markets: Markets and Super Markets details will be collected and placed in this mobile application.
- ➤ Google Maps: It is used to search for the location of the temple and show the map. It provides a route planner from his current location to the required temple location under "Get Directions".
- **Language Specification:** Every temple and other information will be provided in English.
- User Experiences: After visiting the temple he can give his experience and also provide Ratings about that temple.

IV. Experimentation Results

After successful execution of project, Fig 2 is the home page of the project which has several options in it. The below Fig.3 shows that the lists of Temples which are available in some Districts like Anantapur, Guntur, Krishna, Kadapa, and Nellore. The Tourist selects a particular temple from the list of temples available in some Districts. It shows the About, History/Sevas, Gallery, Contact, Map Tabs for every temple which is shown in the above Fig.4. List of Supermarkets and Markets in a particular District of Andhra Pradesh. It consists of Market name, Address, Phone Number, Timings of market in Fig.5. Whenever the user clicks on Schools Tab it will shows the available schools in that particular district of Andhra Pradesh in Fig.6. It includes School name, Address of school, Timings, About the School, Contact Number, Map. The Fig.7 shows the Hospitals List. It involves both Government Hospital and Private Hospitals list. The user may wish to select the interested hospitals details.







Fig.2: Home Page

Fig.3.List of Temples in some Districts

Fig.4.Select Particular Temple from List







Fig.5: Supermarkets List

Fig.6.List of Schools in some Districts

Fig.7.Select Particular Hospital from List

V. Conclusion

It was concluded that, we could use the Temples lists, Temples Images and other information such as Institutions, Hotels & Restaurant, Hospitals and Markets for knowing the information about history, timings, address, picture gallery, contact information and google map and so on the Android operating system. It can be used practically through the mobile application to meet the demand for storing and retrieving temple tour information as well. It supplies the user with the information quickly and accurately. It helps to make a positive impression on tourists, especially foreigners who visits temples. The database development was the collection and filing of the information for the history, buildings, other details of the temples, which could be retrieved to show pictures and information in English language on the mobile screen.

Future Work

It can be extended that the analysts recommend different specialists who needed to contemplate advance on a similar subject ought to expand these discoveries for the techniques for data seeking. They ought to apply new electronic gear with the seeking techniques keeping in mind the end goal to furnish the visitor clients with astounding adequacy and most extreme advantage.

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