

PROJECT REPORT

MAD

A report submitted in partial fulfilment of the requirements for the Award of
Degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE AND ENGINEERING

By

Amey Borade

Aditya Bansode

Juned Bagban

Manmohan Billa

Aftab Choudhary

Aniket Choure

Under Supervision of

Prof. Z.M Shaikh MAD prof. of

N.K.O.C.E.T

(DURATION 1st Feb 2022 and 17th June 2022)

N K Orchid College of Engineering & Technology, Solapur

**Approved by AICTE, New Delhi & Addilated to DBATU, Lonere,
NAAC Accredited**

ACKNOWLEDGEMENT

First I would like to thanks **Prof. Z.M. Shaikh** MAD prof. of NKOCET for giving me and my team the opportunity to do Android App.

I also would like all the Team that worked with me in this MAD project with their patience and openness they created an enjoyable working environment.

I am extremely great full to my department staff members and friends who helped me in successful completion of this Project.

ABSTRACT

MAD is an Android Mobile Application for Third Year Computer Science and Engineering students.

This app is developed by the MAD Team ,CSE Third Year students of N.K. Orchid College of Egg. And Tech. Solapur.

This APP cover the data related to Mobile Application Development Subject in B.Tech. Course

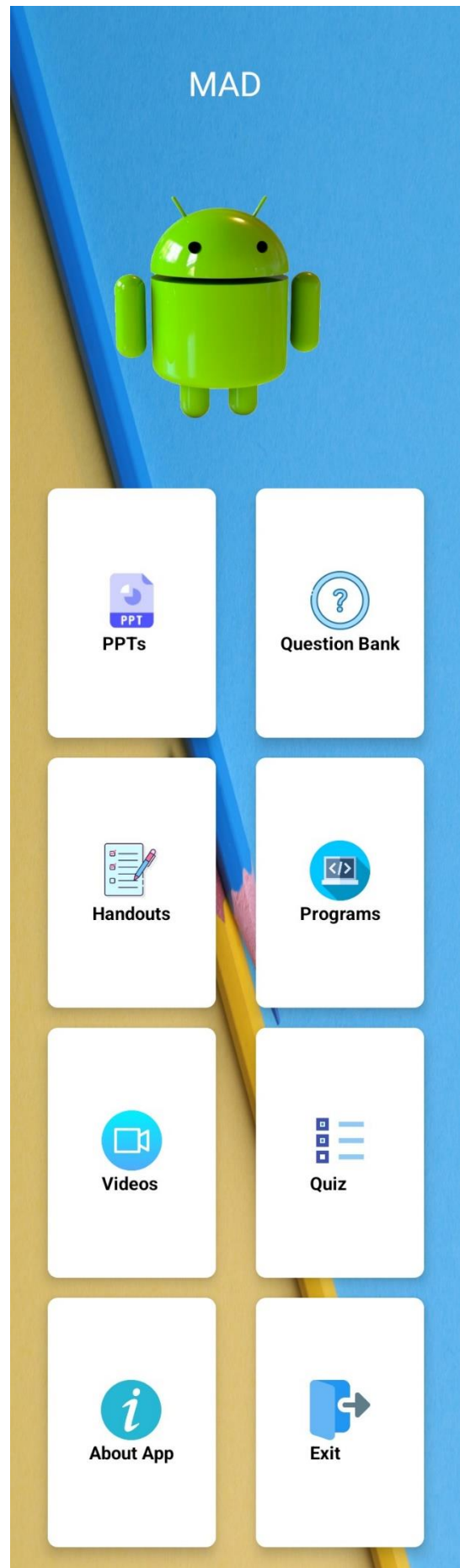
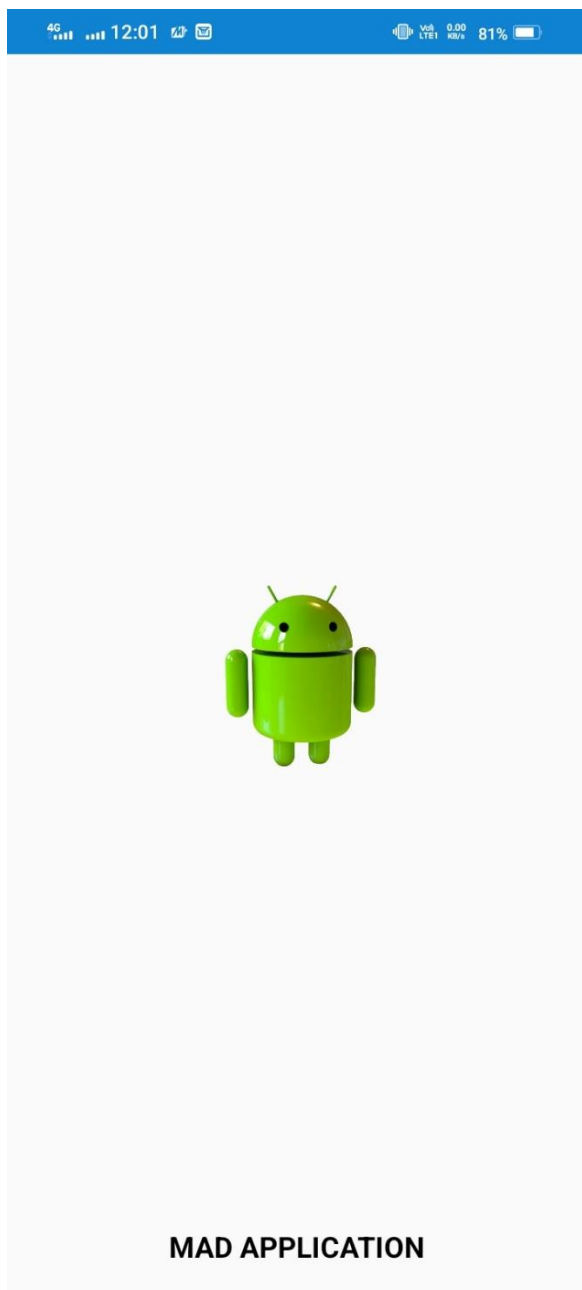
Now a days as students required all the PPTs , Question Bank , Video lectures for their study purpose for every time the prof required to send data via what's app or sometimes by drive, every time to check that data student and prof need to work with the data.

This App help both the students and the prof. in one APP which store all the data in one single app. Its help students to find what they need easily and prof do not need to send data always.

Working Of App:-

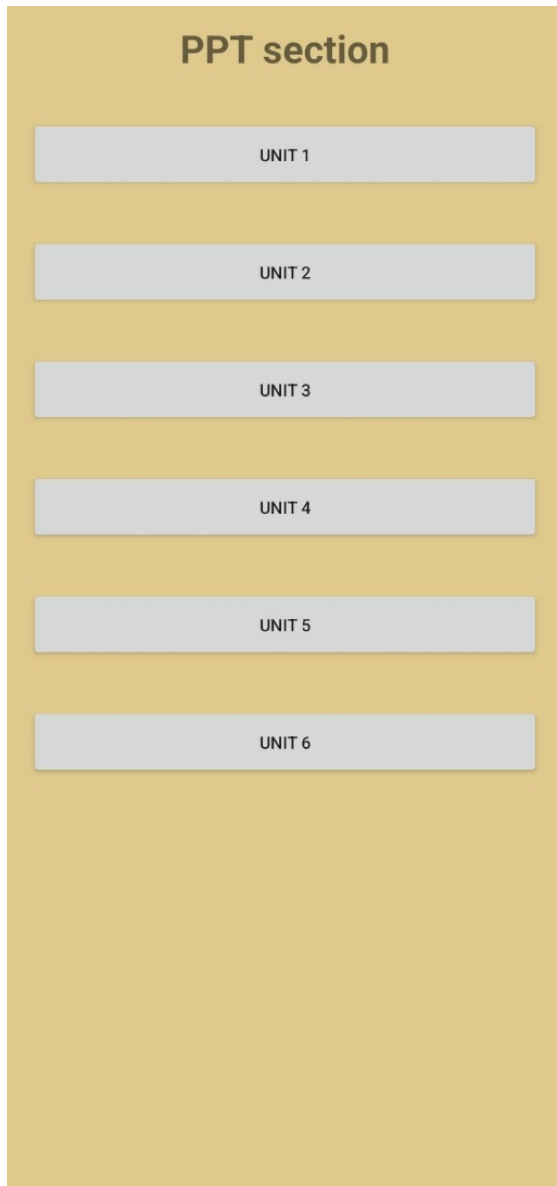
This app consist of

- PPT's
- Question Bank
- Handouts
- Program
- Quiz
- About app




PPT's :-

Power point presentation for each unit of this course is added in this application



Mobile Application Development

Unit- 1 & 2



Unit- 1 & 2

Prerequisites

- Object Oriented Programming using Java

Compulsory Reading Material

- Android (Vikas Publications) by Prasannakumar Dixit
- The Android™ Developer's Cookbook-Building Applications with the Android SDK, by Ronan Schwarz, Phil Dutson, James Steele, Nelson To (2nd Edition)

Assessment & Evaluation Criteria

Quizzes	10 %
Assignments	10 %
Mid Term	20 %
Project	10 %
Final Term	50 %
Totals	100 %

Mobile Operating Systems

- Any mobile OS is an operating system for smartphones, tablets, PDAs, or other mobile devices.
- Mobile OSs combine features of a personal computer OS with other features useful for mobile or handheld use; usually including, and most of the following considered essential in modern mobile systems:
 - touchscreen, cellular, Bluetooth, Wi-Fi, GPS mobile navigation, camera, video camera, speech recognition, voice recorder, music player, etc.

Some Current software platforms

- Android (based on the Linux Kernel) is from Google Inc.
- CyanogenMod and Cyanogen OS are based on the open source Android Open Source Project(AOSP).
- Fire OS is an operating system launched by Amazon based on Google's AOSP.
- iOS (previously known as iPhone OS) is from Apple Inc.
- Windows Phone (Soon to be Windows 10 Mobile) is from Microsoft.
- BlackBerry 10 (based on the QNX OS) is from BlackBerry.
- Firefox OS is from Mozilla.

Introduction to Android

- Android is an OS based on Linux with a Java programming interface. It is a comprehensive open source platform designed for mobile devices.
- First beta version of Android Software Development Kit (SDK) was released by Google in 2007 where as first commercial version, Android 1.0, was released in September 2008.

Features of Android

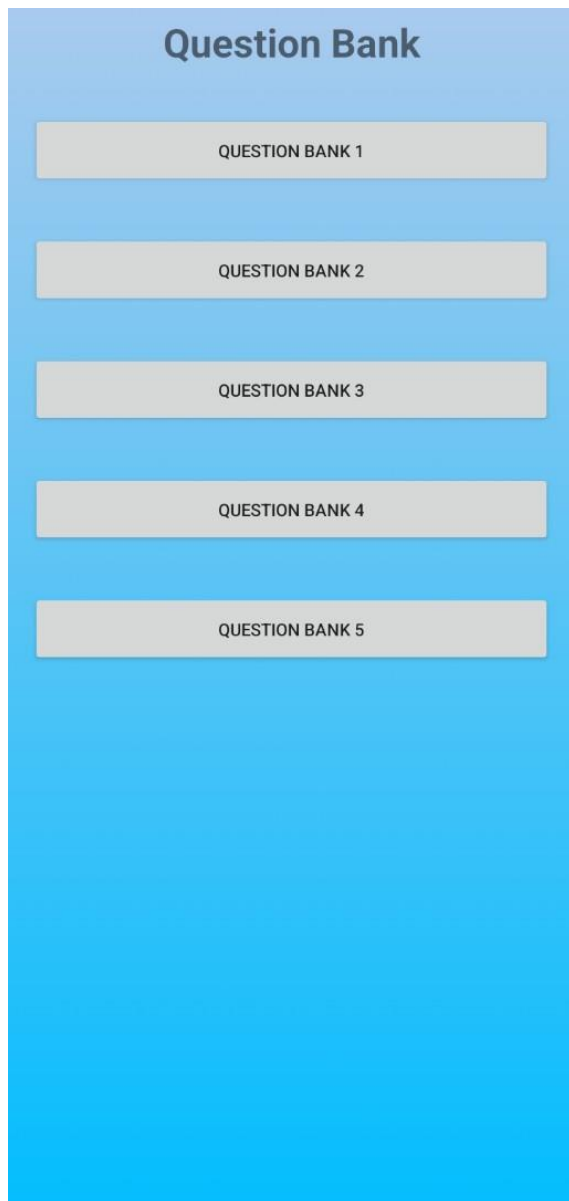
- Beautiful UI, Connectivity, Storage, Media support, Messaging, Web browser, Multi-touch, Multi-tasking, Resizable widgets, Multi-Language, GCM, Wi-Fi Direct, Android Beam

Android Applications

- Android applications are usually developed in the Java language using the Android Software Development Kit.
- Once developed, Android applications can be packaged easily and sold out either through a store such as Google Play, SlideME, Opera Mobile Store, Mobango, F-droid and the Amazon Appstore.

Question Bank :-

For Each unit Question Bank is provided in PDF form.



4G 12:02 VoLTE 0.00 KB/s 81%

Sample Question Paper:
Scheme – I

Programme Name: Computer/Information Technology Engineering
Programme code: CO/IT
Semester: VI Sem
Course Title: Mobile Application Development
Marks : 70

22617

Time: 3 Hrs.

Instructions:
(1) All questions are compulsory.
(2) Illustrate your answers with neat sketches wherever necessary.
(3) Figures to the right indicate full marks.
(4) Assume suitable data if necessary.
(5) Preferably, write the answers in sequential order.

Q.1) Attempt any FIVE of the following. (10 Marks)
a) List features of Android Operating System.
b) Define Android Virtual Devices (AVD).
c) Write the directory path where images are stored while developing Android application.
d) List all attributes to develop a simple button .
e) Write the syntax for Intent-Filter tag.
f) Define services in Android operating system.
g) Enlist the steps to publish the Android application.

Q.2) Attempt any THREE of the following. (12 Marks)
a) Describe the Android architecture in detail.
b) Differentiate between JVM and DVM.
c) Explain the activity life cycle.
d) Discuss the need of permissions in Android. Describe the permissions to set system functionalities like bluetooth, camera.

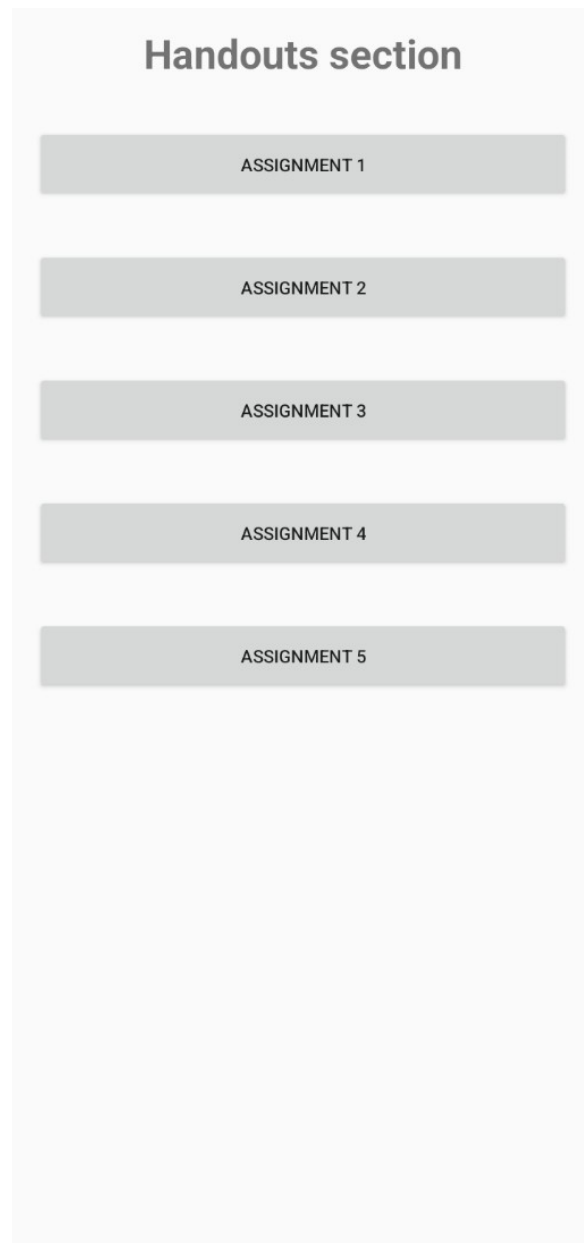
Q.3) Attempt any THREE of the following. (12 Marks)
a) Explore the Steps to install and configure Android Studio and SDK .
b) Explain Date and Time picker with its methods.
c) Describe the significance of SQLite database in Android.
d) Discuss Developer console with its purpose.

Q.4) Attempt any THREE of the following. (12 Marks)
a) Observe the following GUI and write an XML file using relative layout to create the same.

b) Write a program to display circular progress bar.
c) List sensors in Android and explain any one in detail.
d) Explain zoom control (IN / OUT) with the help of an example.
e) Develop an application to send and receive SMS. (Write ONLY java and permission

Handouts :-

For Each unit Assignment is provide in this application in PDF form



Step 1: [Create a new project](#) and name it TableLayoutExample

Step 2: Open res->layout->activity_main.xml (or) main.xml and add following code:

In this step we open an [xml](#) file (activity_main.xml) and add the code for displaying username and password fields by using [textview](#) and [edittext](#) with one login [button](#).

```
<TableLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#0000"
    android:orientation="vertical"
    android:stretchColumns="1">

    <TableRow android:padding="5dp">

        <TextView
            android:layout_height="wrap_content"
            android:layout_marginBottom="20dp"
            android:layout_span="2"
            android:gravity="center_horizontal"
            android:text="@string/loginInfo"
            android:textColor="#00ff"
            android:textSize="25sp"
            android:textStyle="bold" />

    </TableRow>

    <TableRow>

        <TextView
            android:layout_height="wrap_content"
            android:layout_column="0"
            android:layout_marginLeft="10dp"
            android:text="@string/username"
            android:textColor="#fff"
            android:textSize="16sp" />

        <EditText
```

```
        android:id="@+id/username"
        android:layout_height="wrap_content"
        android:layout_column="1"
        android:layout_marginLeft="10dp"
        android:background="#fff"
        android:hint="@string/username"
        android:padding="5dp"
        android:textColor="#0000" />

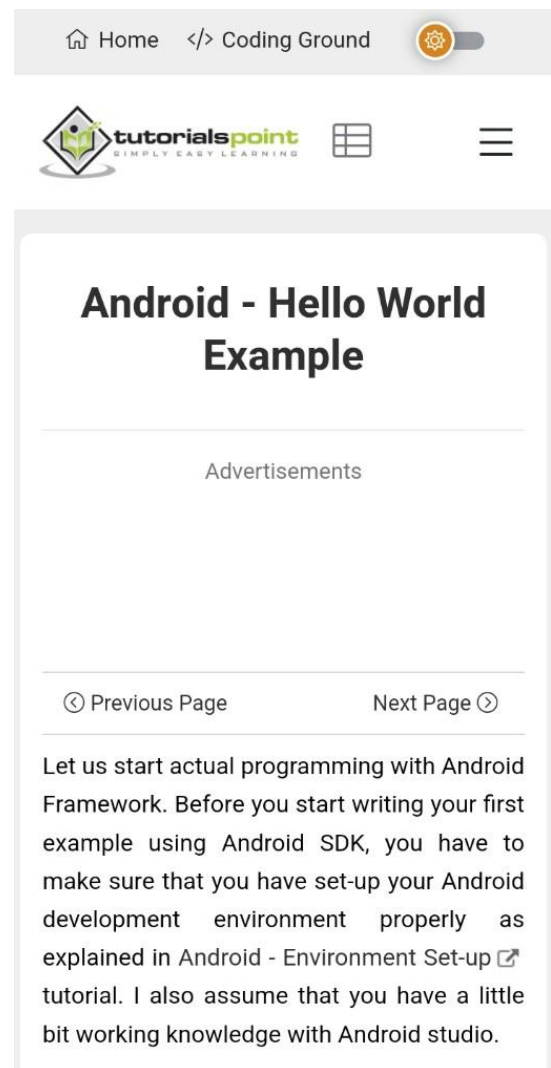
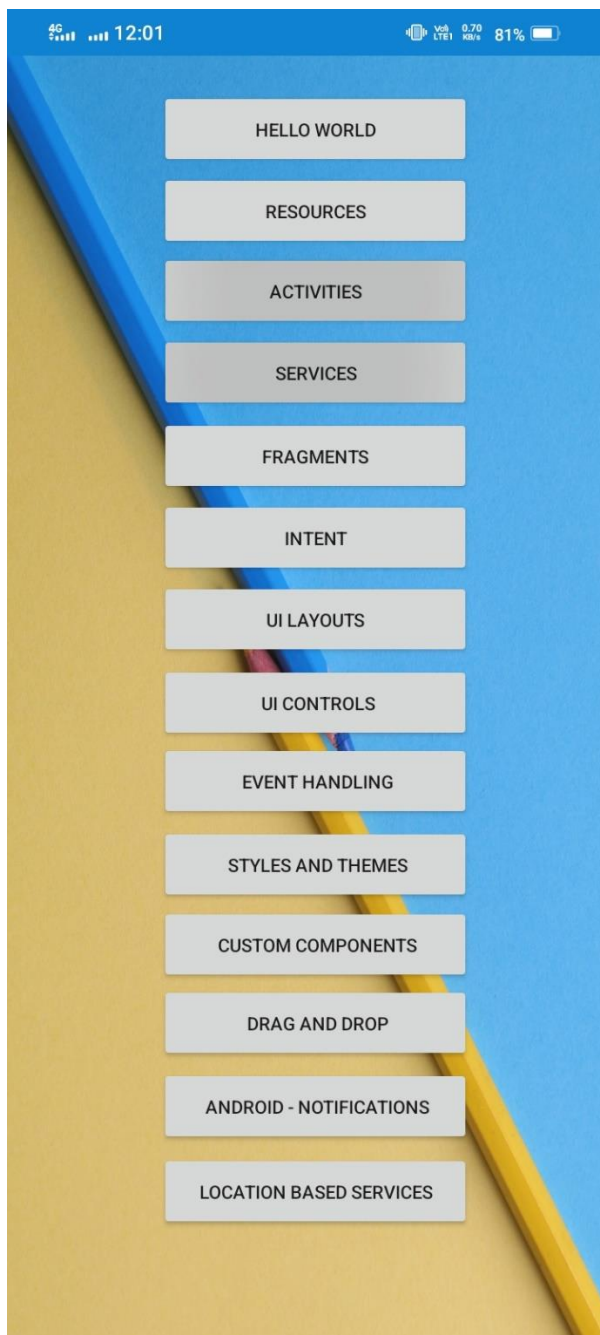
    </TableRow>

    <TableRow>

        <TextView
            android:layout_height="wrap_content"
            android:layout_column="0"
            android:layout_marginLeft="10dp"
            android:layout_marginTop="20dp"
            android:text="@string/password"
            android:textColor="#fff"
```

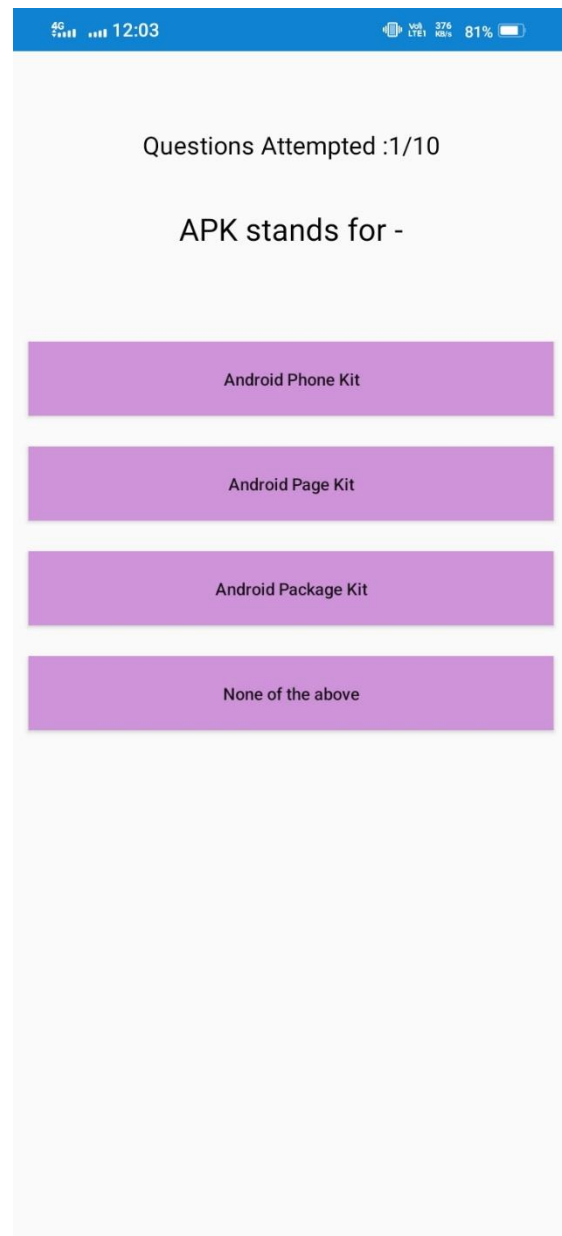
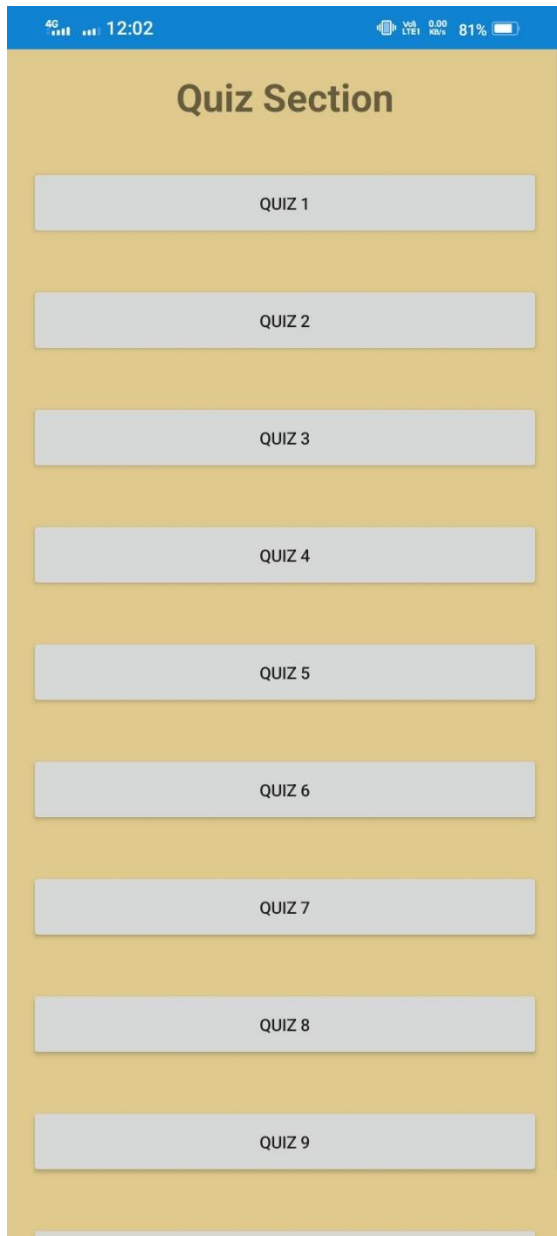

Program :-

As per unit wise programs are provided in this application



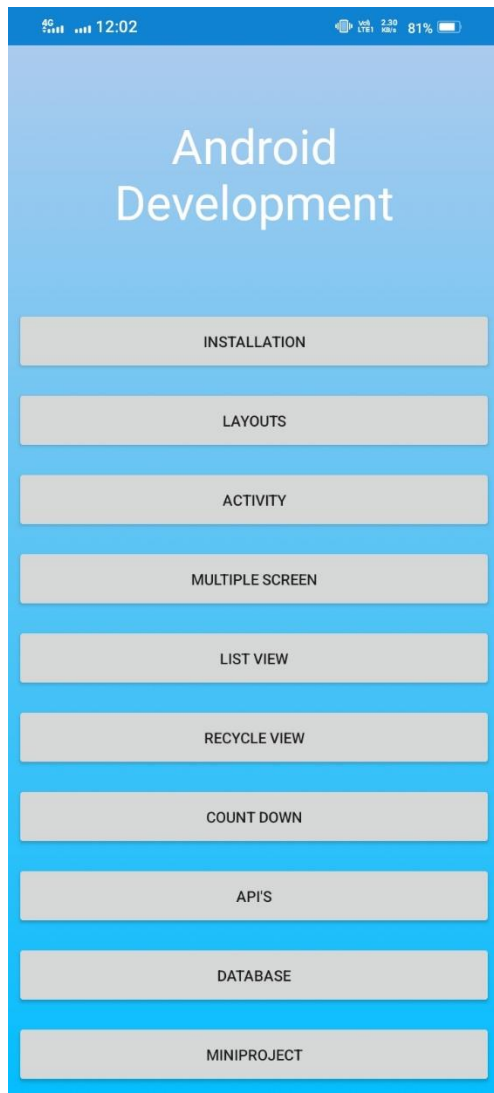
Quiz :-

As for practice purpose some offline quiz are provide in which the result will directly display as you submitted the test



Videos:-

As per unit wise Videos are provided in this application



Installing Android Studio and Setup | Android Tutorials

Download Android Studio by writing "download android studio" in your browser's search bar. Go to the official android studio website and download android studio! Click on the downloaded android studio in your Downloads folder and install it by following instructions and clicking on "Next" Create a new android project by selecting Create New Project > basic activity > name the project > package name > location > language (java/kotlin) > API level(try to use an API which runs on maximum possible phones)

To be able to zoom in and out using mouse wheel, you will have to activate a setting as mentioned below:- Go to "File > Settings > Editor > General and click the checkbox next to "change font size with ctrl+mouse wheel"

To Create an Emulator for testing your Android app:-

Select Tools > AVD manger > Create Virtual Device > Phone/tablet (select the device you want to choose) > Next > System image (API level) > Finish

Here mainly two languages will be used : XML and Java. XML is for designing and Java is for the logic and hence is the brain of the app. Code completion or Auto completion suggests the code while you write it and it is very helpful as it saves a lot of time while coding. There are three types of code completion in Android Studio Basic completion (auto completes variable name) Ctrl + Space Smart completion (auto completes code on the basis of context) Ctrl + Shift + Space Statement completion (auto completes brackets , parantheses) Ctrl + Shift + Enter

CONCLUSION

We Learn how to build the Android App in Android Studio using java

In this Project we learn how to use Grid Layout, Table Layout, Pdfview, Youtube Viewer, some java logic implementation, Xml properties , Sdk path , Build. Gradle, Learn about Activity Life Cycle.

The changes required according to the version in Build.Gradle Dependences

We Learn how to work Dynamic in XML properties with the help of java.