PHONE DIRECTORY USING ANDROID

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ABSTRACT

A mobile app is a software application designed to run on various mobile platforms such as smart phones and tablet computers. Constraints and features should be considered while developing mobile apps. Now a days, Mobile apps usage has become increasingly prevalent among mobile phone users. Mobile apps plays a vital role in each and every field which further yield many benefits when designed and integrated correctly. Thus this project is a mobile app which converts the hard copy of phone card into a software package. Through this software NEC staff members can make a call or send a message to their colleagues in smart way without referring any phone books. It includes Eclipse JUNO and android 4.0 version to implement this project named, "PHONE DIRECTORY USING ANDROID".

INTRODUCTION:

This caller app Software contains the phone number of all department Teaching and Non Teaching staffs, drivers and publics. Searching the phone book, finding the numbers which we want, typing it into our mobile phone and then finally making a call to them seems to be a long and time consuming process. Thus to reduce the time and work that has been spend for just making a phone call, we have developed a mobile application which contains all the phone numbers in the phone book that are inbuilt in its coding. Using this mobile app we can make a call or send the message to the staff members of NEC without the contact reference of your mobile phone.

NEEDED SOFTWARES

- ✓ Software required : ECLIPSE JUNO
- ✓ Operating System : WINDOWS 7
- ✓ Android Version : 4.0-ICECREAM SANDWICH
- ✓ Database connectivity : NIL
- ✓ APK Size :4.51MB

ECLIPSE JUNO:

Eclipse Juno is an integrated development environment (IDE) which is mostly used in computer programming and is the most widely used Java IDE. Eclipse Juno consists of base workspace and an extensible plug-in system for customizing the environment effectively. Eclipse may also be used to develop applications in other programming languages through the use of plugins,but it is written mostly in Java and its primary use is for developing Java applications which released under the terms of the Eclipse Public License. Eventhough Eclipse SDK is incompatible with the GNU (General Public License), it is

free and an open-source software. Eclipse SDK was first IDEs to run under GNU Class path and no problem that occurred when it runs under IcedTea.

The Eclipse SDK includes the JDT that is Java development tools which offers an IDE. In addition to that built-in incremental Java compiler are also available .It allows for advanced refactoring techniques and code analysis., If incase a set of metadata over a flat file space allowing external file modifications The IDE makes use of a workspace and afterwards the corresponding workspace "resource" is refreshed .

Most Java applications use the Java standard Abstract Window Toolkit (AWT) or Swing whereas Eclipse implements the interface graphical control elements of the Java toolkit called Standard Widget Toolkit (SWT). JFace is intermediate graphical user interface layer is used by Eclipse's user interface .JFace which simplifies the construction of applications based on SWT. In the year of 2014, Eclipse was made to run on Wayland during a GSoC-Project. During "Babel project" Language pack being developed that provide translations of single language into a dozen natural languages.

SERVER PLATFORM

Eclipse is capable of installing the required server directly from the IDE and supports development for Tomcat, GlassFish . It allows the user to watch variables and step through the code of an application that is running on the attached server and supports remote debugging.

WEB TOOLS PLATFORM

The WTP is the extension of the eclipse platform. The WTP has tools for developing Web and Java EE applications..It also has some of the wizards and built-in applications. It also has some APIs to support deploying, running, and testing apps.

MODELING PLATFORM

The Modeling project focuses on the model-based development technologies, which are contained in the projects of the Eclipse Foundation and are separated in several categories such as Model Transformation, Model Development Tools, Concrete Syntax Development, Abstract Syntax Development, Technology and Research, and Amalgam. They are adaptable to the Eclipse Modeling Framework created by IBM.

ANDROID 4.0-ICE CREAM SANDWITCH

A major platform that released which adds a variety of new features for users and app developers is Android 4.0 (ICE_CREAM_SANDWICH). To overcome the Android 3.x to smaller screens Android 4.0 brings the extensive set of APIs and Holographic themes. If you have a single platform and unified API framework now that enables you to develop and publish your application with a single APK that provides an optimized user experience for handsets, tablets, and more,

when running the same version of Android—Android 4.0 (API level 14) or greater.

The Android 4.0 platform is available as a downloadable component for the Android SDK for easy access of developers. An Android library and system image, a set of emulator skins and so on are included in the downloadable platform .Using the Android SDK Manager for downloading the platform into your SDK before start developing or testing against Android 4.0.The main reason behind why peoples love Android 4.0 are easy multitasking, rich notifications, customizable home screens, resizable widgets, and deep interactivity and also adds powerful new ways of communicating and sharing

The common actions are more visible and lets users to navigate with simple and intuitive gestures. The interactions engaging and interesting are available in android 4.0 are refined animations and feedback throughout the system. The readability is improved by an entirely new typeface optimized for high-resolution screens and brings a polished and modern feel for the user interaction. The key strength of Android is multitasking .Using the list in the System Bar , the switching over from one task to another task is made by recent Apps button.

A spell-checker in Android 4.0 is used to fix misspelled words more easily and also locate errors by underlining it and suggests some replacement words. Multiple spelling suggestions are made with one tap, so users can delete a word, or add it to the dictionary and even to see replacement suggestions for words that are spelled correctly. Users can now download and install third-party dictionaries, spell-checkers, and other text services for specialized features or additional languages.

In android 4.0 Email is easier to send, read, manage and compose .when composing easier input of frequent text, users can now create quick responses and store them in the app, then enter them from a convenient menu. It also have auto-completion of recipients helps with finding and adding frequent contacts more quickly while composing email . Without changing screens for replying to a message, users can now toggle the message to Reply All and forward

ANDROID APPLICATION PACKAGE (APK):

Android operating system uses Android application package (APK) for distribution and installation of mobile apps and middleware. APPX in Microsoft Windows or Deb packages in debian-based operating systems like ubuntu are the packages they are related with. The first compilation is made in android program and they are all are packed into one file, which make a APK file. It contains program code,resources, assets, certificates, manifest files. The file name can be named anyway, but extension should be in ".APK".

They are a type of archive file, which is in zip format packages based on the JAR file format. Application/

vnd . android. package-archive is the MIME type associated with APK files. It can be installed on android devices just like installing software on pc. An APK file is automatically installed in their devices when a user downloads and installs an android application from official site or from unofficial site. It can also be directly installed (that is, not via download from the network) using a communication program Adb or from within a file manager app in a process known as side loading

PROJECT MODULES

- ✓ home page module
- ✓ staff module
- ✓ others module
- ✓ public module
- ✓ about us

MODULE DESCRIPTION

The Home Page modules ask us to select the modules like staff, others, public which we want to use. In the right top corner it contains the about us module. The Staff module contains Principal name and all the department names. By selecting the particular department we will get the name of both Teaching and Non-Teaching staff. By choosing the name that we want, we will get the dialog box which allows us to make a call or send a message to them.

The others module contains the name of the staff in Library, TCP cell, R&D, Alumni, Physical Education and Humanities. It also includes the name of the members in

Estate office and Transport. The Public module contains the members name in Hospital, Bank,printing press, Post Office, Courier and Railway Station. By clicking the about us module, we can get the details like developers, size of APK file, software used etc about the App.

IMPLEMENTATION

We have implemented the coding for some department and run it with the help of our mobile phone. We find some more errors while implementation and rectified it one by one with the help of books and internet. Thus we have implemented the above coding for all departments and run it successfully.

TESTING

The source code was converted into APK file and loaded into the mobile phone. First we have tested whether the dialog box which asks us to select the option containing call, SMS, cancel is visible for all numbers or not. Second we have tested whether all the phone numbers are correct or not by making a call to them. Thirdly we check the working of SMS activity by sending the message to corresponding numbers. Finally we confirm that the overall functionality of the App is perfect in the mobile bed.

DEPLOYMENT

Successful implementation of APK will be deployed to all android Smartphones for NECians.

RESULTS

Fig 1- Home Page

Fig 1.1.1- CSE department-Staff List

Fig 1.1 Department Names
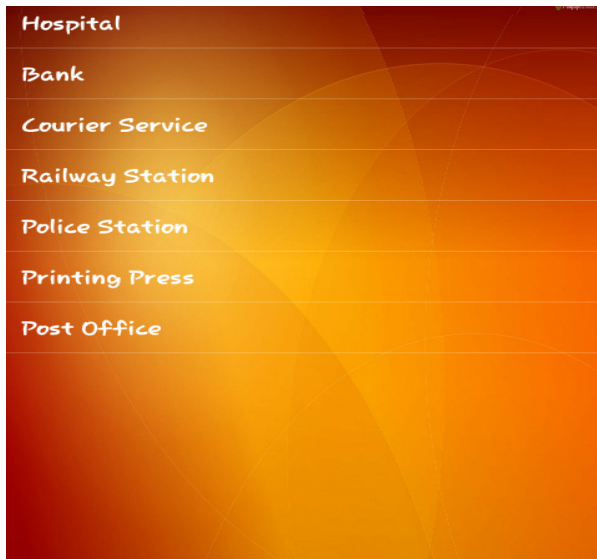

Fig 2-Others

Fig 3-Public

CONCLUSION & FUTURE SCOPE

Thus we have successfully collected all the phone numbers of the working people in our college, used it in the coding, implemented and debugged the errors and finally tested and deployed it. Now our NECians can make use of the **"PHONE DIRECTORY USING ANDROID",** by downloading the needed APK files and software. This App will give a better solution for the problem faced by the staff member when they are in need to call or send a message to their colleagues in any situation. Thus this project work is completed and implemented successfully.

Our project is in static mode and that can be extended to design and implement in dynamic mode using SQL litedb. This work can be carried out in future.

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