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## Early-Enact

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## **ABSTRACT**

These days the Present generation is exaggerated with the mobile devices due to the breakthroughs of auxiliary features in the modern devices such as mobile phones, tablets, etc. Now a day's each and every handset is collaborated with the contemporary technologies such as Wi-Fi, GPS, and 4G Connectivity. The primary idea of the Early-Enact Mobile application is to develop an android based application which enable the family of university to register with their personal information and chatter with the Wi-Fi based intranet application with their group of Co-users who are already registered with the Early-Enact mobile application. Using this system everyone in the university can register into the Early-Enact Mobile application by which users and co-users across the university can connect. The system involves both the devices to be tied in to a same Wi-Fi network. The end-users should install this application on the devices which they are using by which they can use the avails of the Early-Enact Mobile application.

As a squad, we are developing this Early-Enact Mobile application to display the pictures which are interested in a user to keep the background of his mobile application along with the quotes of a famous personality. In this Android mobile application, a user can add, edit and delete the pictures in the application according to his personal opinion by which the user wants his mobile to be more attractive than the co-user mobile by using this application. The Main characteristic of Early-Enact intranet Wi-Fi chatting application enables the end-users such as the group members of the university can connect each other by sending and receiving the messages.

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# **1.PROJECT DESCRIPTION**

The primary idea of the Early-Enact Mobile application is to develop an android based application which enable the family of university to register with their personal information and chatter with the Wi-Fi based intranet application with their group of Co-users who are already registered with the Early-Enact mobile application.

## **Competitive Information**

Ios, Symbian, chrome, BlackBerry OS, webOS etc., are the competitors for the android application in the todays market. Where Android is the Linux-based open source platform. The android operation system Development Kit is available for the various operating systems such as Windows, Linux and Mac OS. These all Applications will be emerged in Android using a virtual machine known as Dalvik virtual machine.

### **1.1 Relationship to Other Applications/Projects**

Our project is totally different from the other projects of the android but it has some similar features of some applications such as inspirational quotes, image gallery etc.

### **1.2 Assumptions and Dependencies**

Some of our assumptions of the project:

- i) All the squad members will mandatorily should participate and complete the tasks assigned to them before the deadline.
- ii) Our mobile application project is very feasible and comparatively fairly inexpensive.

Some of our dependencies of the project:

- i) The mobile devices which are using our application should have minimum hardware Requirements.
- ii) Budget and time.

The Mobile Application is formally dependent on some of the Web Application because the application wouldn't run without retrieving the data from the applications of the web and vice versa. This application is assumed as the web based application where it can have accessed 24/7. The Network connectivity should be in use for the working of an application.

### **1.3 Future Enhancements**

The phrase mobile application development is a very common term in today's fast paced world. The trend is very dynamic in the nature and the high technology markets are rushing to the development for the next generation great mobile application for the running market. The developers of the mobile application are getting overwhelmed with the requests to develop versatile applications which are right now utilized as a part of the improvement and production of these applications are for the technologies which are in the present markets.it really keeping a

lot of pressure on the developers of the present market for the development of the latest application for the present market.

## **1.4 Definitions and Acronyms**

API – Application Programming Interface

ASO – App Store Optimization

AVD – Android Virtual Device

FTP – File Transfer Protocol

GUI – Graphical User Interface

GPS – Global Positioning System

JVM – Java Virtual Machine

JDK – Java Development Kit

OS – Operating System

SDK – Software Development Kit

UI – User Interface

## **2 Project Technical Description**

The main objective of this project is to develop a group chat including the wallpapers and quotes with in a allocated time, budget and specified quality. The project is emphasized due to high benefits for the organization. The main usages of this project is that it will create a group of users to chat with them and generating the wallpaper's with the defined quotes as the user requested. There are more benefits of this project will be further discussed ahead. The main objective of our team is the reliability, usability, and quality. Satisfying the requirements of the user with accuracy is very important to us while this application aims to meet all the user's requirements and needs.

The complete application is made with the help of android API, the API were contributed in the functional way to provide the best effort where the eclipse platform for the android is taken. The Android Development tool which is provided from the eclipse is used by us to perform the project creation , project development and finally the project deployment into the AVD which is android virtual device provided in the same eclipse environment , which is easy to create using AVD manager. The AVD manager is used to choose the device configuration and then finally the data APK can be install on the particular created AVD and run on it.

The android platform provides the facility to create the project and finally the Complete folder structure get create, along with the output folder , where the APK file which is ready to deploy can be obtain and either transfer to mobile or AVD.

The Activity is a screen in which it follow a life cycle for the complete android whole process. Where the life cycle starts from a different method such as the start, restart and other runnable method . also the other stop, destroy method such that get into non-runnable state. Thus the android activity running screen follow all the mechanism to perform complete process of

running. The complete and important life cycle of the activity is given below which is followed by our application in either state.

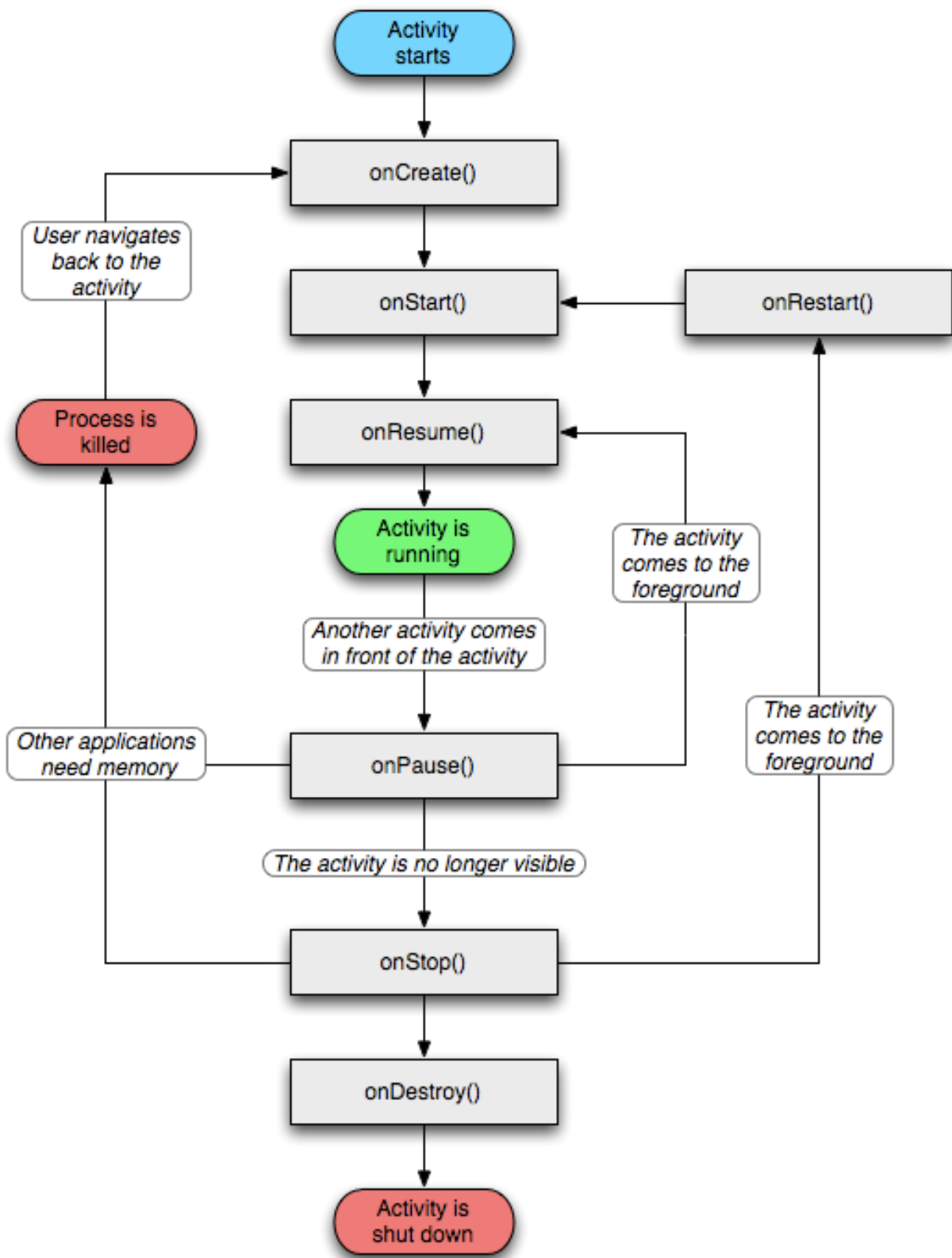


Figure – 1: The activity life cycle flow



The figure above describes all the runnable, non-runnable state in a android activity and further execution process from scratch.

## 2.1 Application Architecture

The complete application is described as it is having the numerous multiple activity and functionalities, drawer menu for the selection of requirement. The application flow is started from the loading main activity and then further the drawer menu and other activity such as quote ,image collection and numerous other functionality such as group chat with users who are joined in the chat room can be perform using the process.

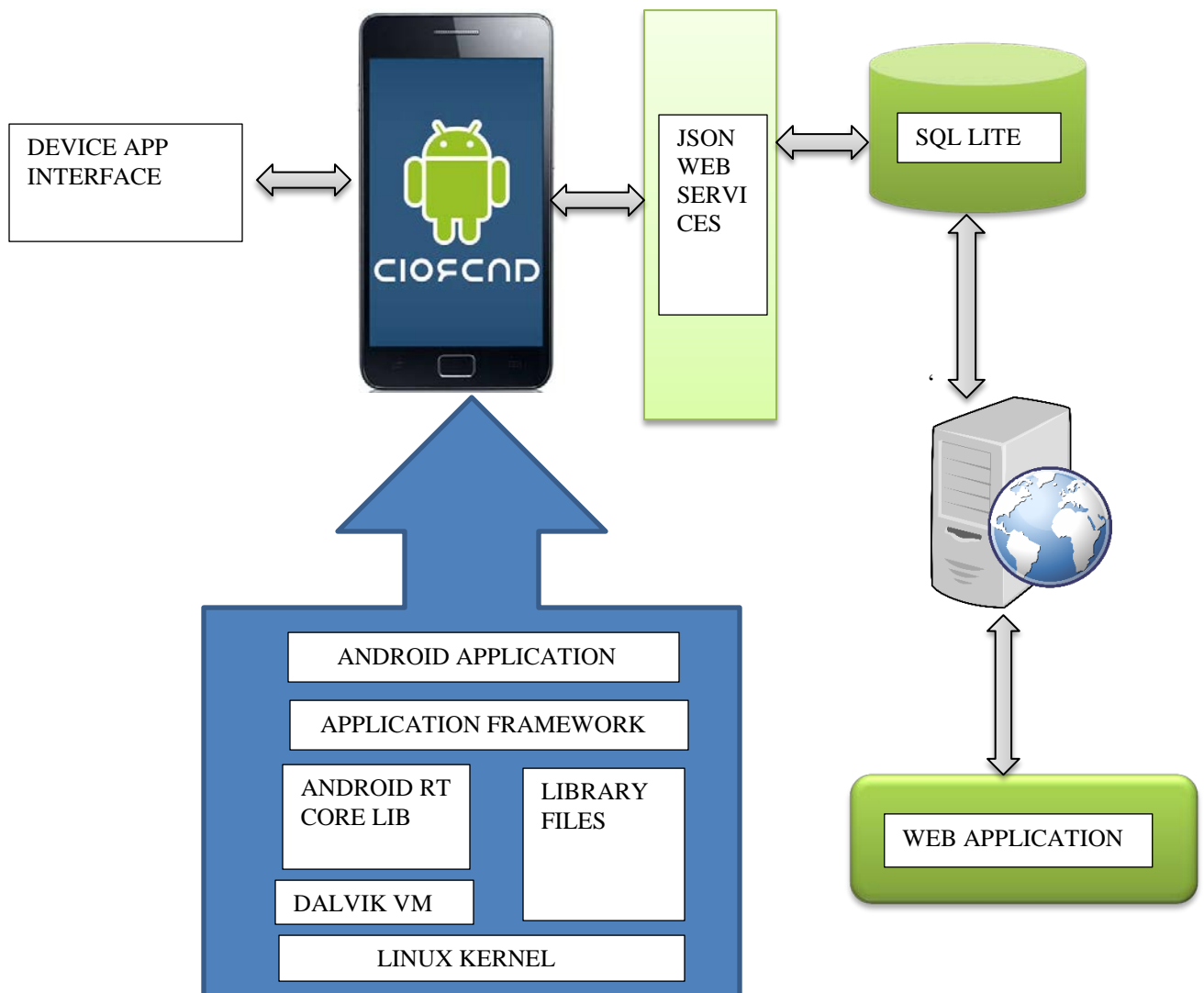


Figure -2 – the complete architecture.

In the diagram above complete architecture is given that how the application is working with the system provided by us. In the diagram above the things can be observed as the first of all application is getting load into the mobile and all its database and other requirement information are storing into SQLite database which is in build in our mobile android phone.

Further the data can be fetch either the information as images or data quotations, after that the chatting operation can be performed.

## 2.2 Application Information flows

The steps of the user process/usage –

The application processed with different flow and usage as per the requirement and finally the work has been issued in between different activity. The complete information flow and the database is being flow in between the complete process.

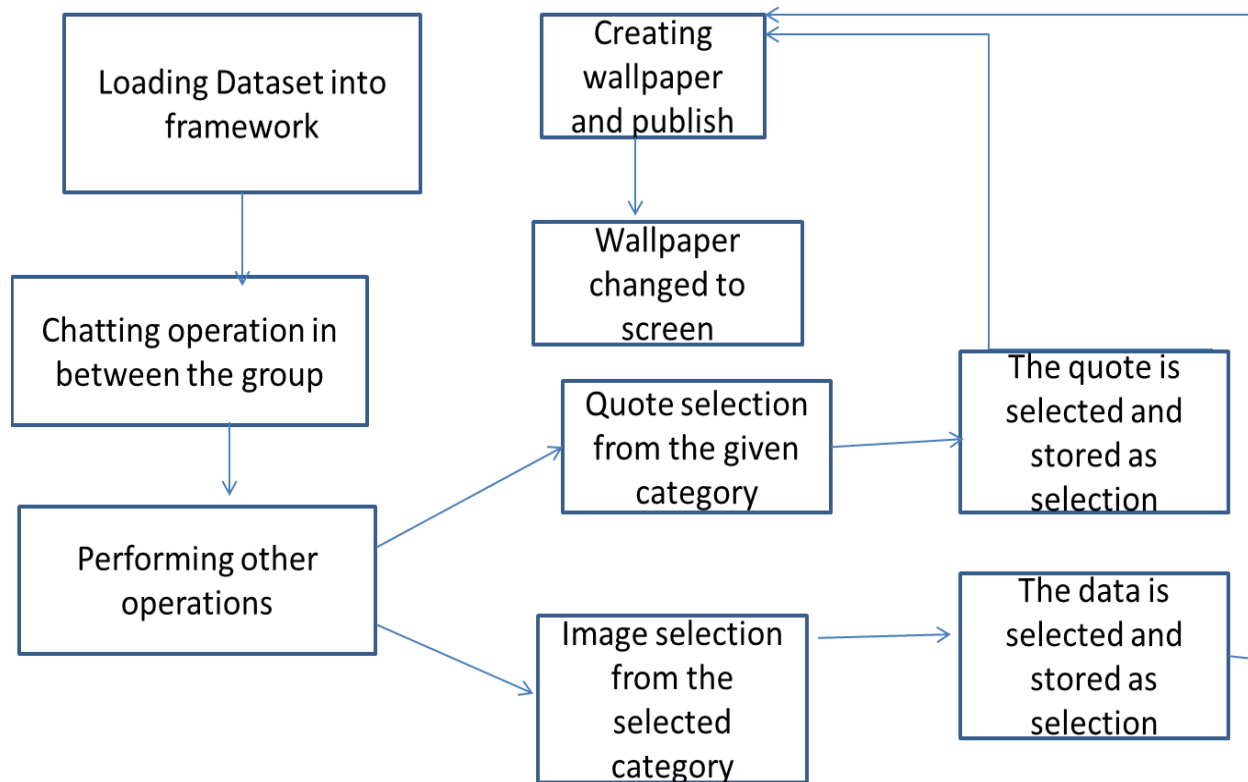


Figure -3: Complete flow information.

The above figure describes the complete flow which means to explore the information flow and exchange in between the components available in the application.

### **2.3 Interactions with other Projects (if Any)**

This application is build and where the chat functionality is given where the integration with other application is performing the form of chatting with other activity.

The chatting activity is used to interact each other application. Also the application driven by us is using a permission of media and native storage of application.

### **2.4 Interactions with other Applications**

There are different application which are linked with our application, the all other application given here –

Application media storage.

1. Media storage permission.
2. Chatting application message of other mobile.

### **2.5 Capabilities**

There are different capabilities are required to run this project –

1. The application required a proper media storage which is internal storage of mobile to access media images.
2. Application should have the Wi-Fi or Bluetooth connectivity which is able to connect device in group and further the chatting operation can be performed.
3. Device should have 5.0 lollipop or major version to run the application.
4. Device should have enough space for the storage to make sure application run smooth, due to lack to space there can be possibility of file apk get crash and stop the execution of application.

### **2.6 Risk Assessment and Management**

Although the project is going to run for the personal interest and person group , but still there are some risk assessment –

1. The group is required to keep secure such that no extra person can join and access the information of your mobile.
2. The accessibility of other requirement storage needs to keep secure which are required to run OS.
3. The quote and image should be original to provide the best and reliable service to the user and make more active on the application.
4. A large number of data may increase the size of application and thus can effect to the storage. Thus a proper required dimension for the images and other things should be keep in mind while performing the application building.

### **3 Project Requirements**

#### **3.1 Identification of Requirements**

There are different requirements needed to gather such as required for the project fulfillment which further used to execute the functionality and other requirements.

There are following requirements needed to gather and execute the project in a full functional and innovative method where it should generate the final execution of the project.

1. Collection of the quotation by category, the different types of category and quotation can be obtained and required to collect from different resources such as books, such as internet and other website which provide the best quotes from the famous names of the person with their respective personalities and names.
2. Collection of the images by category, the different types of category and images can be obtained and required to collect from different resources such as books, such as internet and other website which provide the collection of images of different personalities in the multiple category from the famous names in the fames.
3. The collection of chatting functionality and other module API. The project contains a third device connection and thus in order to make it connect the required API for the connection in between different devices.

#### **3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)**

In order to maintain the application fruitful a complete maintenance is required for the updation and to make it interesting a daily updates with the quote and daily updates in images is required.

Also the application is always required a proper research on users interest and further the functionality can be increase based on the user selection.

The user choice and survey on the application is always required to administrate where a proper communication and requirement fulfillment can be done which say to provide a complete entertainment to the user.

#### **3.3 Security and Fraud Prevention**

This section in which the android application driven by us uses the different internal intent and other interactive section.

- Android will ship with a set of core applications including an -
  - a)SMS program,
  - b)Calendar,
  - c) Contacts & others....

Thus these features and access are required to maintain keep secure and permission should be granted at risk as for the accessing of complete application in flow, there may get a charge, there may leak of information such as calendar change, such as contact information change or modification.

Thus a security thread is need to perform while accessing this feature from the application project.

### **3.4 Release and Transition Plan**

In the beginning the plan is to make it release in university level in between the group and then further there are certain plans which are going to be done step by step so that the application can get popular and provide the best entertainment to the people who demands for it.

The steps following for the transition –

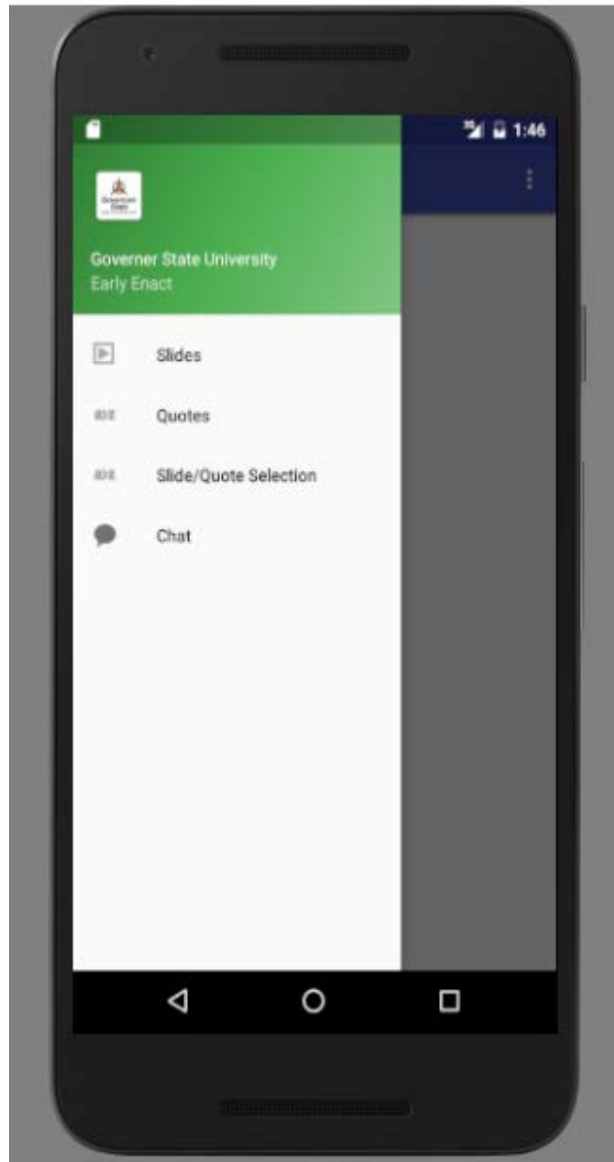
1. Deployment on the google play store.
2. Distribution in university group of different division people and taking the feedback on it.
3. Upon performing the changes on feedback the final deployment and updating is going to be done on play store.
4. Finally the outside university promotion and other online promotion is going to be perform by us to make system popular among the different generation people who use smartphones.

## 4. Project Design Description

5554:Nexus\_5X\_API\_23



5554:Nexus\_5X\_API\_23

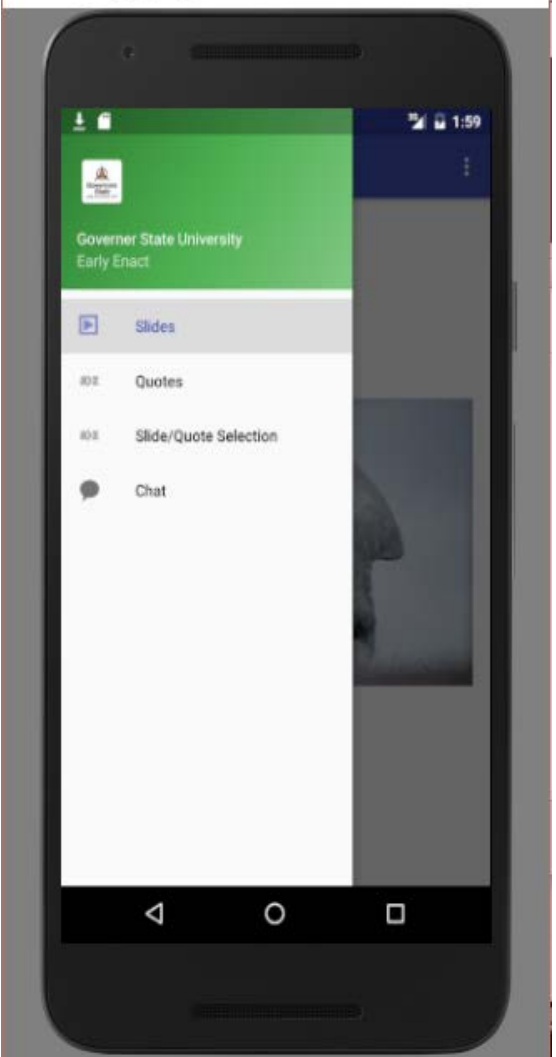
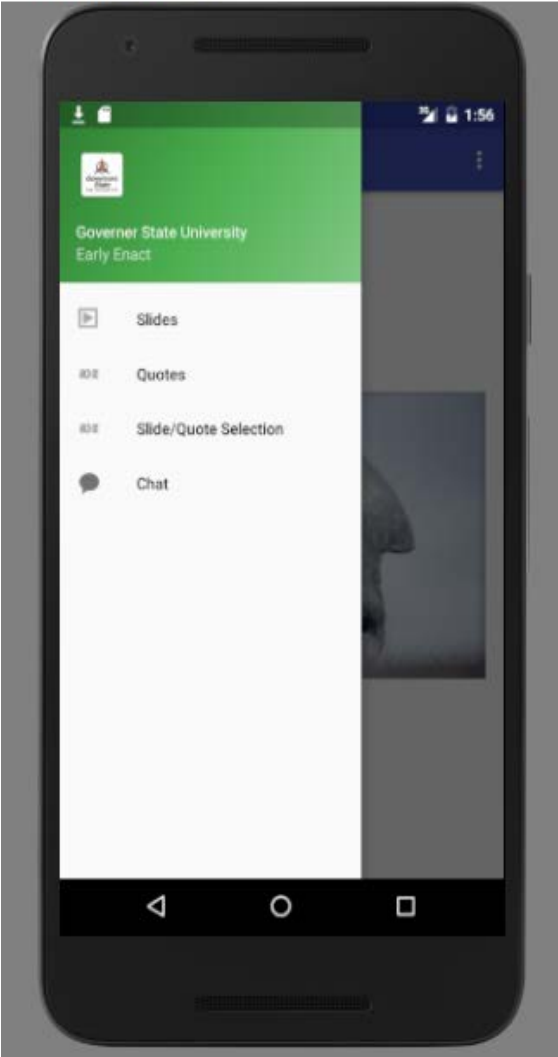


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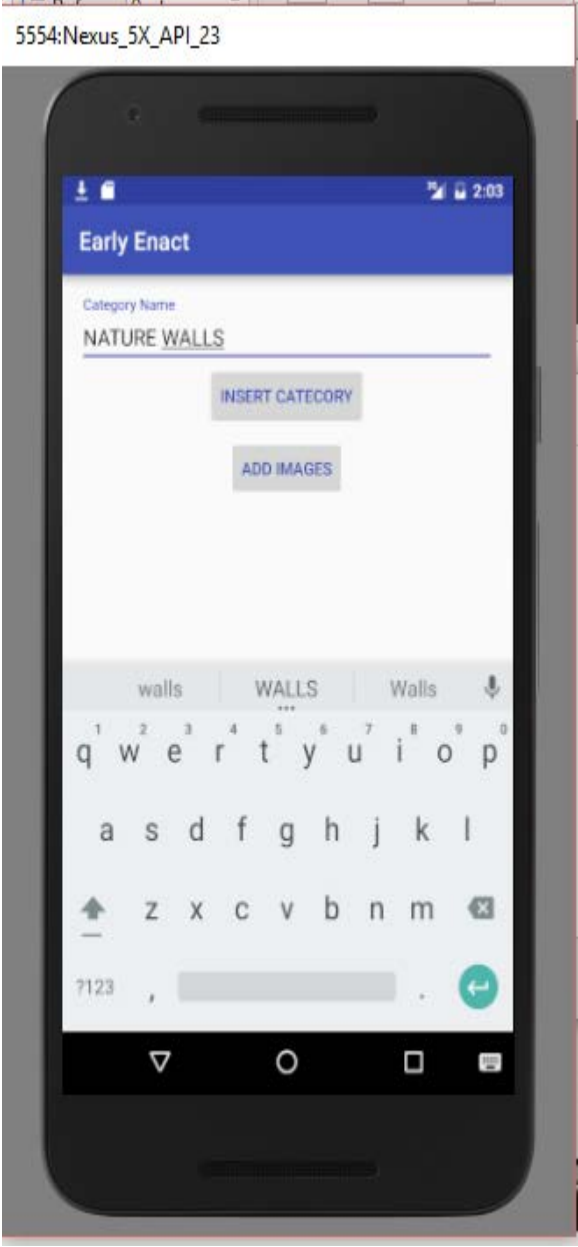
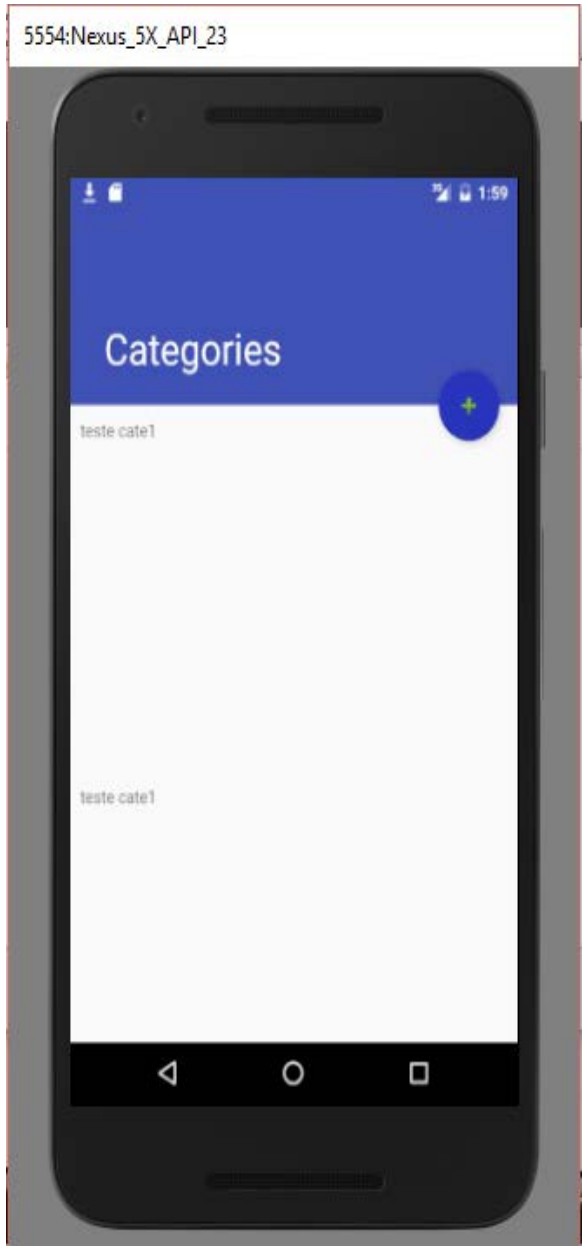


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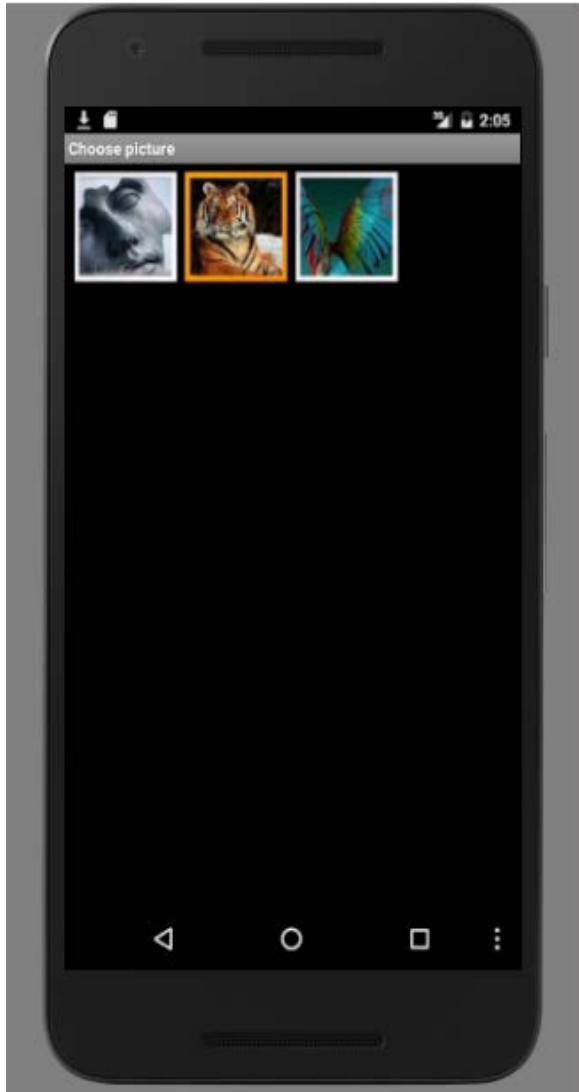






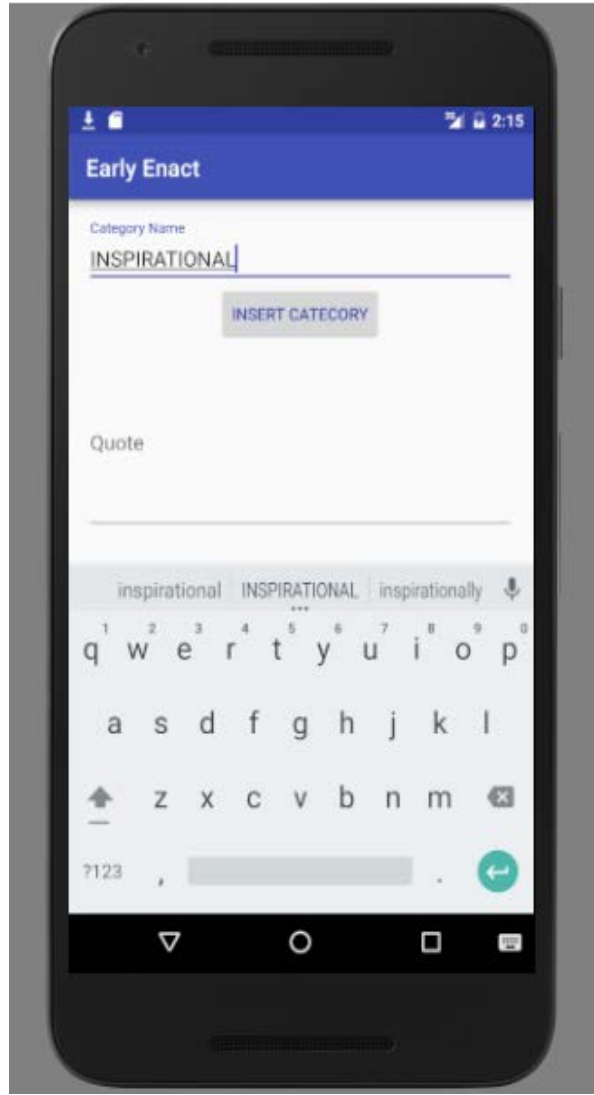
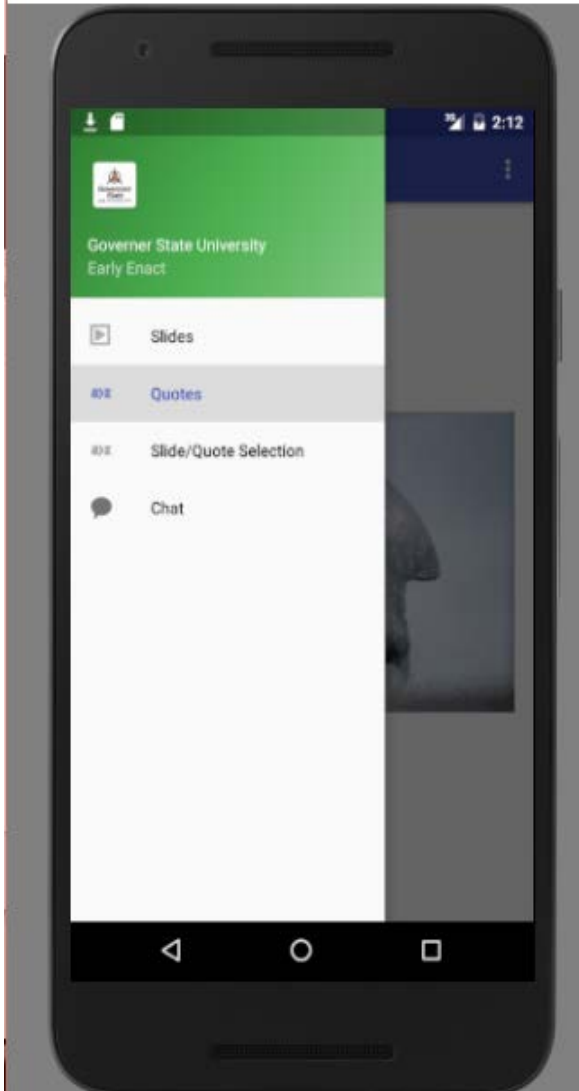


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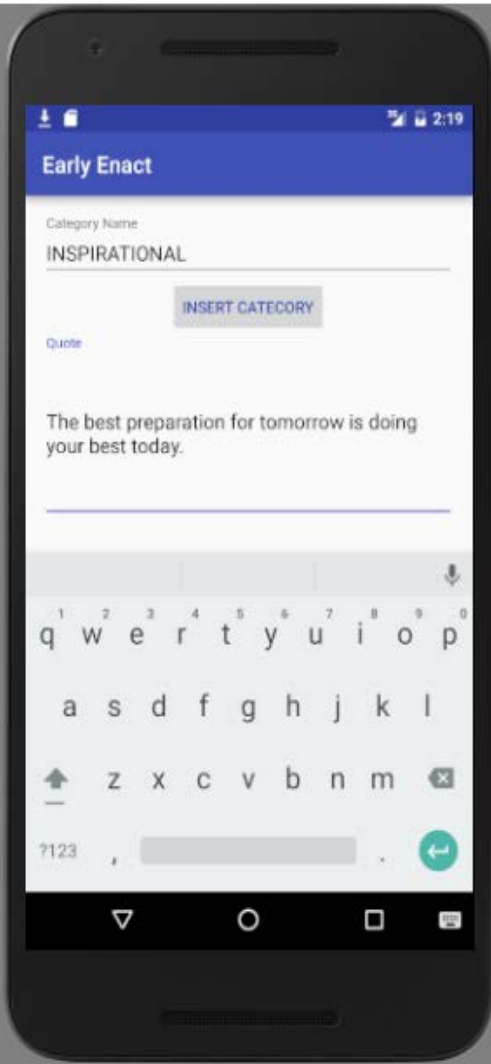


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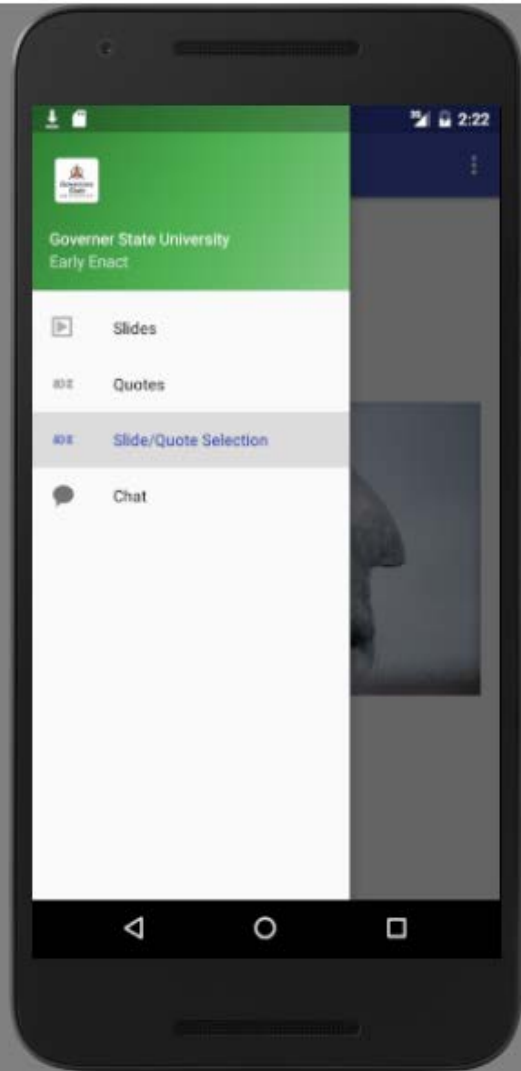




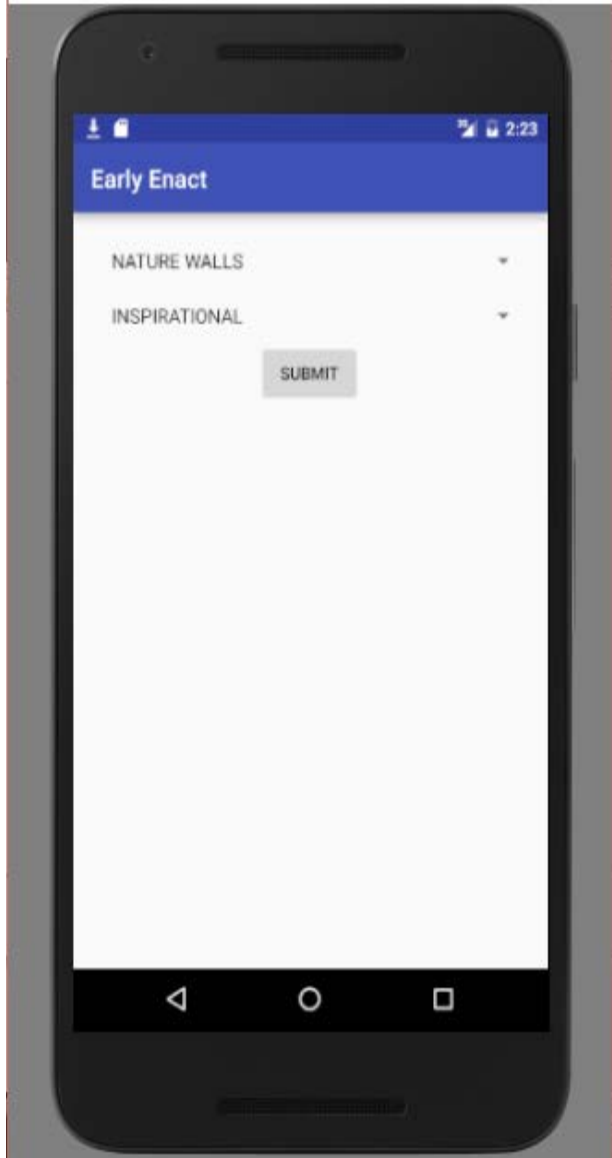
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5554:Nexus\_5X\_API\_23

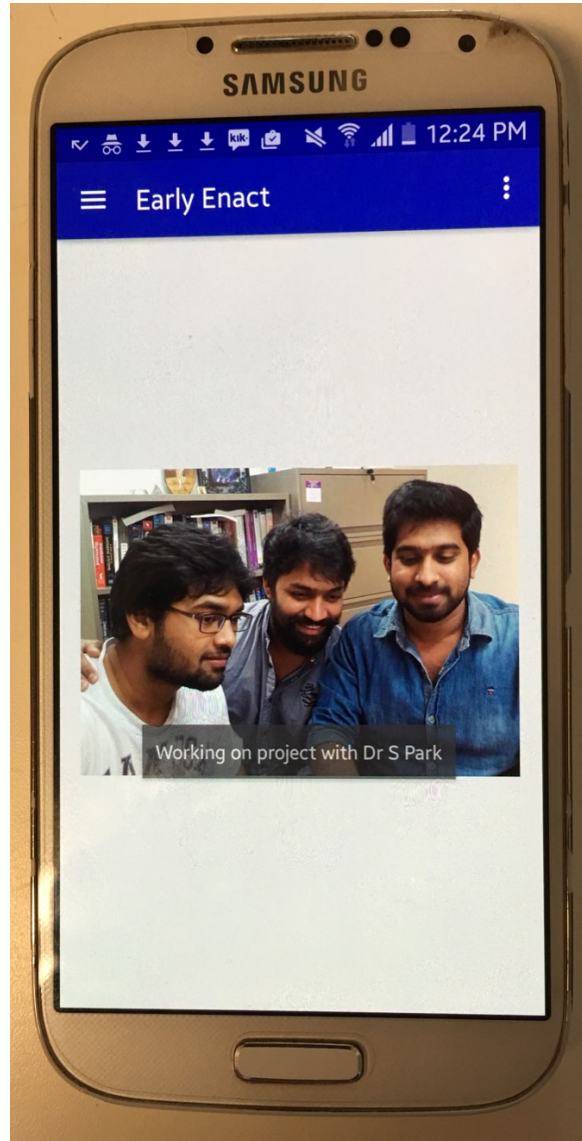
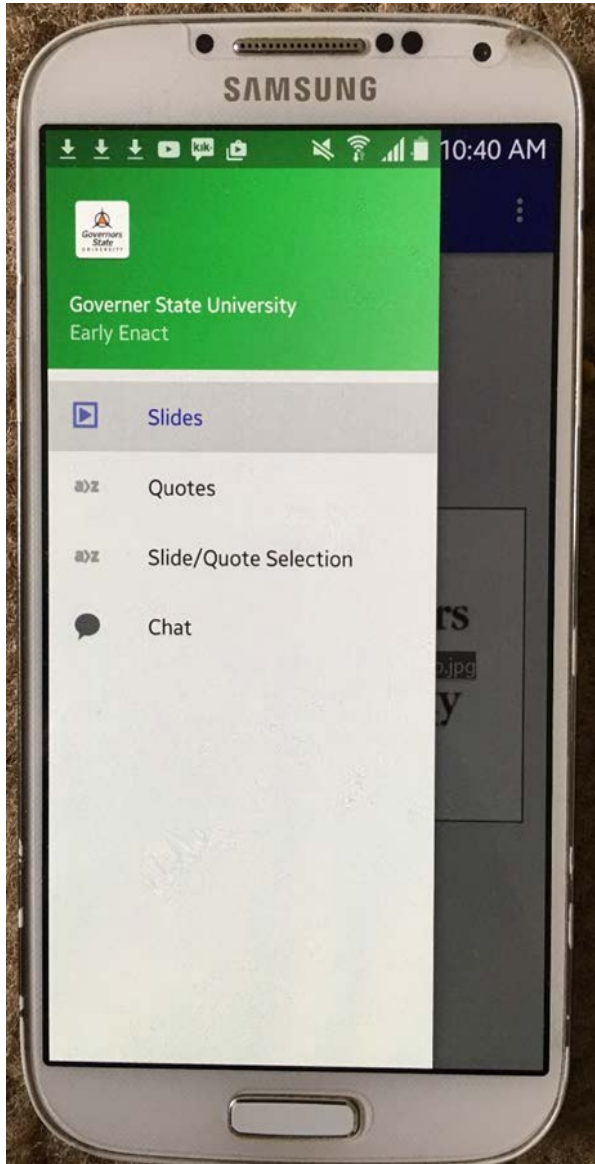


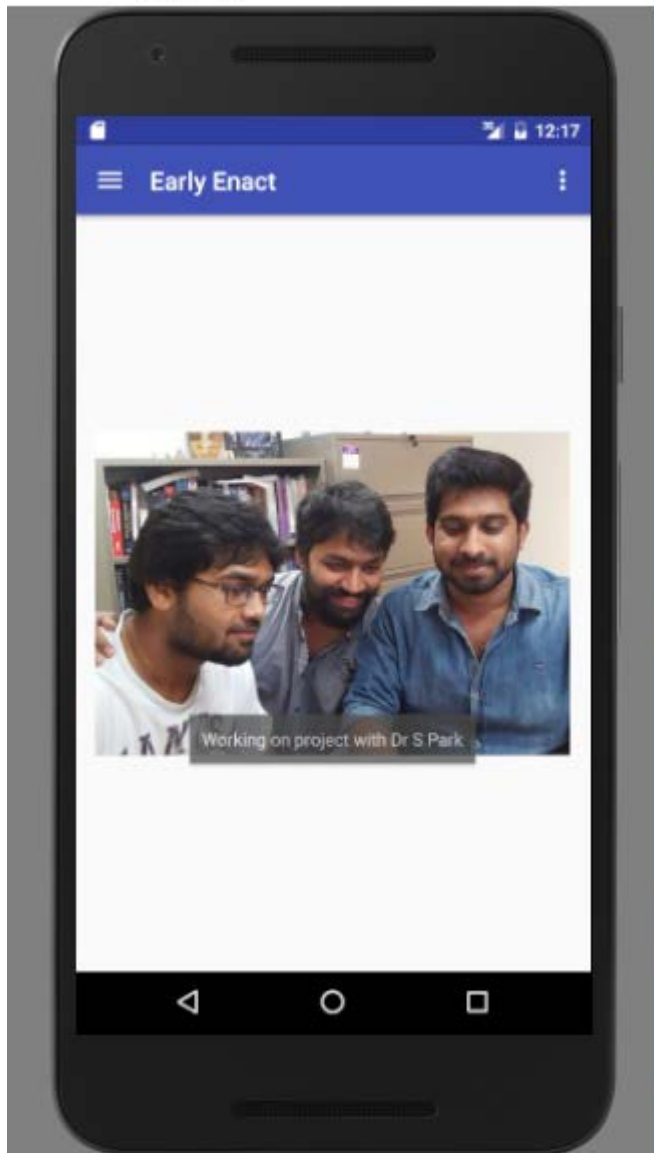
5554:Nexus\_5X\_API\_23



5554:Nexus\_5X\_API\_23







4

## 5 Internal/external Interface Impacts and Specification

In order to perform the entire mentioned requirements which are following the Screen activity :-

1. Main activity – the main activity is a kind of operation which is going to load and perform the main drawer loading operation using which the image database setup and other information setup is performed with the system.
2. Chatting Activity – the chatting activity is created where the list of people in group can be taken to describe and further a chat can be perform in between the group using which a discussion can be performed.

3. Quote Activity – Quote section activity is taken into consideration for the quote selection for the wallpaper and further the quote is chosen and carries forward to set along with the image which is being chosen in another activity.
4. Image Activity – Image selection activity is taken into consideration for the image selection.

## **6 Design Units Impacts**

There are different design impacts with the complete flow is performed where the application on demands is going to launch in market.

There are following features which give a surprise functionality to the users for making them more understand the functionality.

1. It is going to provide a wall paper setup in few second.
2. A wall paper can be customize by selection of image and selection of quote using the functionality provided by us.
3. A chatting functionality can be done in group and which is easy to make a group discussion in between users.

### **6.1 Functional Area A/Design Unit A**

The application developed by is having a functional area which is specific in android platform field.

The functional area for the application are below-

1. Application need to work with selection of proper image upon selection.
2. Application should able to select proper quote on category selection.
3. A proper image and quote selection should be able to display and to set on the wallpaper.
4. A proper selection and setting a random wallpaper should be able to apply.
5. A proper chatting functioning should perform with in the group.

#### **6.1.1 Functional Overview**

There are following functional area of our working module which are describe below description

–

Chatting module in between multiple application.

1. Quote selection from the different category.
2. Image selection from the different category.
3. Implementation of drawer menu and their menu items.
4. Selection and combining the images and quotation selected by the user.
5. Finally, setup the selection as a wallpaper is given with the application which is requirement by the project.



### **6.1.2 Impacts**

There are different impacts on the system which is going to gain from the application running environment.

1. Running and accessing the memory storage.
2. Accessing the contact details and other media locations.
3. Changing the wallpaper background of the OS android which is using by the system in our phase.

### **6.1.3 Requirements**

As per our analysis and importance of information purpose we have further gathered and understand the project requirement and by here there are some important issues which describe the project requirement -

1. According to the major roles and fundamentals a requirement to understand a open source android platform.
2. Understanding of complete structure and responsive nature of application, setting up a proper dimension and various resources for the proper utilization and accessibility for the application.
3. A requirement to understand the proper software , such as proper latest jdk 8 installation and further to obtain a genuine open source platform for the android project development is chosen which run a perfect application development environment and simulation ahead.
4. Proper hardware requirement such as development environment as well as deployment version and their requirement such as device size and their android version compatibility is need to understand properly and provide them according to understanding on coding form.

This obtaining above points and information a better development can be performed with our application.

## 7 Acknowledgements

We are really very happy to support our feelings towards the project who provided the greatest support in completion of our project report very successfully without any hurdles. We are very grateful to our beloved professor and guide **Dr. Soon-Ok Park** for guiding us in completion of the project report and executing the project without any errors.

Even we are thankful to our self for contributing the support and patience in developing the application by taking initiative towards the project completion.

As a team we are highly gratitude to support our feelings to our guide **Dr. Soon-Ok Park**, where she provided the full support in constant supervision and even in providing the valuable information necessary for the development of the project.

Thank you very much for supporting or team members in development of our project and project report.

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## 9 Appendices

**GUI:** Graphical User Interface.

**IDE:** it is an integrated development environment in which it is integrated with the necessary tools required for a specific project.

**User interface:** Coming to a design field such as the industrial design field of interaction between the human-machine, and it is the place where the human-machine interaction occurs. When it is comparing with or project it is a graphical user interface.

**AVD Manager:** Android virtual device manager is a kind of graphical user interface which is inbuilt in the android studio for the virtual device which is required for an emulator to run an application in it.

**Android API:** Android Application Program Interface has different levels which generally means that a programmer can communicate with the devices such as the functionalities and built in functions of a device in which he is programming.