Quiz Contest

(A Quiz Application)

A PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Salt Lake, kolkata

Certified that this project report on 'Quiz Contest' - a Quiz Android application is the bonafide work of <u>Paritosh Ram</u> who carried out the project work under my supervision.

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I would like to thank my mentor for guiding me. Last but not the least I'm grateful to all the team members of HPE.

Paritosh Ram

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Introduction:

*** Relevance:**

Quiz Contest is an android application that has general questions related to current affairs and computer. It has multiple choice questions with time limit and it also calculate scores of each correct answer. It is good for students of every age group it helps in increasing general knowledge about world ,Sports and computer etc. Don't need register simply give any user name and password it will saved automatically and you can login again with same user name and password don't have to worry about the past score. The application helps the user to increase his/her knowledge. Since Smartphone mobiles are being widely used by general population and students, the Quiz Contest application can provide on the Student's mobile.

* Problem Definition:

Quiz Contest is a application developed to conduct an quiz based on time constraints. Quiz Contest system is accessed by entering the user name and password which is added to the database. Before start of the quiz, the rules and regulations are displayed that includes description of the time limit, number of questions to be answered and scoring methods. Quiz is started by displaying one question with four options each based on computer and general knowledge. if the answer is correct, score is incremented by four and no negative marks for wrong answers. If the time exceeds 20secs next question will come automatically after giving few limited question's answer quiz application will finally direct you to the score page. Final score will be displayed and updated in the database with username.

Objective:

The main objective of "Quiz Contest" is to facilitate a user friendly environment for all users and reduces the manual effort. In past days quiz is conducted manually but in

further resolution of the technology we are able to generate the score and pose the queries automatically. The functional requirements include to create users that are going to participate in the quiz, automatic score and report generation and administrative tasks like add, delete, update for admin

privilege users. In this application, all the permissions lies with the administrator i.e., specifying the details of the quiz with checking result will show to interviewee or not, addition of question and answers, marks for each question, Set timer for each quiz and generate report with score for each quiz.

Basic Concepts & Tools:

Introduction to Java

Java is a programming language created by James Gosling from Sun Microsystems (Sun) in 1991. The first publicly available version of Java (Java 1.0) was released in 1995. Sun Microsystems was acquired by the Oracle Corporation in 2010. Over time new enhanced versions of Java have been released. The current version of Java is Java 1.7 which is also as Java 7. From the Java programming known language the Java platform evolved. The lava allows software developers platform to write

program code in other languages than the Java programming language and still runs on the Java virtual machine. The Java platform is usually associated with the Java virtual machine and the Java core libraries.

> Java Virtual machine

The Java virtual machine (JVM) is a software implementation of a computer that executes programs like a real machine. The Java virtual machine is written specifically for a specific operating system, e.g. for Linux a special implementation is required as well as for Windows.

▶ Java Runtime Environment vs. Java Development Kit

A Java distribution comes typically in two flavours, the Java Runtime Environment (JRE) and the Java Development Kit (JDK). The Java runtime environment (JRE) consists of the JVM and the Java class libraries and contains the necessary functionality to start Java programs. The JDK contains in addition the development tools necessary to create Java programs. The JDK consists therefore of a Java

compiler, the Java virtual machine, and the Java class libraries.

> Characteristics of Java

The target of Java is to write a program once and then run this program on multiple operating systems.

Java has the following properties:

Platform independent: Java programs use the Java virtual machine as abstraction and do not access the operating system directly. This makes Java programs highly portable. A Java program (which is standard complaint and follows certain rules) can run unmodified on all supported platforms, e.g. Windows or Linux.

Object-orientated programming language: Except the primitive data types, all elements in Java are objects.

Interpreted and compiled language: Java source code is transferred into the byte code format which does not depend on the target platform. These byte code instructions will be interpreted by the Java Virtual machine (JVM). The

JVM contains a so called Hotspot-Compiler which translates performance critical byte code instructions into native code instructions.

Automatic memory management: Java manages the memory allocation and de-allocation for creating new objects. The program does not have direct access to the memory. The so-called garbage collector deletes automatically objects to which no active pointer exists.

Android

Android is a software platform and operating system for mobile devices. Android is available as open source. It allows developers to write managed code in the Java language, controlling the device via Google-developed Java libraries.

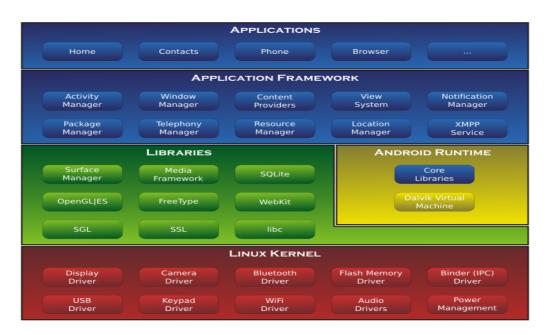
Android SDK was released by Open Handset Alliance in the month of November of the year 2007. Android was actually developed using the kernel of Linux 2.6 and the highlighting features of Android include the following:

- No fees for licensing, distribution and release approval
 - GSM, 3G EDGE networks for telephony
 - IPC message passing

- Background processes and applications
- Complete multimedia hardware control
- API's for location based services such as GPS.

> Architecture of Android OS

The skeleton of Android framework and its constituents are shown in the following figure:



Architecture of Android OS

Applications Layer

Android ships with a set of core applications including an email client, SMS program, calendar, maps, browser, contacts and others. All applications are built using the Java. Each of the applications aims at performing a specific task that it is actually intended to do.

Application Framework Layer

The next layer is the application framework. This includes the programs that manage the phone's basic functions like resource allocation, telephone applications, switching between processes or programs and keeping track of the phone's physical location. Application developers have full access to Android's application framework. This allows them to take advantage of Android's processing capabilities and support features when building an Android application. We can think of the application framework as a set of basic tools with which a developer can build much more complex tools.

Libraries Layer

The next layer contains the native libraries of Android. These shared libraries are all written in C or C++, compiled for the particular hardware architecture used by the phone and preinstalled by the phone vendor.

Android Runtime Layer

Android Runtime layer includes Dalvik Virtual Machine (DVM) and a set of core java libraries. Every Android app gets its own instance of DVM. Dalvik has

been written so that a device can run multiple virtual machines efficiently and it executes files with .dex (Dalvik Executable Format) extension optimized for minimum memory.

> Components of Android

The basic components of an Android application include Activity, Broadcast Receiver, Service, and Content Provider. Each of the above, which when used for any application, has to be declared in the AndroidManifest.xml. The user interface of the component is determined by the Views. For the communication among these basic components we use Intents and Intent filters which play crucial role during app development.



Android Components

Activity

An Activity is, fundamentally, an object that has a lifecycle. An Activity is a chunk of code that does some work, as necessary. The work can include displaying a UI to the user, though it doesn't have to as some Activities never display UIs. Typically,

we designate one of our application's Activities as the entry point to our application.

Broadcast Receiver

Broadcast Receiver is yet another type of component that can receive and respond to any of the broadcast announcements.

Service

A Service is a body of code that runs in the background. It can run in its own process, or in the context of another application's process, depending on its needs. Other components "bind" to a Service and invoke methods on it via remote procedure calls. An example of a Service is a media player; even when the user quits the media-selection UI, she probably still intends for her music to keep playing. A Service keeps the music going even when the UI has completed.

Content Provider

Content Provider is a data storehouse that provides access to data on the device; the classic example is the Content Provider that is used to access the user's list of contacts. Our application can access

data that other applications have exposed via a Content Provider, and we can also define our own Content Providers to expose data of our own.

System Analysis:

Feasibility Study:

The feasibility study is an evaluation and analysis of the potential of a proposed project which is based on extensive investigation and research to support the process of decision making. Depending on the results of the initial investigation the survey is now expanded to a more detailed feasibility study.

Feasibility Study		
System: Quiz Contest	Date: 15-03-2017	
Author: XXX	Page: 1	

Product

The project is a Quiz android application . It will help its users to improve their general knowledge.

Technical Feasibility

The android application will be developed using Android Studio. The team is competent in that.

Social Feasibility

Some training for the users/admin are required but all users are IT literate.

Market Research

Market research says that this application would be useful for the users as it could seamlessly help them for their lifestyle.

Economic Feasibility

The application can be developed within budget.

Alternate Solution

Could be a desktop system but that would not be as portable.

♦ Existing System:

- ➤ User has to Login first by giving any user name and password it will be added automatically in database so that user can login again in future by same user name and password.
- ➤ Then Welcome(user profile) will be appear user has to choose any of three option 'Start Game', 'High Score', 'Logout'.
- After choosing start game continue page will be appear to continue game.
- ➤ After Clicking on continue multiple choice questions will come automatically one by one with a specific time limit.
- ➤ User has to choose any of four existing options and then user has to hit the submit button and each right answer will automatically count the score.
- At the end of the game it will show the score of the user.

All these findings demands new application which will reduce the manual work & do everything automatically. Also the existing systems have some major drawbacks which motivate us to develop new system.

Those drawbacks are as follows:

- Quest won't get update automatically need to update manually.
- Existing systems has not type of fields in like questions on History, Game, Sports, Geography etc.
- There is possibility of hanging down the existing systems.

Proposed System:

Unlike the websites where you need to make account for every quiz you want to play, using this application based on android, you just have to login by user name and password and then you will get access to all quizzes from it. The proposed system is an application for the Android platform mobiles will help in improving the knowledge and accuracy. Android is a Linux-based operating system designed primarily for touch screen mobile devices such as smart phones and tablet computers, developed by Google in conjunction with the Open Handset Alliance.

The proposed system will be developed for Android mobiles only because the market share of Android is more than other operating systems.

Table of Comparison:

Comparison of Existing System & Proposed System

Parameters	Existing	Proposed
	System	System
Method	Manual	Automatic
Time	More time	Less time
	consuming	consuming
Database	Required	Not required
Reliability	Less	More

Software Requirements:

❖ Operating System: Android

Toolkit: Software Development Toolkit(SDK)

Platform: Java and Android

❖ Database: SQLite

Hardware Requirements:

❖ 2.3 minimum version (API 8)

❖ Android phone (Having Version Above or 2.3)

Diagram:

♦ Data Flow Diagram (DFD):

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its *process* aspects. A DFD is often used as a preliminary step to create an overview of the

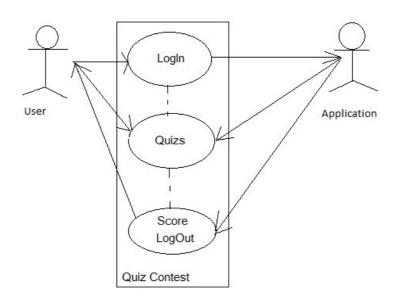
system. DFDs can also be used for the visualization of data processing.

A DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored. It does not show information about the timing of process or information about whether processes will operate in sequence or in parallel.

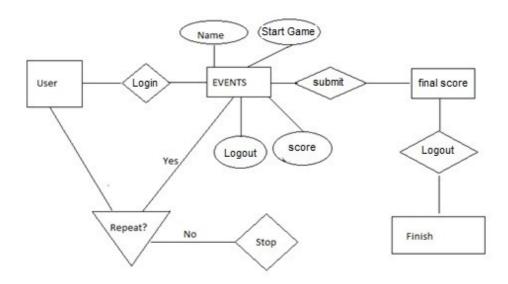
> Level 0 DFD:



♦ Use Case Diagram:



♦ Entity-Relationship Diagram:



♦ Table Diagram:

Design of database table which is named as Events is given below ---

Attribute Name	Attribute type
Id	Int
Name	Text
Info	Text
Period	Text
Period_unit	Text
Start_time	Text

Form Design:

Components---

- Linear Layout (Vertical)
- Linear Layout (Horizontal)
- TextView(Medium)
- EditText
- Button
- CheckBox
- ListView
- Spinner
- ImageView
- AlertDialog

Testing:

*** Objective:**

The objective our test plan is to find and report as many bugs as possible to improve the integrity of our program. Although exhaustive testing is not possible, we will exercise a broad range of tests to achieve our goal. We will also test the user friendliness of our app .The application will

be used as an important tool, but we would like to ensure that it could be run on a variety of platforms with little impact on performance or usability.

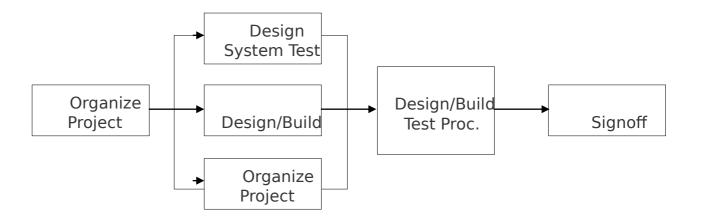
* Process Overview:

The following represents the overall flow of the testing process:

- ➤ Identify the requirements to be tested. All test cases shall be derived using the current Program Specification.
- ➤ Identify which particular test(s) will be used to test each module.
- ➤ Review the test data and test cases to ensure that the unit has been thoroughly verified and that the test data and test cases are adequate to verify proper operation of the unit.
- ➤ Identify the expected results for each test.
- ➤ Document the test case configuration, test data, and expected results.
- > Perform the test(s).
- ➤ Document the test data, test cases, and test configuration used during the testing

- process. This information shall be submitted via the Unit/System Test Report (STR).
- ➤ Successful unit testing is required before the unit is eligible for component integration/system testing.
- ➤ Unsuccessful testing requires a Bug Report Form to be generated. This document shall describe the test case, the problem encountered, it's possible cause, and the sequence of events that led to the problem. It shall be used as a basis for later technical analysis.
- ➤ Test documents and reports shall be submitted. Any specifications to be reviewed, revised, or updated shall be handled immediately.

Testing Process:



The diagram above outlines the Test Process approach that will be followed.

- Organize Project involves creating a System Test Plan, Schedule & Test Approach, and assigning responsibilities.
- Design/Build System Test involves identifying Test Cycles, Test Cases, Entrance & Exit Criteria, Expected Results, etc. In general, test conditions/expected results will be identified by the Test Team in conjunction with the Development Team. The Test Team will then identify Test Cases and the Data required. The Test conditions are

- derived from the Program Specifications Document.
- Design/Build Test Procedures includes setting up procedures such as Error Management systems and Status reporting.
- **Build Test Environment** includes requesting/building hardware, software and data setups.
- ➤ Execute System Tests identified in the Design/Build Test Procedures will be executed. All results will be documented and Bug Report Forms filled out and given to the Development Team as necessary.
- > **Signoff** happens when all pre-defined exit criteria have been achieved.

Testing Strategy:

The following outlines the types of testing that will be done for unit, integration, and system testing. While it includes what will be tested, the specific use cases that determine how the testing is done will be detailed in the Test Design Document. The test cases that will be used for designing use cases is shown below.

❖ Test Cases:

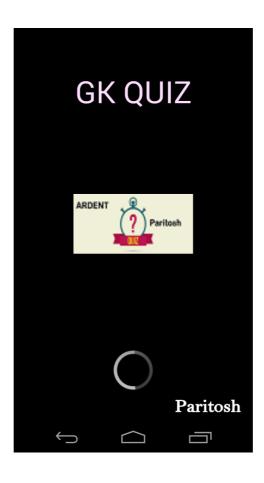
Tested	By:	Paritosh Ram							
Test Ty	est Type Unit Testing								
Test Ca	se Number	1							
Test Ca	se Name	Login							
Test Ca Descrip	otion	pass	user word.	should	give	any	user	name	and
Item(s) to be tested									
1 Verification of Login.									
Specifications									
Input				Expected Output/Result					

type the user name and password	Successful welcome user's profile come
2) Logout	2) Page exits

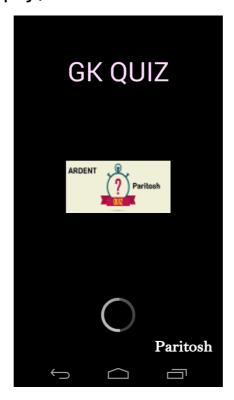
Tested By:	Paritosh Ram					
Test Type	Unit Testing					
Test Case Number	2					
Test Case Name	Checking questions					
Test Case Description	The user should choose right option among four options.					
Item(s) to be tested	Item(s) to be tested					
1 Verification of right answer whether popup messes age is showing or not.						
Specifications						
Input		Expected Output/Result				
3) check the score and popup message		message will be show you are correct or you are wrong				
4) Logout		4) Page exits				

Results:

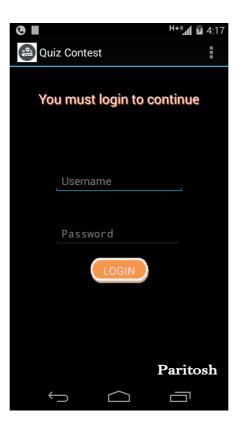
Splash Screen:



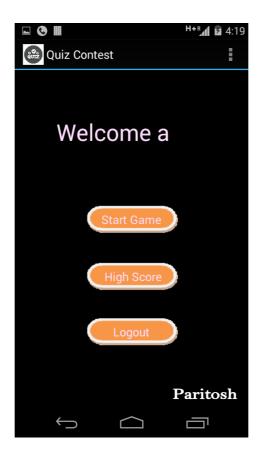
Main Activity (Empty):



Login Screen:

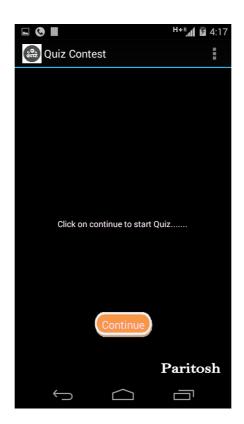


User Profile:

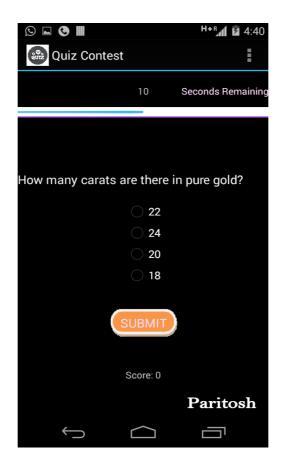


32

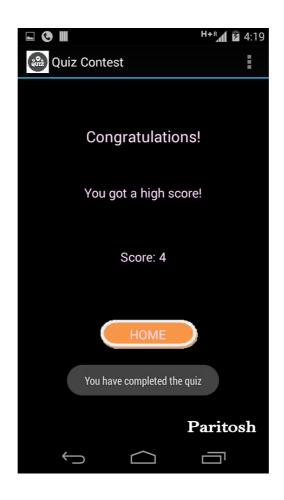
Continue page:



Quiz page(GameStart):



Score page(QuizActivity):



Future scope and further enhancement of the Project:

We have put an endless effort on this application& also provided room for future expansion of this application.

- Interface can be enriched later.
- Selection of alarm tone are in progress.
- ❖ Prescription Parameter (PP) contains the necessary information of a medicine including its name M, the dosage size g and the amount n to be taken each time (as multiples of the dosage size) and its therapy duration T during which the patient should take the medicine. A picture of the medicine is also incorporated to assist patients identifying the medicine. This parameter can be added.
- ❖ Dosage Parameter (DP) states the minimum and maximum dose sizes [dmin, dmax] and the minimum and maximum separations [nsmin, nsmax] between two consecutive doses. It also specifies the supply rate (B, R), which the maximum dosage B is taken within any time interval R and the demand rate (L, P) and which the minimum dosage L is taken in any time interval p. DP parameter should be implemented in future days.

Code:

1)MainActivity.java:

```
package com.example.quiz_contest;
import android.os.Bundle;
import android.app.Activity;
import android.content.Intent;
import android.view.Menu;
import android.view.Window;
import android.view.WindowManager;
public class MainActivity extends Activity {
       @Override
       protected void onCreate(Bundle savedInstanceState) {
               super.onCreate(savedInstanceState);
               requestWindowFeature(Window.FEATURE_NO_TITLE);
this.getWindow().setFlags(WindowManager.LayoutParams.FLAG_FULLSCREEN,
        WindowManager.LayoutParams.FLAG_FULLSCREEN);
               setContentView(R.layout.main);
               Thread t=new Thread()
               {
                       public void run()
                               try
                               {
                                       Thread.sleep(3000);
                                       Intent intent=new
Intent(getApplicationContext(), LoginScreen.class);
                                       startActivity(intent);
                               catch (Exception e)
                                        e.printStackTrace();
                               }
                       }
               };
               t.start();
       }
       @Override
       public boolean onCreateOptionsMenu(Menu menu) {
               // Inflate the menu; this adds items to the action bar if
it is present.
               getMenuInflater().inflate(R.menu.main, menu);
               return true;
       }
}
```

2)HomeScreen.java:

```
package com.example.quiz_contest;
import android.app.Activity;
import android.app.AlertDialog;
import android.content.Context;
import android.content.DialogInterface;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;
public class HomeScreen extends Activity {
              TextView tv;
              String n;
              Button btn, btn2, btn3;
              SharedPreferences sharedpreferences;
              @Override
              protected void onCreate(Bundle savedInstanceState) {
                  super.onCreate(savedInstanceState);
                  setContentView(R.layout.activity_home_screen);
                  tv=(TextView)findViewById(R.id.textView1);
                  btn=(Button)findViewById(R.id.button1);
                  btn2=(Button)findViewById(R.id.button2);
```

```
btn3=(Button)findViewById(R.id.button3);
                  Bundle data=getIntent().getExtras();
                  n=data.getString("Name");
                  tv.setText("Welcome "+n);
                  btn.setOnClickListener(new OnClickListener() {
                        @Override
                        public void onClick(View v) {
                              // TODO Auto-generated method stub
sharedpreferences=getSharedPreferences(LoginScreen.MyPREFERENCES,
Context.MODE_PRIVATE);
                            SharedPreferences.Editor
editor=sharedpreferences.edit();
                            editor.clear();
                            editor.commit();
                            Intent i=new
Intent(getApplicationContext(),LoginScreen.class);
                            startActivity(i);
                        }
                  });
                  btn2.setOnClickListener(new OnClickListener() {
                        @Override
                        public void onClick(View arg0) {
                              // TODO Auto-generated method stub
                              Intent i=new Intent(getApplicationContext(),
GameStart.class);
                              i.putExtra("Name", n);
                              startActivity(i);
                        }
                  });
                  btn3.setOnClickListener(new OnClickListener() {
                        @Override
```

```
public void onClick(View arg0) {
                              // TODO Auto-generated method stub
                              Intent i=new
Intent(getApplicationContext(), HighScores.class);
                              i.putExtra("Name", n);
                              startActivity(i);
                        }
                  });
              }
              @Override
    public void onBackPressed() {
AlertDialog.Builder(this).setIcon(android.R.drawable.ic_dialog_alert).setTi
tle("Exit")
                .setMessage("Are you sure?")
                .setPositiveButton("yes", new
DialogInterface.OnClickListener() {
                    @Override
                    public void onClick(DialogInterface dialog, int which)
{
                        Intent intent = new Intent(Intent.ACTION_MAIN);
                        intent.addCategory(Intent.CATEGORY_HOME);
                        intent.setFlags(Intent.FLAG_ACTIVITY_NEW_TASK);
                        startActivity(intent);
                        finish();
                    }
                }).setNegativeButton("no", null).show();
    }
              @Override
              public boolean onCreateOptionsMenu(Menu menu) {
                  // Inflate the menu; this adds items to the action bar if
it is present.
```

3) LoginScreen.java:

```
package com.example.quiz contest;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.content.SharedPreferences;
import android.os.Bundle;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;
public class LoginScreen extends Activity {
      public static final String MyPREFERENCES="MyPrefs";
      public static final String Name = "nameKey";
      public static final String Password="passKey";
      SharedPreferences sharedpreferences;
      EditText et1,et2;
      Button btn;
      @Override
      protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
             setContentView(R.layout.activity_login_screen);
             et1=(EditText)findViewById(R.id.editText1);
             et2=(EditText)findViewById(R.id.editText2);
             btn=(Button)findViewById(R.id.button1);
             sharedpreferences=getSharedPreferences(MyPREFERENCES,
Context. MODE PRIVATE);
             String val=sharedpreferences.getString(Name, null);
             if(val!=null)
             {
                    Intent i=new Intent(getApplicationContext(), HomeScreen.class);
```

```
i.putExtra("Name", val);
                     startActivity(i);
              btn.setOnClickListener(new OnClickListener() {
                     @Override
                     public void onClick(View arg0) {
                            // TODO Auto-generated method stub
                            String name=et1.getText().toString();
                            String pass=et2.getText().toString();
                            if(name.equals("") || pass.equals(""))
                                   Toast.makeText(getApplicationContext(), "login
details Empty.!", Toast. LENGTH_LONG).show();
                                   return;
                            SharedPreferences.Editor editor=sharedpreferences.edit();
                            editor.putString(Name, name);
                            editor.putString(Password, pass);
                            editor.commit();
                            Intent i=new Intent(getApplicationContext(),
HomeScreen.class);
                            i.putExtra("Name", name);
                            startActivity(i);
                     }
              });
       }
       @Override
       public boolean onCreateOptionsMenu(Menu menu) {
              // Inflate the menu; this adds items to the action bar if it is present.
              getMenuInflater().inflate(R.menu.activity_login_screen, menu);
              return true;
       }
}
```

4) GameStart.java:

```
package com.example.quiz_contest;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.RadioGroup;
import android.widget.TextView;
```

import android.widget.Toast;

```
public class GameStart extends Activity {
       RadioGroup rg;
       TextView tv;
       Button btn;
       private Cursor p;
       String n;
       private SQLiteDatabase db;
       String q[]={ "UNIVAC is",
                     "The basic operations performed by a computer are",
                     "The two major types of computer chips are",
                     "Microprocessors as switching devices are for which generation
computers",
                     "The main electronic component used in first generation computers
was".
                     "ASCII and EBCDIC are the popular character coding systems. What
does EBCDIC stand for?",
                     "The brain of any computer system is",
                     "Storage capacity of magnetic disk depends on",
                     "The two kinds of main memory are:",
                     "A storage area used to store data to a compensate for the
difference in speed at which the different units can handle data is",
                     "Computer is free from tiresome and boardoom. We call it",
                     "Integrated Circuits (Ics) are related to which generation of
computers?",
                     "CD-ROM is a",
                     "A hybrid computer",
                     "Which type of computers uses the 8-bit code called EBCDIC?",
                     "The ALU of a computer responds to the commands coming from",
                     "Chief component of first generation computer was",
                     "To produce high quality graphics (hardcopy) in color, you would
want to use a/n",
                     "What are the stages in the compilation process?",
                     "Which of the following IC was used in third generation of
computers?",
                     "Dos is Spanish for which number?", "How many hours are equal to
600 minutes?",
                     "Can you unscramble this word to find the name of a country:
SUSAIR?".
                     "What is the meaning of the Latin phrase 'bona fide'?", "What do the
fifty stars on the US flag represent?",
                     "Which country is first to appear in the English dictionary?", "What is
the last letter of the Greek alphabet?",
                     "What name is given to a triangle with one angle greater than 90
degrees?",
                     "What is the name of Scooby Doo's psychedelic van?", "What is the
largest island in the Caribbean?",
                     "Which TV series features a chemistry teacher called Walter
White?".
                     "Which F.R.I.E.N.D.S. character makes jokes when he is
uncomfortable?",
                     "If you were born December 4th, which star sign would you belong
to?"
                     "In the film Shrek, what is the name of Shrek's wife?"."What was
the name of the boy in the Jungle Book?",
                     "What is the name of the actor who played the role of Harry Potter
in the film series?".
```

```
"Which Bond movie did Daniel Craig first star in?", "Who played Jack
in the film The Titanic?",
                      "From which movie did this quote come from: A lie keeps growing
and growing until it is as plain as the nose on your face?",
                      "How many square meters are there in a hectare?", "How many
rings does Saturn have around it?",
                      "Which of the five senses develops first?", "How many carats are
there in pure gold?",
                      "Who scored the winning penalty in the 2006 world cup final?", "How
many red balls are used in a game of snooker?",
                      "Who has won the most FIFA Ballons d Or?", "In which sport is the
Davis cup awarded?"
                      "At what time did Andres Iniesta score the winning goal to help
Spain win their first World Cup ever?"
};
       String a[]={"Universal Automatic Computer","Arithmetic operation","External
memory chip", "First Generation", "Transistors", "Extended Binary Coded Decimal
Interchange Code", "ALU", "tracks per inch of surface",
                      "Primary and secondary", "Memory", "Accuracy", "First
generation", "Semiconductor memory", "Resembles digital
computer", "Minicomputers", "Primary memory", "Transistors", "RGB monitor"
                      ,"Feasibility study, system design and
testing", "SSI", "Transistors", "many words", "22", "20", "Uruguay", "in good
Radcliffe", "Spectre", "Christan Bale", "Toy Story", "10000", "4", "Touch", "22", "Andrea Pirlo", "12", "Cristiano Ronaldo", "Football", "117"};
       String b[]={"Universal Array Computer","Logical operation","Primary memory
chip", "Second Generation", "Extended Bit Code Decimal Interchange
Code", "Memory", "bits per inch of tracks", "Random and
sequential", "Buffer", "Reliability", "Second generation", "Memory register", "Resembles
analogue computer", "Microcomputers",
                      "Control section", "Vacuum Tubes and
Valves", "Plotter", "Implementation and documentation", "MSI", "Vacuum Tubes and
Valves", "Ear", "1000 words", "12", "10", "Russia", "for
this", "States", "Algeria", "Alpha", "Isoceles", "The Van",
                      "Antigua", "F.R.I.E.N.D.S.", "Chandler
Bing", "Aries", "Rapunzel", "Mowgli", "Justin Timberlake", "Casino Royale", "Mathew
McCaughney", "Pinocchio",
                      "100", "3", "Smell", "24", "Marco
Matterazi","15","Ronaldinho","Cricket","113"};
       String c[]={"Unique Automatic Computer", "Storage and relative", "Microprocessor
chip", "Third Generation", "Extended Bit Case Decimal Interchange Code", "CPU", "disk pack
in disk surface", "ROM and RAM", "Accumulator", "Diligence", "Third generation", "Magnetic
memory", "Resembles both a digital and analogue computer", "Mainframe
computers", "External memory", "Integrated Circuits", "Ink-jet printer",
                      "Lexical Analysis", "LSI", "Integrated Circuits", "Stomach", "10
words","2","60","USSR","word for word","50 top
cities", "Afghanistan", "Delta", "Acute", "The Mystery Van", "Barbados",
"Breaking Bad", "Joey", "Leo", "Fiona", "Leo", "Rupert
Grint", "Thunderball", "Russel Crowe", "Finding Nemo", "1", "5", "Taste", "20", "Fabio Grosso",
       "9","Lionel Messi","Hockey","93"};
String d[]={"Unvalued Automatic Computer","All the above","Both b and
c", "Fourth Generation", "Extended Binary Case Decimal Interchange Code", "Control
unit","All of above","All of above","Address","Versatility","Fourth generation","None of
above", "None of the above", "Super computer", "Cache memory", "None of above", "Laser
printer",
```

```
"None of the above", "Both a and b", "None of above", "Liver", "100
words","7","600","USA","after death","50 lakes","Australia","Gamma","Scalene","The
Mystery Machine",
                    "Galle", "Game Of
Thrones", "Rachel", "Saggitarius", "Cindrella", "Pumba", "Kevin
McCauley", "Skyfall", "Leonardo DiCaprio", "Ice Age", "100", "7", "Sight",
                   "18","Alesandre Del Piero","1","Ronaldo","Tennis","121"};
1,1,2,1,2,3,0};
      @Override
      protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
             setContentView(R.layout.activity game start);
             Bundle data=getIntent().getExtras();
             n=data.getString("Name");
             btn=(Button)findViewById(R.id.button1);
             //tv.setText(q[0]);
             createDatabase();
             p=db.rawQuery("SELECT * FROM guestions", null);
             if(!p.moveToFirst())
             insertDB():
             btn=(Button)findViewById(R.id.button1);
             btn.setOnClickListener(new OnClickListener() {
                    @Override
                    public void onClick(View v) {
                          // TODO Auto-generated method stub
                          Intent i=new Intent(getApplicationContext(),
QuizActivity.class);
                          i.putExtra("Name", n);
                          startActivity(i);
                    }
             });
      protected void createDatabase()
             db=openOrCreateDatabase("QuizDB.db", Context.MODE PRIVATE, null);
             db.execSQL("CREATE TABLE IF NOT EXISTS questions(id INTEGER PRIMARY
KEY AUTOINCREMENT NOT NULL, question VARCHAR, opA VARCHAR," +
                          "opB VARCHAR, opC VARCHAR, opD VARCHAR, answer
NUMBER)");
      protected void insertDB()
             //tv.setText("Getting the quiz ready...");
             int 1=50;
             for(int i=0; i<1; i++)
                    String query="INSERT INTO
questions(question,opA,opB,opC,opD,answer) values("+q[i]+"',"+a[i]+"',"+b[i]+
                                 "','"+c[i]+"','"+d[i]+"','"+ans[i]+"');)";
                    db.execSQL(query);
             Toast.makeText(getApplicationContext(), "Application ready to use!",
Toast. LENGTH SHORT). show();
      }
```

```
@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}
```

5) QuizActivity.java:

```
package com.example.quiz contest;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.ProgressBar;
import android.widget.RadioButton;
import android.widget.RadioGroup;
import android.widget.TextView;
import android.widget.Toast;
public class QuizActivity extends Activity {
      TextView tv,tv2,tv3,tv4;
      RadioGroup rg;
      Button btn;
      MediaPlayer mp;
      ProgressBar pb;
      int scr,nscr,questions=0;
      private SQLiteDatabase db;
      private static final String x="SELECT * FROM questions";
      private Cursor c;
      CountDownTimer timer:
      String n:
      int done[]=new int[11];
      @Override
      protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
             setContentView(R.layout.activity quiz);
             tv=(TextView)findViewById(R.id.textView1);
             tv2=(TextView)findViewById(R.id.textView2);
             tv3=(TextView)findViewById(R.id.textView3);
             tv4=(TextView)findViewById(R.id.textView4);
             rg=(RadioGroup)findViewById(R.id.radioGroup1);
             btn=(Button)findViewById(R.id.button1);
             pb=(ProgressBar)findViewById(R.id.progressBar1);
```

```
pb.setProgress(100);
              Bundle data=getIntent().getExtras();
              n=data.getString("Name");
              //tv.setText("");
              openDatabase();
              c=db.rawQuery(x, null);
              c.moveToFirst();
              getQuestion();
              tv2.setText("Score: 0");
              startCount();
              btn.setOnClickListener(new OnClickListener() {
                     @Override
                     public void onClick(View v) {
                            // TODO Auto-generated method stub
                            int res=rg.getCheckedRadioButtonId();
                            switch(res)
                            {
                            case 0:
                            case 1:
                            case 2:
                            case 3:
                                   break:
                            default:
                                          Toast.makeText(getApplicationContext(),
"Select atleast one option", Toast. LENGTH_SHORT).show();
                                          return:
                            if(res==Integer.parseInt(c.getString(6)))
                                          Toast.makeText(getApplicationContext(),
"Correct Answer!", Toast. LENGTH SHORT).show();
                                          scr+=nscr;
                                          tv2.setText("Score: "+scr);
                                   }
                            else
                            {
                                   mp=MediaPlayer.create(getApplicationContext(),
R.raw.alert2);
                                   mp.start();
                                   Toast.makeText(getApplicationContext(), "Incorrect
Answer!", Toast. LENGTH SHORT).show();
                            if(questions<10)</pre>
                                   //c.moveToNext();
                                   rg.removeAllViews();
                                   getQuestion();
                                   timer.cancel();
                                   pb.setProgress(100);
                                   startCount();
                            }
                            else
                            {
                                   Toast.makeText(getApplicationContext(), "You have
completed the quiz", Toast. LENGTH LONG). show();
                                   timer.cancel();
                                   Intent i=new
Intent(getApplicationContext(),FinalActivity.class);
```

```
i.putExtra("score", scr);
                                  i.putExtra("Name", n);
                                  startActivity(i);
                          }
                   }
            });
    }
    protected void openDatabase() {
  db = openOrCreateDatabase("QuizDB.db", Context.MODE_PRIVATE, null);
}
    protected void getQuestion()
            boolean f=false;int qid;
            do {
                   gid=(int) Math.floor(Math.random()*50);
                   for(int i=0;i<questions;i++)</pre>
                   {
                          if(qid==done[i])
                          {
                                 f=true;
                                 break;
                          }
                   }
            } while (f);
            c.moveToFirst();
            boolean flag=true;
            while (flag) {
                   if(qid!=Integer.parseInt(c.getString(0)))
                   {
                          if(!c.isLast())
                                 c.moveToNext();
                          else
                                 c.moveToFirst();
                   }
                   else
                          flag=false;
            tv.setText(c.getString(1));
           for(int i=0;i<=3;i++)
            {
                   RadioButton rb=new RadioButton(this);
                   rb.setId(i);
                   rb.setText(c.getString(i+2));
                   rg.addView(rb);
            }
            rg.clearCheck();
            done[questions]=qid;
            questions++;
    protected void startCount() {
           tv4.setText("Seconds Remaining");
btn.setText("SUBMIT");
            timer=new CountDownTimer(20000, 1000) {
                   public void onTick(long millisUntilFinished) {
       tv3.setText("" + millisUntilFinished / 1000);
```

```
nscr=(int)millisUntilFinished/2000;
          pb.setProgress(pb.getProgress()-5);
       public void onFinish() {
              pb.setProgress(0);
              tv3.setText("");
          tv4.setText("Sorry...Time Up!");
          //btn.setClickable(false);
          btn.setText("Move to next");
          getQuestion();
      }.start();
       }
       @Override
       public boolean onCreateOptionsMenu(Menu menu) {
              // Inflate the menu; this adds items to the action bar if it is present.
              getMenuInflater().inflate(R.menu.activity_quiz, menu);
              return true;
       }
}
```

6) HighScores.java:

```
package com.example.quiz_contest;
import android.os.Bundle;
import android.app.Activity;
import android.content.Context;
import android.database.Cursor;
import android.database.sglite.SQLiteDatabase;
import android.view.Menu;
import android.widget.TextView;
public class HighScores extends Activity {
      private SQLiteDatabase db;
      private Cursor c:
      TextView tv,tv2;
      @Override
      protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
             setContentView(R.layout.activity high scores);
             tv=(TextView)findViewById(R.id.textView1);
             tv2=(TextView)findViewById(R.id.textView2);
             openDatabase();
             c=db.rawQuery("SELECT * FROM scores", null);
             if(!c.moveToFirst())
                    tv.setText("No high scores yet!");
             else
             {
                    tv.setText(c.getString(0));
                    tv2.setText(c.getString(1));
             }
```

```
protected void openDatabase() {
    db = openOrCreateDatabase("ScoresDB.db", Context.MODE_PRIVATE, null);
    db.execSQL("CREATE TABLE IF NOT EXISTS scores(name VARCHAR, score
NUMBER)");
}

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.activity_high_scores, menu);
    return true;
}
```

7) Final Activity. java:

```
package com.example.quiz contest;
import android.app.Activity;
import android.app.AlertDialog;
import android.content.Context;
import android.content.DialogInterface;
import android.content.Intent;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.os.Bundle;
import android.view.Menu;
import android.view.View;
import android.view.View.OnClickListener;
import android.widget.Button;
import android.widget.TextView;
public class FinalActivity extends Activity {
      TextView tv,tv2;
      private SQLiteDatabase db;
      private Cursor c:
      Button btn:
      int s;String n,query;
      private static final String x="SELECT * FROM scores";
      protected void onCreate(Bundle savedInstanceState) {
             super.onCreate(savedInstanceState);
             setContentView(R.layout.activity final);
             tv=(TextView)findViewById(R.id.textView3);
             tv2=(TextView)findViewById(R.id.textView2);
             btn=(Button)findViewById(R.id.button1);
             Bundle data=getIntent().getExtras();
             s=data.getInt("score");
             n=data.getString("Name");
             tv.setText("Score: "+s);
             createdatabase();
             c=db.rawQuery(x, null);
```

```
if(!c.moveToFirst())
                    query="INSERT INTO scores VALUES('"+n+"','"+s+"')";
                    db.execSQL(query);
                    tv2.setText("You got a high score!");
             }
             else
              {
                    c.moveToLast();
                    if(s>Integer.parseInt(c.getString(1)))
                           query="UPDATE scores SET name=""+n+"", score=""+s+""
where score=""+c.getString(1)+"";
                           db.execSQL(query);
                           tv2.setText("You got a high score!");
             btn.setOnClickListener(new OnClickListener() {
                     @Override
                     public void onClick(View arg0) {
                           // TODO Auto-generated method stub
                           Intent i=new Intent(getApplicationContext(),
HomeScreen.class);
                           i.putExtra("Name", n);
                           startActivity(i);
                    }
             });
      }
      protected void createdatabase()
             db=openOrCreateDatabase("ScoresDB.db", Context.MODE_PRIVATE,
null);
             db.execSQL("CREATE TABLE IF NOT EXISTS scores(name VARCHAR, score
NUMBER)");
      }
       @Override
       public boolean onCreateOptionsMenu(Menu menu) {
             // Inflate the menu; this adds items to the action bar if it is present.
             getMenuInflater().inflate(R.menu.activity_final, menu);
             return true:
      }
}
```

Conclusion:

Currently there are many medication reminder systems which are operable manually. Due to increased manual work, the available system becomes more time consuming. So in the given work, an attempt has been made to implement fully automatic medication reminder system. It eases the user's task of recalling when to take the medicine by reminding them of the particular medicine at the correct time thereby reducing the much prevalent manual work.

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