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Paramount Real Estate through Android

R.Sukanya[*1], M.V Bramhananda Reddy[2]

[*1]Assistant Professor, Cse, Global Institute of Engineering & Technology, Hyderabad, India

[2]Associate Professor & Hod, Cse & IT, R.K College of Engineering, Vijayawada, India

Abstract

The paper entitled "PARAMOUNT REAL ESTATE THROUGH ANDROID" has been developed using Android. This paper gives you the information about Paramount (Online) Real Estate. The user can easily find real estate property's and information about real estate property's by this application At Paramount, we offer premium Real Estate services throughout the India like Selling & buying Flats, Buildings, Lands selling & buying, Developments as well as residential and commercial leasing. For over 39 years our clients have enjoyed exceptional services and outstanding results from our experienced team. We invite you to inspect our properties which are updated daily. If you would like to know more information on any of the properties listed on this application, if you would like more information about how we can assist you with your real estate needs, then check this application. The application will be designed using Android Development Tool (ADT) and Software Development Tool (SDK) both are available with the JAVA.

Keywords: ANDOROID, REAL ESTATE, PARAMOUNT, JAVA, SDK.

Introduction

A software requirements specification (SRS) is a comprehensive description of the intended purpose and environment for software under development. The SRS fully describes what the software will do and how it will be expected to perform. An SRS minimizes the time and effort required by developers to achieve desired goals and also minimizes the development cost. A good SRS defines how an application will interact with system hardware, other programs and human users in a wide variety of real-world situations.

The application in android will get the basic information about all details of particular Paramount real estate (Paramount Real Estate is a group of companies) and about any information about real estate and buy land will get instantly through this application and it will show the best way or location of the Paramount Real Estate registered office in India. And also will get online registration instantly we can use it any were at any time by using web view also you can access real estate website through this application it shows the online registration form directly in webpage user can response as soon as possible instantly and this application providing best real estate consultation help so user can save time.

When any user want to buy and sell any real estate property so user may face some problems for searching good property, in case may be user don't have much time, may be find lack of real estate consultant, etc. in case user will interact with internet or any other real estate consultant, if the person want more about any information about the real estate. Person will interact this application and find most of information about Paramount Real Estate and if the user really want to buy or sell property so user can register account directly using this application and directly contact by E-Mails,SMS,Call etc . If the user is enable to go to Paramount real estate office so user can use Google map and easily see all registered office in India. Users can appointment for real estate consulting. Even if user really buys or sells. so now user can easily contact to register office and can save time and money.

Use Case Model Survey

A use-case is a description of a set of sequence of actions, including variants that a system performs to yield an observable result of value to an actor.

Roles

- **Smart Phone**
- **Applications**

Smartphone

[1] Mobile phone module should be compatible with the application build.
[2] Application should be installed on device.
[3] Device should be Smartphone.

[4] GPRS and EDGE facilities should be supported and activated on the device.
[5] Operations will be performed after selecting the options from mobile phone
[6] The user on the Smartphone should provide inputs for the application.

Applications

[1] Should be built supporting to the android version of the Smartphone.
[2] Should respond to the request of the mobile user.
[3] Giving the permission to access the application for mobile phone
[4] The longitude and latitude will be calculated to find the location of the place.
[5] The use of the maps will be taken for further use.

Principles/Actors

- **Users**

Mobile user can operate the application globally. The users will have full fledged permissions for viewing the place. The place can be added with the image tag or an audio tag . Hence the application does have very important role of the user.

Specific Requirements

1 Functional Requirements

Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish

The functional requirement is to provide a robust and manageable system. The application should be able to store the data and view locations and sharing it in future.

1.1 The following requirements which are vigorously used by user through the application are:-

1. Location on Google Map
2. Connect by SMS
3. Connect by E-mail
4. Connect by Direct Call
5. Database (SQLite)

1. Locations on Google Map(Google API)

By using this module user can find the Paramount Real Estate office location of the particular area which are already registered to Paramount Real Estate.

2. Connect by E-mail

By using this module user can directly interact to Paramount and if user have some query so user can send email to Paramount email address and after that Paramount Real Estate contact to user.

3. Connect by SMS

By using this module user can directly interact to Paramount R eal Estate office and if user have some query so user can send SMS to Paramount Real Estate office and after that Paramount Real Estate admin will contact to user as soon as possible.

4. Connect by Direct Call(Tool Free)

By using this module user can directly call to Paramount Real Estate office and if user have some query so user can take help by Paramount Real Estate about real estate.

5. Database(SQLite)

By using this module interested user can register account for purchasing the property or apartment/house in Paramount Real Estate.

Non Functional Requirements

1 Hardware Requirements:

PROCESSOR : Dual Core 1.2 GHz Cortex-A9
RAM : 512MB
HARD DISK : 80GB

OPERATING SYSTEM : WindowsXP, Windows Vista,Windows 7, Mac X Lion, Ubuntu Linux
TECHNOLOGIES : JAVA 1.6, J2ME(CLDC 1.1,MIDP 2.0)

Eclipse 3.6 (Helios) or greater TOOLS : Sun Java Wireless Toolkit 2.5.2

2 Mobile Requirements:

CONNECTIVITY : EDGE, 3G, GPS
PHONE MEMORY : Minimum 10MB
TECHNOLOGY : JAVA (MIDP 2.0) supported mobiles, Bluetooth, Camera, and Audio Recorder

Android: The Android platform is the product of the Open Handset Alliance, a group of organizations collaborating to build a better mobile phone. The group, led by Google, includes mobile operators, device handset manufacturers, component manufacturers, software solution and platform providers, and marketing companies. From a software development standpoint, Android sits smack in the middle of the open source world.

The first Android-capable handset on the market was the G1 device manufactured by HTC and provisioned on T-Mobile. The device became available after almost a year of speculation, where the only software development tools available were some incrementally improving SDK releases. As the G1 release date neared, the Android team released SDK V1.0 and applications began surfacing for the new platform.

To spur innovation, Google sponsored two rounds of "Android Developer Challenges," where millions of dollars were given to top contest submissions. A few months after the G1, the Android Market was released, allowing users to browse and download applications directly to their phones. Over about 18 months, a new mobile platform entered the public arena.

1 The Android platform:

With Android's breadth of capabilities, it would be easy to confuse it with a desktop operating system. Android is a layered environment built upon a foundation of the Linux kernel, and it includes rich functions. The UI subsystem includes:

- Windows
- Views
- Widgets for displaying common elements such as edit boxes, lists, and drop-down lists

Android includes an embeddable browser built upon Weskit, the same open source browser engine powering the phone's Mobile Safari browser.

Android boasts a healthy array of connectivity options, including Wife, Bluetooth, and wireless data over a cellular connection (for example, GPRS, EDGE, and 3G). A popular technique in Android applications is to link to Google Maps to display an address directly within an application. Support for location-based services (such as GPS) and accelerometers is also available in the Android software stack, though not all Android devices are equipped with the required hardware. There is also camera support.

Historically, two areas where mobile applications have struggled to keep pace with their desktop counterparts are graphics/media, and data storage methods. Android addresses the graphics challenge with built-in support for 2-D and 3-D graphics, including the OpenGL library. The data-storage burden is eased because the Android platform includes the popular open source SQL light database. Below figure shows a simplified view of the Android software layers.

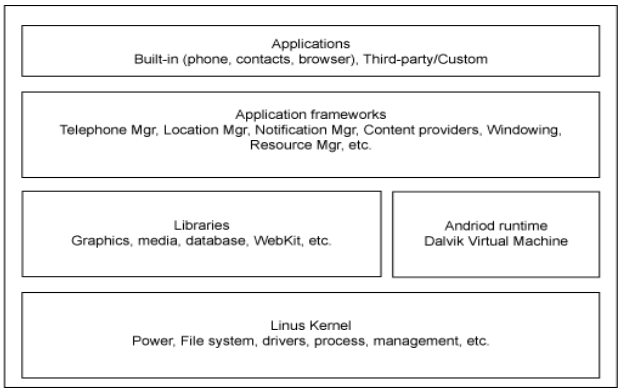


Fig 1: Android software layers

2 Application Architecture:

As mentioned, Android runs a top a Linux kernel. Android applications are written in the Java programming language, and they run within a virtual machine (VM). It's important to note that the VM is not a JVM as you might expect, but is the Dalvik Virtual Machine, an open source technology. Each Android application runs within an instance of the Dalvik VM, which in turn resides within a Linux-kernel managed process, as shown below.

Fig 2: Dalvik VM

Activity Life Cycle

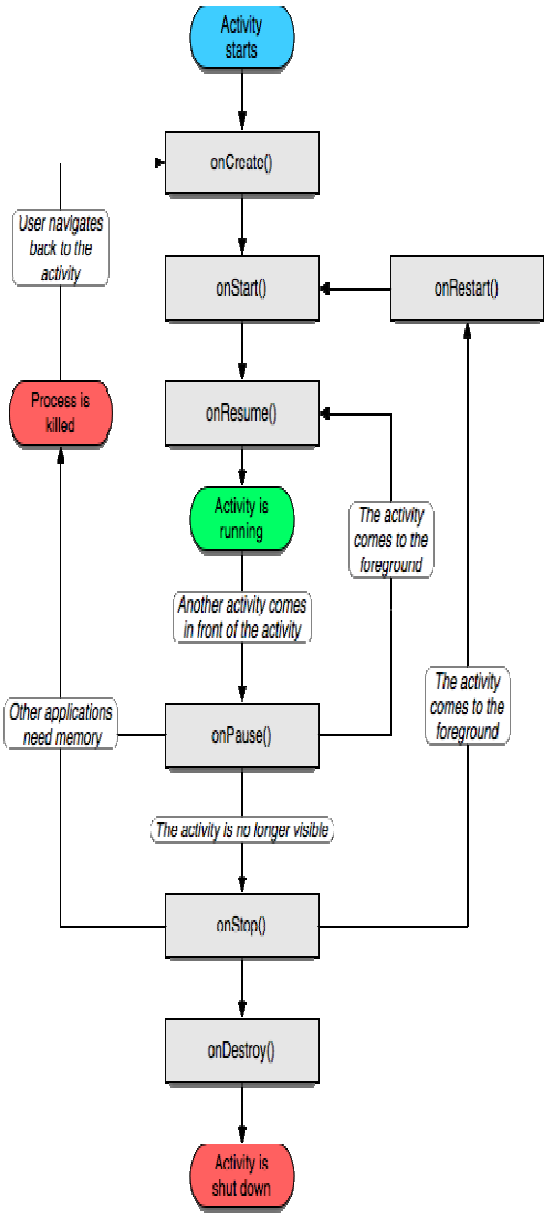


Figure 3 : Activity Life Cycle

Developing Application

1. Download the java jdk from below URL and follow the below important steps http://www.oracle.com/technetwork/java/javase/downloads/index.html. Select the Java button, you don't need the Java EE.
2. Install the Java JDK.
3. Download the SDK (not the installer exe, but the zip file) from the above link. Currently you want the android-sdk_r08-windows.zip file.
4. Unpack the zip file to the location you want to have the SDK installed (doesn't much matter where, just remember where you put it). For example C:\Users\ which will be used here.
5. Add the ANDROID_SWT user variables:

- Open start menu, enter sysdm.cpl into the text field and press enter.
- In the opened window, select Advanced System Settings on the left.
- Select Environment variables in the lower right corner.
- Press the New button under the User variables windows (the top one).
- Enter ANDROID_SWT in the variable name field and the path to the swt 64-bit SWT file into the variable value field. For example C:\Users\<YOURUSERNAMEHERE>\android-sdk-windows\tools\lib\x86_64.

5.6. Press OK in all the windows to close them.

6. Download Eclipse from http://www.eclipse.org/downloads/, you want Eclipse IDE for Java Developers for Windows 64 Bit. Unpack the eclipse folder to wherever you want to have eclipse installed. Go into the folder and drag the eclipse.exe file to your desktop or start menu while holding the SHIFT key to make a shortcut to Eclipse.
7. Follow the instructions at http://developer.android.com/sdk/eclipse-adt.html to install the Eclipse ADT Plugin. Here is the list from that page:
    - In Eclipse go to Help > Install New Software.....
    - Press Add in the top right hand corner.
    - Write ADT Plugin in the name field and process with SDK https://dl-ssl.google.com/android/eclipse/ in the Location URL. If you get any errors, try changing from https to http.
    - In the Available Software dialog, select the checkbox next to Developer Tools, press Next.
    - In the next window, you'll see a list of the tools to be downloaded. Click Next.
    - Read and accept the license agreements, then click Finish.

- When the installation completes, restart Eclipse.
- After restating Eclipse, go to Window > Preferences....
- Select Android from the list on the left.
- For the SDK Location in the main panel, click Browse... and locate your downloaded SDK directory.
- Click Apply, then OK.

8. Add the SDK components needed to code forAndroid (not just the manager which is what you downloaded):
    - In Eclipse select Window > Android SDK and AVD Manager.
    - Select Available Packages on the left.
    - Check the checkbox next to Android Repository to install all versions of the SDK (so you can develop for all versions of Android 1.5 - 2.3).
    - Click Install Selected.
    - Accept the licenses, press Accept All and then Install.
9. Follow http://developer.android.com/guide/developing/device.html to set up device (Nexus One):
    - Connect you Nexus One to the PC using an USB cable.
    - When/If Windows says it has failed to install drivers for a device, tell it you have drivers. If windows doesn't ask you for drivers go to the start
    - Menu and type devmgmt.msc into the field and press Enter. You will get a list of all your devices, find the one with a red mark and right click it. Select Update Driver Software.
    - Select Browse my computer for driver software.
    - Select Browse and select the google-usb_driver folder in the SDK folder you unpacked in step 3.
10. Turn on "USB Debugging" on the Nexus One.
    - Press MENU, select Applications > Development, then enable USB debugging.
11. Try to see if your Nexus One is connected by opening command line (go to start menu, enter cmd and press enter). navigate to the location of your SDK and the platform-tools directory. Run adb devices or just run it directly by using the full path: C:\Users\<YOUR USERNAME HERE>\android-sdk-windows\platform-tools\adb.exe devices. You should see something like: List of devices attached-HT9DSP500000 device
12. If you already have a project written in Eclipse open the document and check AndroidManifest.xml file, open the Application tab at the bottom and then select true in the Debuggable drop-down box on the left.
    - If you do not have a project, follow below useful Url finding http://developer.android.com/resources/tutorials/hello-world.html to set one up.
13. To run your in Eclipse select Run > Run Configurations...
    - Select Android Application on the left and press the New icon.
    - Enter whatever you want in the Name field and press browse and select the project you want to run.
    - In the target tab. Select Manual.
    - Press run. In the dialog select you device and press OK.

This section provides a whirlwind tour of building an Android application. The example application is about as simple as you can imagine: a modified "Hello Android" application. You'll add a minor modification to make the screen background color all white so you can use the phone as a flashlight. Not very original, but it will be useful as an example. Download the full source code.

To create an application in Eclipse, select File > New > Android project, which starts the New Android Project wizard.

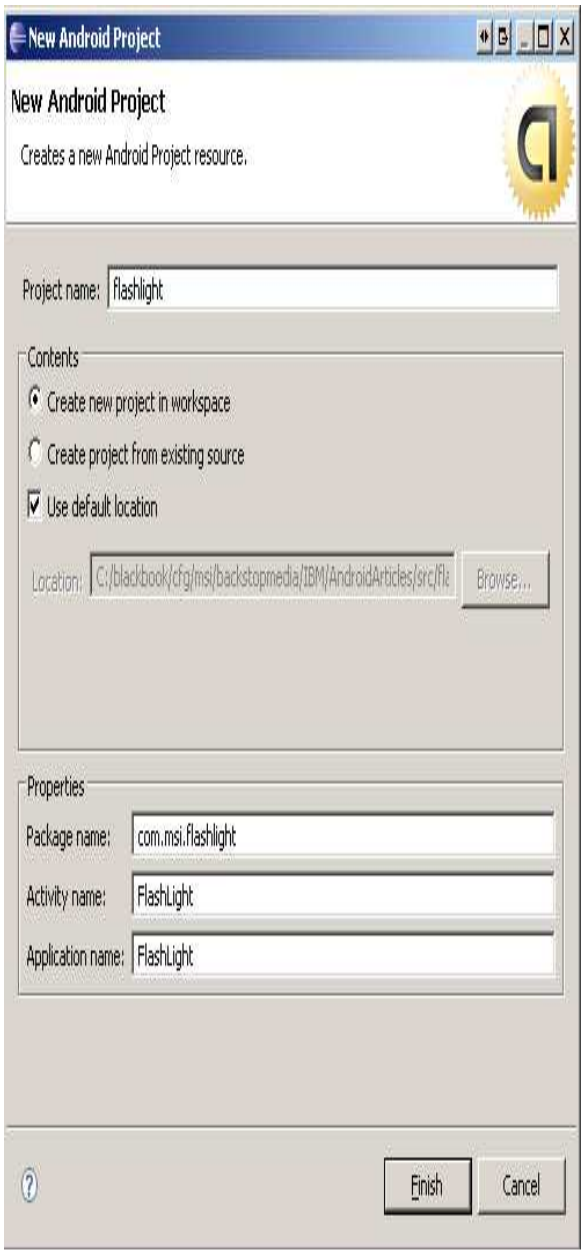


Fig 4: New Android project wizards

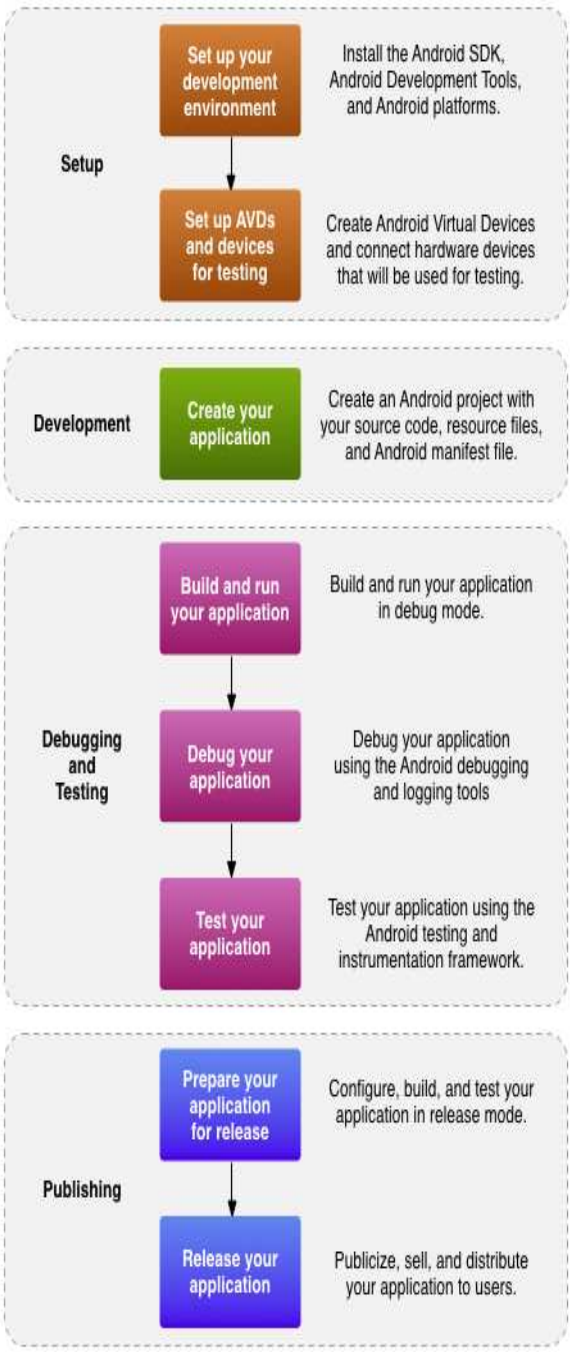


Fig 5: New Android project debugging and testing process

Test Cases

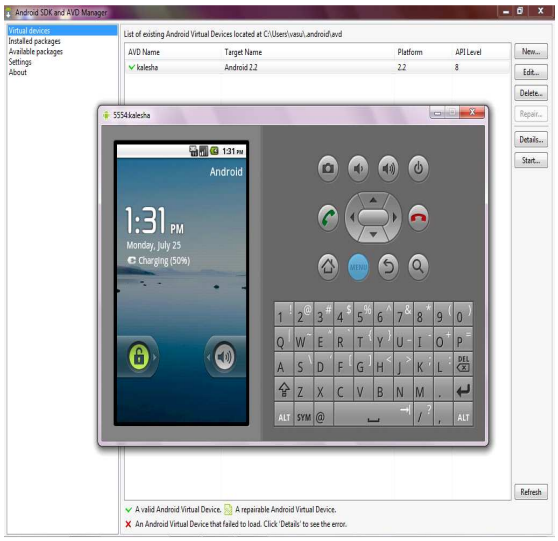
Module Name: User Login:

Test	Inputs	Actual Output	Obtained Output	Description
Valid Login	Mobile no & pwd	Success	Success	Test passed. Passes the control to the Other module
InValid Login	Mobile no & pwd	Failed	Failed	Test Passed. Displays the alert message

Test	Inputs	Actual Output	Obtained Output	Description
Valid Login	Mobile no & pwd	Success	Success	Test passed. Passes the control to the Other Module
InValid Login	Mobile no & pwd	Failed	Failed	Test Passed. Displays the alert message
InValid Mobile no	Mobile no	Failed	Failed	Test Passed. Displays the alert message
InValid Pwd	Pwd	Failed	Failed	Test Passed. Displays the alert message

Output Screens

Create virtual device:



Description Screen:

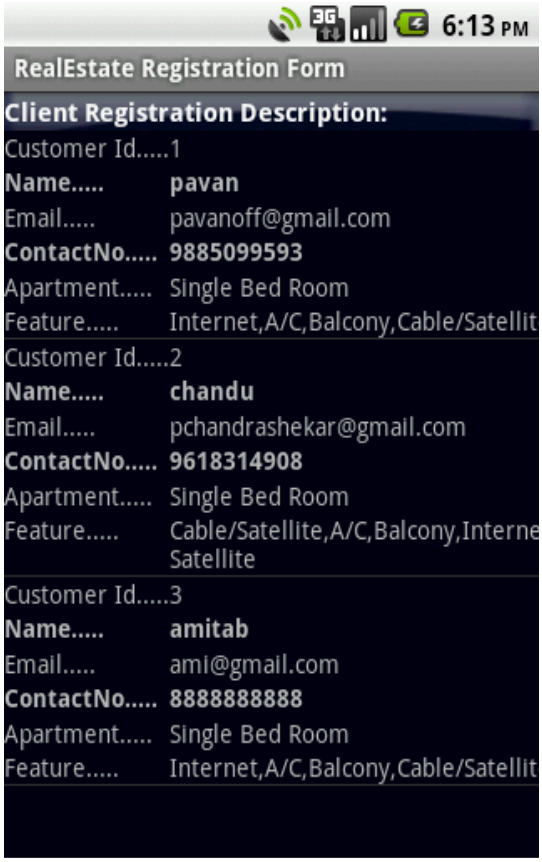
Home Screen:

Welcome Screen:

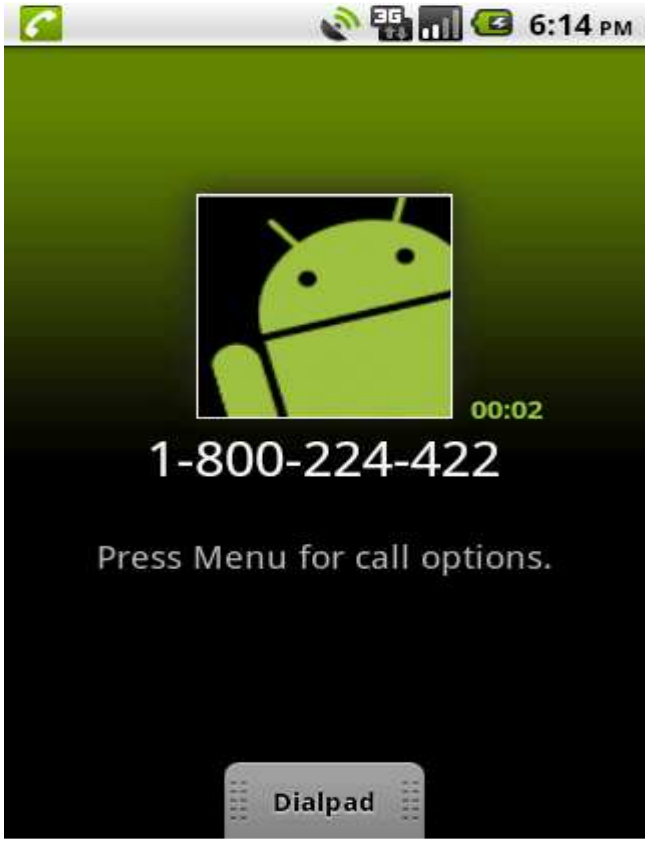
Enter Details Screen:

Features Screen:

Customer Details Screen:



Caller Screen:



Thank you Screen:

Conclusion

Organizations intending to deploy mobile applications must plan their testing strategy across manual and automation testing approaches for efficient and error-free delivery. In addition to actual device-based testing, emulators should be included as an integral part of the testing program. Enterprise applications require special testing techniques. Outsourcing to vendors who are operating an independent testing practice may be a viable option to manage the expertise, scalability, and quality assurance requirements for mobile application delivery.

- Through this system user can buy or sale his property's from any place like home, office, coffee shop etc.,
- User may need not to go to the Real Estate Office and no need to search for a broker or middle person or third party person.
- User no need to spend money for getting information from the real-estate consultant
- Through this system user can save his time and money.
- User can market his property and he can do auctions with other users through web services
- Through Google maps we can view the site location and available flats and land locations and also registered Paramount Real-Estate office branches.

Future Scope

It is not possible to develop a system that makes all the requirements of the user. User requirements keep changing as the system is being used. Some of the future enhancements that can be done to this system are: As the technology emerges, it is possible to upgrade the system and can be adaptable to desired environment. Because it is based on object-oriented design, any further changes can be easily adaptable. Based on the future security issues, security can be improved using emerging technologies.

- This application can run in above 4.0.5 versions
- It can run in Portable as well as Landscape mode
- Based on the future security issues, security can be improved using emerging technologies.
- Based on the user requirement, we can add or upgrade the system to meet user requirement
- If any new technology will come then this system can easily adaptable to that environment
- Auctions option can be append to this application by maintaining separate database and web services

References

[1] Hello, Android, E. Burnette, the Pragmatic Programmers (2009).
[2] Professional Android 2 Application Development, R. Meier, Wiley (2010).
[3] Beginning Android 2, M. Murphy, Apress (2010).
[4] Android Wireless Application Development, S. Conder and L. Darcey, Addison-Wesley (2010).
[5] Android Application Development in 24 Hours, L. Darcey and S. Conder, Sams (2010).
[6] The Android Developer's Cookbook, J. Steele, N. To, Addison-Wesley (2011).
[7] Mark L. Murphy ,"Managing and Accessing local dabase, 455-504 "The Busy Coader's Guide to Android Development
[8] Mark L. Murphy ,"Accessign Location-based Services, 563-569 "The Busy Coader's Guide to Android Development
[9] Mark L. Murphy ,"Playing media", 165-187 "The Busy Coader's Guide to Advance Android Development
[10] Mark L. Murphy ,"Handling Events", 191-202 "The Busy Coader's Guide to Advance Android Development