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ANDROID APPLICATION DEVELOPMENT(PICKSTORE) USING CLOUD COMPUTING

Kratika Kothari[1], Shubhika Jain[2], Priyanka Shinde[3], Ankita Shinde[4], Prof. P.P. Shevatekar[5]
Department of Computer Engineering, DYPIEMR

Abstract- This Android Application is built on Google App Engine. This application illustrates the location of specific stores, malls in the city, and the offers running in these stores, layout of the malls, arrival of new stock. There will be two types of users. First are the managers. These managers are the authorities who manage all the information of theirs respective stores, malls. Second are customers who are interested in shopping from these stores. For a customer, there are two ways to navigate after selecting his location(e.g. Pune), first, he can select a particular mall. Under this he will get to see a layout of the mall and a list of all the stores in the mall and all the offers running in individual stores. Also information regarding new arrivals will be available. Other additional information will be like if any store is closed or a new store is opened. Second, he can select a particular brand he is looking for. All the stores of that brand in the city will be shown along with their addresses. Offers running in these stores will also be shown. Additional information like if a store is opened or closed recently. Managers have authority to modify information regarding their concerned stores, malls. Customers can save there frequently accessed stores and malls for future reference. There will be a more organized and approachable interface between the sellers and the customers.

Index Terms- Android application development, Google App Engine, Cloud Computing, Social Network

2 INTRODUCTION

Applications have the reputation for being no nonsense business tools. However with the success of platforms such as iOS and Android, consumer expectations have raised the bar on what constitutes an acceptable user experience. Apps are now starting to feel the impact of this renewed focus on ease of use and visual design. With our new focus, apps must also be easy to use, visually appealing, and engaging.

Google's Android has near about 95% of market share in the Indian Market. This gives us a large exposure in terms of number of users. We will be creating an Android Application which will use Google App Engine to support its backend. The reason for using the Google App Engine over traditional databases is that Google App Engine supports development of scalable mobile and web applications.

This application illustrates the location of specific stores, malls in the city, and the offers running in these stores, layout of the malls, arrival of new stock. Google App Engine provides the API for Google Maps that are used in this app to provide location of the stores, malls.

Android Studio is the IDE(Integrated Development Environment) used for developing the app. It can be developed for any type of android device. Android Studio offers built-in support for adding Applications to the Google App Engine with the help of Google Cloud Endpoints. Apart from Google Maps, App Engine also provides built-in services and APIs such as NoSQL datastores, memcache, and a user authentication API, which is common to

most applications.
In other words, the App Engine hosts your backend app and take care of everything in between. It will automatically scale it, depending on the traffic.

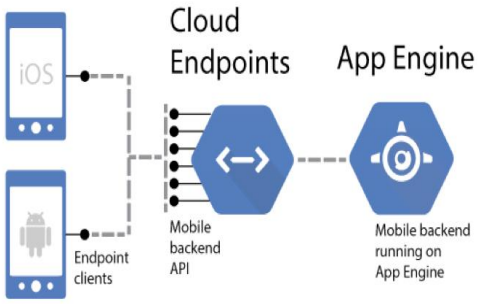
There are two types of users in this App. First are the managers. These managers are the authorities who manage all the information of theirs respective stores, malls. Second are customers who are interested in shopping from these stores. For a customer, there are two ways to navigate after selecting his location(e.g. Pune), first, he can select a particular mall. Under this he will get to see a layout of the mall and a list of all the stores in the mall and all the offers running in individual stores. Also information regarding new arrivals will be available. Other additional information will be like if any store is closed or a new store is opened. Second, he can select a particular brand he is looking for. All the stores of that brand in the city will be shown along with their addresses. Offers running in these stores will also be shown. Additional information like if a store is opened or closed recently. Managers have authority to modify information regarding their concerned stores, malls. Customers can save there frequently accessed stores and malls for future reference. There will be a more organized and approachable interface between the sellers and the customers.

Our conclusion is that as Cloud Computing platform supports more and more traditional frameworks, less and less effort will be made to reengineer the existing system.

LITERATURE SURVEY
There are applications like flipkart, ebay, snapdeal etc. which provide the services for online shopping. Even though online shopping market is increasing rapidly, people still prefer to go to shops for clothing due to several issues like fitting, quality, size etc.
Also there are applications like bookmyshow that provide the rates of movie tickets and availability at theatres. There is a need for applications that help people in knowing that what is appropriate time for them to go for shopping. An application that shows the nearby stores, malls, new arrivals at the stores, sale etc.
Cloud Computing is changing the way that organizations manage their data, due to its elastics, on-demand, cost effective characteristics. Even if you do not know about the size of data that your application will generate at the start of the development, cloud computing provides platform for scalable development of applications.[4]

Android Studio is the official IDE for android Application development. It works based on IntelliJ IDEA.

Google App Engine Android Studio offers built-in support for adding backend apps to the App Engine with the help of Google Cloud Endpoints. The Google App Engine is a platform for building scalable web applications and mobile backends. The App Engine provides you with built-in services and APIs such as NoSQL datastores, memcache, and a user authentication API, which is common to most applications.[8]
In other words, the App Engine will host your backend app and take care of everything in between. It will automatically scale it, depending on the traffic.
On the other hand, Google Cloud Endpoints consists of tools, libraries, and capabilities that allow you to generate APIs and client libraries from an App Engine application in order to simplify the data access for client applications . So, in other words, we will use Google Cloud Endpoints to create an endpoint API that will be hosted by the Google App Engine. Google Cloud Endpoints will also generate client libraries to access the backend API, sparing us from writing the network communication code ourselves.



RESULTS AND DISCUSSION

It is more convenient for users to go for shopping when offers or collection of their choice are available. This application is to give user a help to decide where to go and when to go. Almost everyone has a smart phone today because of which Android applications have a great scope. Knowing offers and collections prior to going for shopping is what buyers desire. Even if the data grows and reduces rapidly, cloud computing supports scalable data efficiently.

Overview of the System

Following figures show a generalized view of the system. Figure 1, shows the relationship between clients(customers, distributors) and the server(administrator).
Figure 2 shows the activities performed at a particular instance.

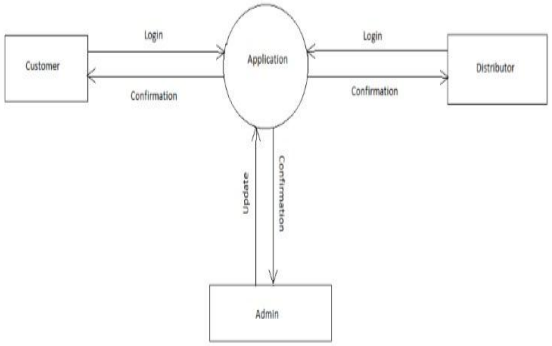


Figure 1

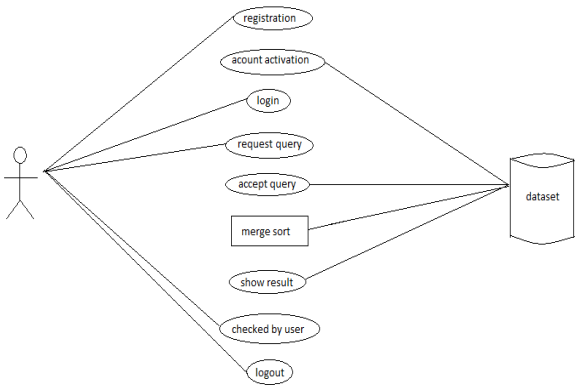
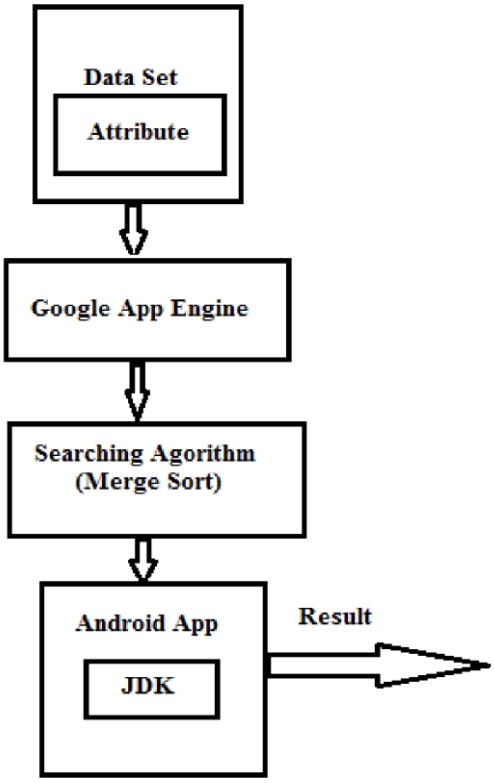


Figure 2

Architectural Design

A description of the program architecture is presented



Merge Sort is used to search the results for a specifc query because it can be applied to files of any size. Reading of the input is sequential, hence not much seeking. Reading through each run during merging and writing the sorted record is also sequential.

CONCLUSION

By using this Application buyers will know all the offers well before going for shopping. Also distributors have a great chance to interact with their customers and increase their sales. To give customers a better knowledge about the market. Through this application, user can locate the stores (precise location in mall) where he wants to go. Also he can find what all stores are present in a particular area. In addition to this, user can also know about various offers and collections available at different stores.

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