MINOR PROJECT REPORT

(Project Term August-November 2016)

V-Quiz

Submitted by
Vishrut Gajjar
Registration Number: 11409177
Programme & Section: Diploma in CSE & JK402

Under the Guidance of
Mr.Bhavnesh Sohal & Salil Batra
Department of: POLYTECHNIC
Lovely School / Institute of: SCIENCE AND TECHNOLOGY
Lovely Professional University, Phagwara
August to November 2016

DECLARATION

I hereby declare that the project work entitled ("V-Quiz") is an authentic record of my own work carried out as requirements of Major Project for the award of degree of **Diploma in CSE** from Lovely Professional University, Phagwara, under the guidance of (Name of Faculty Mentor), during August to November, 2014).

(Signature of student) Vishrut Gajjar 11409177

Date: 05-12-2016

This is to certify that the above statement made by the student is correct to the best of my knowledge and belief.

Bhavnesh Sohal, 1604 and Asst.Professor

Faculty Mentor

Acknowledgement

The satisfaction that accompanies that the successful completion of any task would be incomplete without the mention of people whose ceaseless Cooperation made it possible, whose constant guidance and encouragement crown all efforts with success. We are grateful to our project guide "Mr.Bhavnesh Sohal And Mr. Salil Batra" for the guidance, inspiration and constructive suggestion that helpful us in the preparation of this project.

We are also thankful to my colleagues with whom we have fruitful discussion which have helped us a lot in giving in final shape to the program.

Vishrut Gajjar

INDEX

Sr. No.	Table of Content	Page No.
1.	Profile of the Problem	5
2.	Existing System	6-7
	(a)Existing Software	6
	(b)What's new in the system to be developed	7
3.	Problem Analysis	8
	(a)Problem Definition	8
	(b)Project Plan	8
4.	Software Requirement Analysis	9
	(a)General Discussion	9
	(b)Specific Requirements	9
5.	Design	10-11
	(a)DFD for present system/ flowchart	10
	(b)ER Diagram	11
	(c)Table Design	11
6.	Code Design Implementation	12-27
	(a)Code of each page	12
	(b)Database Tables	20
7.	Bibliography	28

Profile of the Problem

The mobile application based "V-quiz" project is an attempt to simulate the basic concept of Quiz. The system enables user to learn general knowledge, current affairs etc.

The system allows the user to opts new thing the goes around the world. User can learn new things with fun and enjoyment.

There is particular restriction in game to increase the knowledge of user and to have fun and enjoyment.

Time limit and Life line is created to increase level of the game and it create interest and attraction of the user.

Existing System

Existing Software

KBC application

Logo quiz

Current affairs

General quiz

Gk quiz

Disadvantages in Existing System: -

- Timing Consuming
- Possibly of losing data
- Lack of security
- Difficulties to store high score
- Human error will be frequent
- Lack of questions
- Not interactive

What's new in the system to be developed/Scope of work?

APPLICABILITY

- This project solves the problem of the traditional quiz system.
- With certain changes, it can be applicable on any quiz field.
- One of the most benefits in today's life in that quiz can be play from any palace of the world.

ADVANTAGES

- It is easily to learn and adjust to the system.
- This system does not require the user to be highly educated.
- The requirements to tackle this job limited to
- Willing to play long hours
- Data is not easily lost

Problem Analysis

Problem Definition

- 1. **Quiz type:** Its defines that quiz is related to which field i.e. general knowledge, current affairs etc.
- 2. <u>User type:</u> Its defines that user is belong to which filed and searching for which kind of quiz

Project Plan

The plan of this project is to make a webpage which is:->>

- Interpreted and high performance
- Distributed
- Dynamic
- Secure

Software Requirement Analysis

Introduction

Requirements analysis is critical to the success of a development project. Requirements must be documented, actionable, measurable, testable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design. Requirements can be architectural, structural, behavioral, functional, and non-functional.

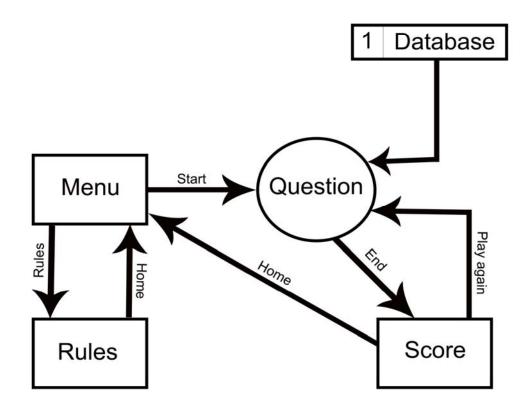
General Description

JAVA is a widely-used open source general-purpose scripting language that is especially suited for Application development and can be embedded into Android.

Specific Requirements

- **❖** System
 - > Android Studio
 - > Sql Database
 - Photo Editor
 - ➤ Windows 10
- Hardware
 - Minimum: 2.0 GHz CPU,1024 MB RAM, 1024*768 display, 5400 RPM Hard Disk
 - Recommended: 2.2 GHz or Higher CPU, 2024 MB or more RAM, 1280*1024 display, 7200 RPM or Higher Hard disk.

DESIGN DFD FOR REPRESENT SYSTEM/FLOWCHATRS



E-R Diagram

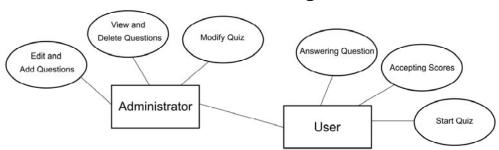


Table Design

Question Bank

Key id	Key_ques	Key_answer	Key_optionA	Key_optionB	Key_optionC	Key_optionD
int(11) pk	Varchar(20)	Varchar(20)	Varchar(20)	Varchar(20)	Varchar(20)	Varchar(20)
1						

Code Design Implementation

```
Code Of Each Page
Activity main.java
package com.example.vishrut.v quiz;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);
  }
Question.java
package com.example.vishrut.v quiz;
import android.app.Activity;
public class Question extends MainActivity {
  private int ID;
  private String QUESTION;
  private String OPTA;
  private String OPTB;
  private String OPTC;
  private String OPTD;
  private String ANSWER;
  public Question() {
    ID = 0;
    QUESTION = "";
    OPTA = "";
    OPTB = "":
    OPTC = "";
    OPTD ="";
    ANSWER = "";
  public Question(String qUESTION, String oPTA, String oPTB, String oPTC, String
oPTD,
           String aNSWER) {
    QUESTION = qUESTION;
    \mathbf{OPTA} = \mathbf{oPTA};
    \mathbf{OPTB} = \mathbf{oPTB};
    \mathbf{OPTC} = \mathbf{oPTC};
    OPTD=oPTD;
    ANSWER = aNSWER;
```

```
public int getID() {
  return ID;
public String getQUESTION() {
  return QUESTION;
public String getOPTA() {
  return OPTA;
public String getOPTB() {
  return OPTB;
public String getOPTC() {
  return OPTC;
public String getOPTD() {
  return OPTD;
public String getANSWER() {
  return ANSWER;
public void setID(int id) {
  ID = id;
               public void setQUESTION(String qUESTION) {
  QUESTION = qUESTION;
public void setOPTA(String oPTA) {
  \mathbf{OPTA} = \mathbf{oPTA};
     public void setOPTB(String oPTB) {
  \mathbf{OPTB} = \mathbf{oPTB};
public void setOPTC(String oPTC) {
  OPTC = oPTC;
public void setOPTD(String oPTD)
  OPTD=oPTD;
public void setANSWER(String aNSWER) {
  ANSWER = aNSWER;}}
```

```
QuestionActivity.java
package com.example.vishrut.v quiz;
import java.util.ArrayList;
import java.util.List;
import java.util.Random;
import java.util.Timer;
import android.widget.Toast;
import java.util.LinkedList;
import java.util.Collections;
import java.util.Collection;
import java.util.concurrent.TimeUnit;
import android.annotation.SuppressLint;
import android.annotation.TargetApi;
import android.app.Activity;
import android.content.Intent;
import android.graphics.Typeface;
import android.media.MediaPlayer;
import android.os.Build;
import android.os.Bundle;
import android.os.CountDownTimer;
import android.util.Log;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;
public class QuestionActivity extends Activity {
  List<Question> quesList;
  int score = 0,count=5;
  int qid =0;
```

```
CounterClass timer = new CounterClass(60000, 1000);
Question currentQ;
TextView txtQuestion, times, scored;
Button button1, button2, button3, button4;
protected void onCreate(Bundle savedInstanceState) {
  super.onCreate(savedInstanceState);
  setContentView(R.layout.activity_main);
  QuizHelper db = new QuizHelper(this); // my question bank class
  quesList = db.getAllQuestions(); // this will fetch all questions
  Collections.shuffle(quesList);
  currentQ = quesList.get(qid);// the current question
  txtQuestion = (TextView) findViewById(R.id.txtQuestion);
  // the textview in which the question will be displayed
  // the three buttons,
  // the idea is to set the text of three buttons with the options from question bank
  button1 = (Button) findViewById(R.id.button1);
  button2 = (Button) findViewById(R.id.button2);
  button3 = (Button) findViewById(R.id.button3);
  button4 = (Button) findViewById(R.id.button4);
  // the textview in which score will be displayed
  scored = (TextView) findViewById(R.id.score);
  // the timer
  times = (TextView) findViewById(R.id.timers);
  // method which will set the things up for our game
  setOuestionView();
  times.setText("00:02:00");
  // A timer of 60 seconds to play for, with an interval of 1 second (1000 milliseconds)
  // CounterClass timer = new CounterClass(30000, 1000);
  timer.start();
  // button click listeners
  button1.setOnClickListener(new View.OnClickListener() {
   public void onClick(View v) {
```

```
// passing the button text to other method
      // to check whether the anser is correct or not
      // same for all three buttons
       getAnswer(button1.getText().toString());
    }
  });
  button2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
       getAnswer(button2.getText().toString());
    }
  });
  button3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
       getAnswer(button3.getText().toString());
    }
  });
  button4.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
       getAnswer(button4.getText().toString());
  });
public void getAnswer(String AnswerString) {
  if (currentQ.getANSWER().equals(AnswerString)) {
    // if conditions matches increase the int (score) by 1
```

```
// and set the text of the score view
  Toast.makeText(getBaseContext(), "Correct", Toast.LENGTH_SHORT ).show();
  score++;
  // scored.setText("Score: " + score);
else {
  Toast.makeText(getBaseContext(), "Incorrect", Toast.LENGTH_SHORT).show();
  count--;
  scored.setText("Life: " + count);}
if (count > 0&& qid<21) {
  // if questions are not over then do this
  currentQ = quesList.get(qid);
  setQuestionView();
} else {
  // if over do this
  Intent intent = new Intent(QuestionActivity.this,
       ResultActivity.class);
  Bundle b = new Bundle();
  b.putInt("score", score); // Your score
  intent.putExtras(b); // Put your score to your next
  startActivity(intent);
  finish();
  timer.cancel();
  score=0;
  count=5;
```

}

```
@SuppressLint("NewApi")
public class CounterClass extends CountDownTimer {
  public CounterClass(long millisInFuture, long countDownInterval) {
    super(millisInFuture, countDownInterval);
    // TODO Auto-generated constructor stub
  }
  @Override
  public void onFinish() {
    times.setText("Time is up");
    Intent intent = new Intent(QuestionActivity.this,
         ResultActivity.class);
    // passing the int value
    Bundle b = new Bundle();
    b.putInt("score", score); // Your score
    intent.putExtras(b); // Put your score to your next
    startActivity(intent);
    finish();
  }
  @Override
  public void onTick(long millisUntilFinished) {
    // TODO Auto-generated method stub
```

```
long millis = millisUntilFinished;
    String hms =String.format(
        "%02d:%02d:%02d",
        TimeUnit.MILLISECONDS.toHours(millis),
        TimeUnit.MILLISECONDS.toMinutes(millis)
             - TimeUnit.HOURS.toMinutes(TimeUnit.MILLISECONDS
             .toHours(millis)),
        TimeUnit.MILLISECONDS.toSeconds(millis)
             - TimeUnit.MINUTES.toSeconds(TimeUnit.MILLISECONDS
             .toMinutes(millis)));
    System.out.println(hms);
    times.setText(hms);
  }
}
private void setQuestionView() {
 // the method which will put all things together
  txtQuestion.setText(currentQ.getQUESTION());
  button1.setText(currentQ.getOPTA());
  button2.setText(currentQ.getOPTB());
  button3.setText(currentQ.getOPTC());
  button4.setText(currentQ.getOPTD());
  qid++;
}}
```

```
QuestionHelper.java
package com.example.vishrut.v quiz;
import java.util.ArrayList;
import java.util.List;
import java.util.Random;
import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;
public class QuizHelper extends SQLiteOpenHelper {
  private static final int DATABASE_VERSION = 2;
  // Database Name
  private static final String DATABASE_NAME = "Vishrut";
  // tasks table name
  private static final String TABLE_QUEST = "quest";
  // tasks Table Columns names
  private static final String KEY ID = "qid";
  private static final String KEY_QUES = "question";
  private static final String KEY_ANSWER = "answer"; // correct option
  private static final String KEY_OPTA = "opta"; // option a
  private static final String KEY_OPTB = "optb"; // option b
  private static final String KEY_OPTC = "optc"; // option c
  private static final String KEY_OPTD ="optd"://option d
```

```
private SQLiteDatabase dbase;
  public QuizHelper(Context context) {
    super(context, DATABASE NAME, null,2);
  @Override
  public void onCreate(SQLiteDatabase db) {
    dbase = db;
    String sql = "CREATE TABLE IF NOT EXISTS " + TABLE_QUEST + " ( "
        + KEY ID + " INTEGER PRIMARY KEY AUTOINCREMENT, " +
KEY QUES
        + " TEXT, " + KEY_ANSWER + " TEXT, " + KEY_OPTA + " TEXT, "
        + KEY_OPTB + " TEXT, " + KEY_OPTC + " TEXT, " + KEY_OPTD + "
TEXT)";
    db.execSQL(sql);
    addQuestion();
    // db.close();
  private void addQuestion() {
    Question q1 = new Question("Grand Central Terminal, Park Avenue, New York is
the world's", "largest railway station", "highest railway station", "longest railway
station", "None of above", "largest railway station");
    this.addQuestion(q1);
    Question q2 = new Question("Garampani sanctuary is located at", "Junagarh,
Gujarat", "Diphu, Assam", "Kohima, Nagaland", "Gangtok, Sikkim", "Diphu,
Assam");
    this.addQuestion(q2);
    Question q3 = new Question("Galileo was an Italian astronomer who", "developed
the telescope", "discovered four satellites of Jupiter", "discovered that the movement of
```

pendulum produces a regular time measurement","All of the above", "All of the

```
above");
    this.addQuestion(q3);
    Question q4 = new Question("Brass gets discoloured in air because of the presence
of which of the following gases in air?", "Oxygen", "Hydrogen sulphide", "Carbon
dioxide", "Nitrogen", "Hydrogen sulphide");
    this.addQuestion(q4);
    Question q5 = new Question("In which of the following regions, maize is used as
staple food ?", "Western Europe", "Russia", "Middle Africa", "South-East Asia",
"Middle Africa");
    this.addQuestion(q5);
    Question q6 = new Question("Four Corners Monument is located in which of the
following countries", "United States", "Canada", "China", "Mexico", "United States");
    this.addQuestion(q6);
Question q7 = new Question("Which of the following rivers carries maximum quantity of water into the sea?", "Nile", "Amazon", "Mississippi
Missouri", "Thames", "Amazon");
    this.addQuestion(q7);
     Question q8 = new Question("Which state was divided into Maharashtra and
Gujarat in 1960?", "Bombay", "Madras", "Rajasthan", "Hyderabad", "Bombay");
    this.addQuestion(q8);
    Question q9 = new Question("New Delhi is the capital of India. Which sacred river
flows through the Indian capital city?", "Ganga", "Yamuna",
"Saraswati", "Bhramputra", "Yamuna");
    this.addQuestion(q9);
    Question q10 = new Question("The
                                              Desert is the largest desert of India.",
"Ladkh", "Thar", "Lahul", "Kutch", "Thar");
    this.addQuestion(q10);
     Question q11 = new Question("A mineral is a natural crystalline solid formed by
geological processes. Which is not an example of a mineral?", "Diamond", "WooD",
"Gold", "Platinum", "WooD");
    this.addQuestion(q11);
    Question q12 = new Question("Which among the following is the World's largest
```

```
Wetland System?", "Camargue (France)", "Okavango (Botswana)", "Everglades
(USA)"."Pantanal (South America)","Pantanal (South America)");
    this.addQuestion(q12);
    Question q13 = new Question("Which of the following is considered as the
secondary pollutant?", "Ozone", "Benzene", "Sulphur dioxide", "Carbon
monoxide","Ozone");
    this.addQuestion(q13);
    Question q14 = new Question("Which technological giant has launched its first
Cybersecurity Engagement Center (CSEC) in India?", "Infosys", "Wipro",
"Reliance", "Microsoft", "Microsoft");
    this.addQuestion(q14);
    Question q15 = new Question("Who is the Founder of V-
Quiz", "Unity", "Gameloft", "Vishrut", "Electronic Arts(EA)", "Vishrut");
    this.addQuestion(q15);
    Question q16 = new Question("Carlos Alberto, who died recently, was a legendary
footballer from which country?", "Germany", "Brazil", "Itlay", "France", "Brazil");
    this.addQuestion(q16);
    Question q17 = new Question("What is the India's rank in the World Bank's Ease
of doing business index for 2017?", "130TH", "117TH", "155TH", "80TH", "130TH");
    this.addQuestion(q1);
    Question q18 = new Question("The World Polio Day is observed on which date?",
"Octobor 23", "Octobor 24", "Octobor 25", "Octobor 26", "Octobor 24");
    this.addQuestion(q18);
    Question q19 = new Question("Varun Singh Bhati, who won bronze at 2016 Rio
Paralympic Games, is associated with which sports?", "Shot Put", "High Jump",
"Badminton", "Javelin Throw", "High Jump");
    this.addQuestion(q19);
    Question q20 = new Question("Which of the following will be the official mascot of
FIFA 2018 World Cup?", "Zakumi", "Willie", "Zabivaka", "Gauchito", "Zabivaka");
    this.addQuestion(q20);
    Question q21 = new Question("Which country has won the 2016 Kabaddi World
Cup?", "Sri Lanka", "Iran", "India", "China", "India");
    this.addQuestion(q21);
```

```
Question q22 = new Question("India's first railway university will be set up in
which city?", "Bengaluru", "Vadodara", "Varanasi", "Kochi", "Vadodara");
    this.addQuestion(q22);
  }
  @Override
  public void onUpgrade(SQLiteDatabase db, int oldV, int newV) {
    // Drop older table if existed
    db.execSQL("DROP TABLE IF EXISTS " + TABLE_QUEST);
    // Create tables again
    onCreate(db);
  // Adding new question
  public void addQuestion(Question quest) {
    // SQLiteDatabase db = this.getWritableDatabase();
    ContentValues values = new ContentValues();
    values.put(KEY_QUES, quest.getQUESTION());
    values.put(KEY_ANSWER, quest.getANSWER());
    values.put(KEY_OPTA, quest.getOPTA());
    values.put(KEY_OPTB, quest.getOPTB());
    values.put(KEY_OPTC, quest.getOPTC());
    values.put(KEY_OPTD, quest.getOPTD());
    // Inserting Row
    dbase.insert(TABLE_QUEST, null, values);
  public List<Question> getAllQuestions() {
    List<Question> quesList = new ArrayList<Question>();
    // Select All Query
```

```
String selectQuery = "SELECT * FROM " + TABLE_QUEST;
dbase = this.getReadableDatabase();
Cursor cursor = dbase.rawQuery(selectQuery, null);
// looping through all rows and adding to list
if (cursor.moveToFirst()) {
  do {
     Question quest = new Question();
     quest.setID(cursor.getInt(0));
     quest.setQUESTION(cursor.getString(1));
     quest.setANSWER(cursor.getString(2));
     quest.setOPTA(cursor.getString(3));
     quest.setOPTB(cursor.getString(4));
     quest.setOPTC(cursor.getString(5));
     quest.setOPTD(cursor.getString(6));
     quesList.add(quest);
  } while (cursor.moveToNext());
}
// return quest list
return quesList;
```

}

}

```
ResultActivity.java
package com.example.vishrut.v quiz;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
public class ResultActivity extends Activity {
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity result);
    TextView textResult = (TextView) findViewById(R.id.textResult);
    Bundle b = getIntent().getExtras();
    int score = b.getInt("score");
    textResult.setText("Your score is " + " " + score + ". Thanks for playing my
game.");
  public void playagain(View o) {
    Intent intent = new Intent(this, QuestionActivity.class);
    startActivity(intent);
  public void stm (View i ){
    Intent intent = new Intent(ResultActivity.this,
         start.class);
    startActivity(intent)
}}
```

Rules.java

```
package com.example.vishrut.v quiz;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class rules extends Activity{
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.rules);}
  public void st (View i ){
    Intent intent = new Intent(rules.this,
         start.class);
    startActivity(intent);
  }}
Start.java
package com.example.vishrut.v quiz;
import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
public class start extends Activity {
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_startup);}
  public void playagain(View o) {
    Intent intent = new Intent(this, QuestionActivity.class);
    startActivity(intent);}
  public void ruless (View i ){
    Intent intent = new Intent(start.this, rules.class);
    startActivity(intent);
}}
```

Bibliography

Wikipedia page for Android:http://en.wikipedia.org/wiki/Android

https://developer.android.com/index.htm

Further reading:

"The Origins and Development of Android "

https://developer.android.com/index.htm