Introduction

In big cities where different services are provided, it is hard to find the sufficient information needed. These services could be very necessary that could even decide the continuity of the human life. an accurate and define information of services are so needed and could ease the difficulty of life. many people are in need of descriptions, locations, types and alternatives of services but many pass through many challenges and difficulties in order to acquire this information.

Let’s imagine a service that provides many sectors (with their services) in one place. A service that provide sufficient information’s of verities of services an ‘’all in one ‘’ system. This application will be a great use both for the local and foreigner people. It will remove many difficulties that every people face. this kind of application is need even by the layman people that doesn’t have the knowledge of computer based software’s. It will be a big advantage for the sectors that are listed in the applications for advertising and promoting their services and goodies. The benefit is mutual for both the customs and the providers.

One of the things that makes this application needed is that it is provided in a way that is accessible to anyone who has smart phone (android based). The application is installed easily on your phone or tabulate and can be used at any time. For example, someone doesn’t need an internet access to find the address of some company through the usage of some functionalities in the application needs an internet connection, but the majority of information provided doesn’t need any internet access or what so very.

We have planned to provide this application to the mass and to the foreigner because of the high demand of if this application mainly provides services of different sectors that are only located in Addis Abeba. And we have called this application “**ADDIS’N BEJE**”.

To mention some of these sectors

* Transportation services
* Health care services
* Tourism services
* Hotel services etc…

This application will include many futures such as GPS system for directing to desired places, supporting different languages, notification, call links and others.

This proposal will give an overview of the mobile application functionality, objectives, tools and methodologies that are going to be implemented and other topics too.

Background

The end users of this application are mainly the Diaspora comminutes and the foreigners. These people are in different knowledge of the city. some may have a little knowledge about the city and services that is provides but other doesn’t have any clue or what so ever about the city and are in high need of this kind of application. They both needs a services that can provide a sufficient information about different sectors and services.

Despite the local people have a better knowledge of their city, but they also need some information about some services since the city is large to comprehend. The local people can also be the end user of this system because we observe that many struggle to find information about some service like hospitals they can easily gain access to the contact and address of the desired service.

There for we can say the chief end users of this application are the local people the Diaspora community and foreigner people that comes to the city.

Problem statement

The program is made mostly to solve the problem that foreigners, tourists and diaspora might face while traveling to Addis Ababa. The current problem lies in that visitors end up paying a lot of money for different information since they don’t have other options.

In the ideal way travelers could use the app to alleviate any worries they might have while travelling to Addis such as not knowing directions to places (the app provides GPS service through the google maps API), not knowing the most convenient place to stay(the app provides hotels and their locations with their respective ratings) ,not knowing etc…

The app also provides places to go to based on the reason the visitor came to Addis, for holiday or for business or even for vacation.

The app provides users with different phone numbers such as emergency phone numbers and call service phone numbers. It also provides different ways of transportation such as bus, plane and cab rides.

Motivation

As mentioned above many visitors are not aware of ways to get around Addis or find the places they are looking for conveniently. And so this has motivated us to settle the injustice travelers have been facing just because they came from a different country.

To enable our users to easily know and navigate the streets of Addis as good as the locals.

To remove barriers for potential investors by empowering them with valuable information.

General objective

To help people know Addis Ababa inside out without much effort and also inform our users of different information.

Specific objective

The application enables users to perform various tasks such as:

* Enables users to navigate the streets of Addis Ababa using GPS
* Enables users to choose the hotels based on their ratings
* Enables users to know the emergency numbers of Addis
* Enables users to choose their transportation method
* Enables users to find and locate historical places in Addis
* Enables users to find phone numbers of various establishments such as phone careers, Airlines ticket office and post office
* Enables users to choose their language either Amharic or English
* Enables users to find renown shops, entertainment centers, malls and etc

SCOPE OF THE SYSTEM

This application has a scope of addressing services of different sectors that located only in Addis Ababa. The scope of the location does not go beyond the capital city in one way of another. This application provides information’s that are mainly located to Addis Ababa.

The other scope is located to the functionality of the application. Let’s see some points located to this.

* This application will only provide the information of different organizations. It will have no further communication with the system of the organization that will invoke other communication. It only provides list of addresses (contacts, links…) of the organizations.
* This application only provides some major services that the majority of the user’s needs. It does not include some sectors such as beauty salons.

In this application there will be different sectors information. The provision of services of different sectors include

* **Transportation sector**: This provides information located to the means of transport. It will mainly address the land based and air based transportation system. It will show the contacts and addresses of cross-country public buses. And contacts and addresses of private care rent for user’s desires to go privately. In air based transportation system, the application show ticket offices, airport and other located issues.
* **The Hotel industry sector**: This provides information located to the hotel industries. It will give information’s about hotel (based on their standard level and it will guide the user to the location with a GPS service. The call link feature is also used in order to create communication between the users and the hotels.
* **Health care sectors**: The application will provide effective a GPS service to find the location of one of the listed health care center. It will divide based on the specialty of the organizations. For example, there will be some that focuses on pediatric services.
* **Public libraries**
* **Tour guides**: Tourism related information’s
* **Emergency numbers**
* **Restaurant sector**: provides information about some well-known restaurants and cafés in the city. It will also include some restaurants that provides foreign foods.
* **And Other additional services…**

The other scope of the system is related to the feature of the system. The language feature will support languages mainly (for the time being). Thus are Amharic and English. But we will try to add additional well known languages as time goes on.

This application also provides the whole GPS map for Addis Abeba. This will help the user to know the routes of Addis.

Limitation of the system

This application has some limitations related to its functionality, features and services. To mention some of this limitations.

* The application is only supported by android based platform systems
* The application is provided for smart phones (not a pc application)
* It only focus in the capital city of Ethiopia services that are provided in other cities are not explicitly listed. so it will only address people that are relating to Addis Abeba.
* Update of services inevitable and rapid at this time it is not desired whether updating the app through time is achievable or not
* On the application, limited amount of sectors is provided there are many sectors that are excluded
* This application only provides the information of the service rather than the actual service

Methodology and Software tools

The methodology and software tools that are intended to be used in this application are concerned to be appropriate at this level but through time we might add additional methods and tools to achieve a better functionality of the system. We might update the listed methodologies and tools as times goes on.

Methodology that is used to develop this software a waterfall model method(approach). We used this approach because the software development process in a linear sequential flow. This means that any phase in the development process begins only if the previous phase is complete. This methodology is best for the reason of the non over lapping of the different phases. In this approach the whole process of the software development is divided into separate phases. The overview list of the phases is as the following.

* Requirement analysis
* System Design
* Implementation
* Testing
* Deployment
* Maintenance

The software tools that are going to be used are the followings.

**The programming language**: we have chosen to use java programming language to build the application. This particular object oriented programming language is chosen for it is easy and simple to understand.

**IDE**(**I**ntegrated **D**evelopment **E**nvironment): The IDE chosen to develop(build) this application is ANDROID STUDIOS(developed by Google and JetBrains). This IDE is one of the best developing environment nowadays. It is designed specifically for android application development.

**Database**: The database that will be used for developing this application is SQLite.

**UI Design**: The user interface design is worked out by the IDE(ANDROID STUDIOS) itself. It has a built in system that will help user to design the UI easily without writing any code. We might also use ADOBE PHOTOSHOP C6 in the development phase to mimic the application.

References

1. SDLC-Water fall model,

https://www.tutorialpoints.com/sdlc/sdlc\_waterfall\_model.html

1. *How to write a problem statement,*http://m.wikihow.com/Write-a-Problem-Statement.