Chapter 4 Implementation

4.3 Coding Standards

➢ **Java Activity file**

```
  private void UpdateQuestion(int n) {

      question.setText(nQuestion.getQuestion(n));

      ans1.setText(nQuestion.getchoices1(n));

      ans2.setText(nQuestion.getchoices2(n));

      ans3.setText(nQuestion.getchoices3(n)); package com.application.abc.quiz;

import android.annotation.SuppressLint;

import android.content.DialogInterface;

import android.content.Intent;

import android.graphics.Color;

import android.support.v7.app.AlertDialog;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

import java.util.Random;

public class JavaActivity extends AppCompatActivity {


  Button ans1, ans2, ans3, ans4, next;

  TextView score, question;
```

```
    private JavaQuestion nQuestion = new JavaQuestion();
    private String nAnswerj;
    private int nscorej = 0;
    private int nQUestionlength = nQuestion.nQuestion.length;
    Random r;
            protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_java);
        getSupportActionBar().setTitle("Java");
        r = new Random();
        ans1 = (Button) findViewById(R.id.ans1);
        ans2 = (Button) findViewById(R.id.ans2);
        ans3 = (Button) findViewById(R.id.ans3);
        ans4 = (Button) findViewById(R.id.ans4);
        next = (Button) findViewById(R.id.next);
        score = (TextView) findViewById(R.id.score);
        question = (TextView) findViewById(R.id.question);
        score.setText("score" + nscorej);
        UpdateQuestion(r.nextInt(nQUestionlength))
        ans1.setOnClickListener(new View.OnClickListener() {
            @SuppressLint("ResourceAsColor")

            public void onClick(View v) {
                if (ans1.getText() == nAnswerj) {
```

```
                nscorej++;
                score.setText("score" + nscorej);
                //ans1.setBackgroundColor(Color.GREEN);
                //Toast.makeText(JavaActivity.this, "CORRECT",
Toast.LENGTH_SHORT).show();
                //UpdateQuestion(r.nextInt(nQUestionlength));
                /*AlertDialog.Builder Ad = new AlertDialog.Builder(JavaActivity.this);
                Ad.setMessage("Correct");
                AlertDialog alterD = Ad.create();
                alterD.show();*/
                Toast.makeText(JavaActivity.this, "Correct", Toast.LENGTH_SHORT).show();
            } else {
               // ans1.setBackgroundColor(Color.RED);
                gameover();
            }
        }
    });
    ans2.setOnClickListener(new View.OnClickListener() {

        public void onClick(View v) {
            if (ans2.getText() == nAnswerj) {
                nscorej++;
                score.setText("score" + nscorej);
                //ans2.setBackgroundColor(Color.GREEN);
```

```
                // UpdateQuestion(r.nextInt(nQUestionlength));
                //Toast.makeText(JavaActivity.this, "CORRECT",
Toast.LENGTH_SHORT).show();
                /*AlertDialog.Builder Ad = new AlertDialog.Builder(JavaActivity.this);
                Ad.setMessage("Correct");
                AlertDialog alterD = Ad.create();
                alterD.show();*/
                Toast.makeText(JavaActivity.this, "Correct", Toast.LENGTH_SHORT).show();
            } else {
                //ans2.setBackgroundColor(Color.RED);
                gameover();
            }
        }
    });
    ans3.setOnClickListener(new View.OnClickListener() {

        public void onClick(View v) {
            if (ans3.getText() == nAnswerj) {
                nscorej++;
                score.setText("score" + nscorej);
                //ans3.setBackgroundColor(Color.GREEN);
                //UpdateQuestion(r.nextInt(nQUestionlength));
                //Toast.makeText(JavaActivity.this, "CORRECT",
Toast.LENGTH_SHORT).show();
                /*AlertDialog.Builder Ad = new AlertDialog.Builder(JavaActivity.this);
```

```
                Ad.setMessage("Correct");
                AlertDialog alterD = Ad.create();
                alterD.show();*/
                Toast.makeText(JavaActivity.this, "Correct", Toast.LENGTH_SHORT).show();
            } else {
               // ans3.setBackgroundColor(Color.RED);
                gameover();
            }
        }
    });
    ans4.setOnClickListener(new View.OnClickListener() {

        public void onClick(View v) {
            if (ans4.getText() == nAnswerj) {
                nscorej++;
                score.setText("score" + nscorej);
                //ans4.setBackgroundColor(Color.GREEN);
                //UpdateQuestion(r.nextInt(nQUestionlength));
               //                Toast.makeText(JavaActivity.this,                "CORRECT",
Toast.LENGTH_SHORT).show();
                /*AlertDialog.Builder Ad = new AlertDialog.Builder(JavaActivity.this);
                Ad.setMessage("Correct");
                AlertDialog alterD = Ad.create();
                alterD.show();*/
```

```
                Toast.makeText(JavaActivity.this, "Correct", Toast.LENGTH_SHORT).show();


            } else {
                // ans4.setBackgroundColor(Color.RED);
                 gameover();
            }
        }
    });
    next.setOnClickListener(new View.OnClickListener() {
    public void onClick(View v) {
            UpdateQuestion(r.nextInt(nQUestionlength));
        }
    });
  }


    ans4.setText(nQuestion.getchoices4(n));
    nAnswerj = nQuestion.getcorrectAnswer(n);
  }
  private void gameover() {
    AlertDialog.Builder Ad = new AlertDialog.Builder(JavaActivity.this);
    Ad.setMessage("Correct Answer"+"\n"+nAnswerj+"\n"+ "Score\n"+nscorej)
            .setCancelable(false)
            .setPositiveButton("Try Again...",
                    new DialogInterface.OnClickListener() {
```

```
                    public void onClick(DialogInterface dialogInterface, int i) {
                        startActivity(new Intent(getApplicationContext(), JavaActivity.class));
                    }
                })
            .setNegativeButton("Exit",
                    new DialogInterface.OnClickListener() {

                    public void onClick(DialogInterface dialogInterface, int i) {
                        finish();
                    }
                });
        AlertDialog alterD = Ad.create();
        alterD.show();
    }
}
```

➢ **Java Questions File**

```
package com.application.abc.quiz;

/**
 * Created by ABC on 09-03-2018.
 */
public class JavaQuestion {
    public String nQuestion[]={
            "Which class can access all public and protected methods and fields of its super class?",
```

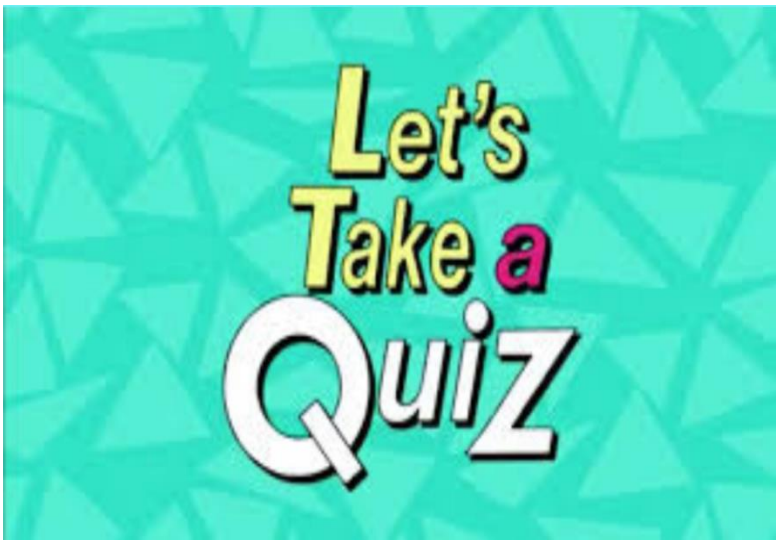
```
        "What is the size of long variable?",
        "What is the default value of short variable?",
        "What is the default value of Boolean variable?",
        "Method,Field can be accessed from the same class to which they belong.",
        "Environment variable that stores the location of bin folder",
        "Static binding uses which information for binding?",
        "Which tool is required on each machine to run a Java program?",
        "Deletion is faster in LinkedList than ArrayList.",
        "Base class for all exceptions",
    };
    public String nchoices[][]={
        {"Inner class","outer class","sub-class","Super class",},
        {"8 bit","16 bit","32 bit","64 bit",},
        {"0.0","0","null","not defined",},
        {"true","false","null","not defined",},
        {"Public","Protected","Default","Private",},
        {"PATH","CLASSPATH","PATHS","BIN",},
        {"type","object","Both of the above.","  None of the above.",},
        {"JDK","SDK","JRE","CVE",},
        {"True","False","null","not null",},

{"Java.throwable","Java.Lang.throwable","Java.Lang.Exception","Java.Lang.throwables",},
    };
    private String ncorrectAnswer[]= {"sub-class","64
bit","0","false","Private","PATH","type","JRE","true","Java.Lang.throwable"};
```

```
    public String getQuestion(int a){
        String question = nQuestion[a];
        return  question;
    }
    public String getchoices1(int a){
        String choice = nchoices[a][0];
        return  choice;
    }
    public String getchoices2(int a){
        String choice = nchoices[a][1];
        return  choice;
    }
    public String getchoices3(int a){
        String choice = nchoices[a][2];
        return  choice;
    }
    public String getchoices4(int a){
        String choice = nchoices[a][3];
        return  choice;}
    public String getcorrectAnswer(int a){
        String Answer = ncorrectAnswer[a];
        return  Answer;
    }
}
```

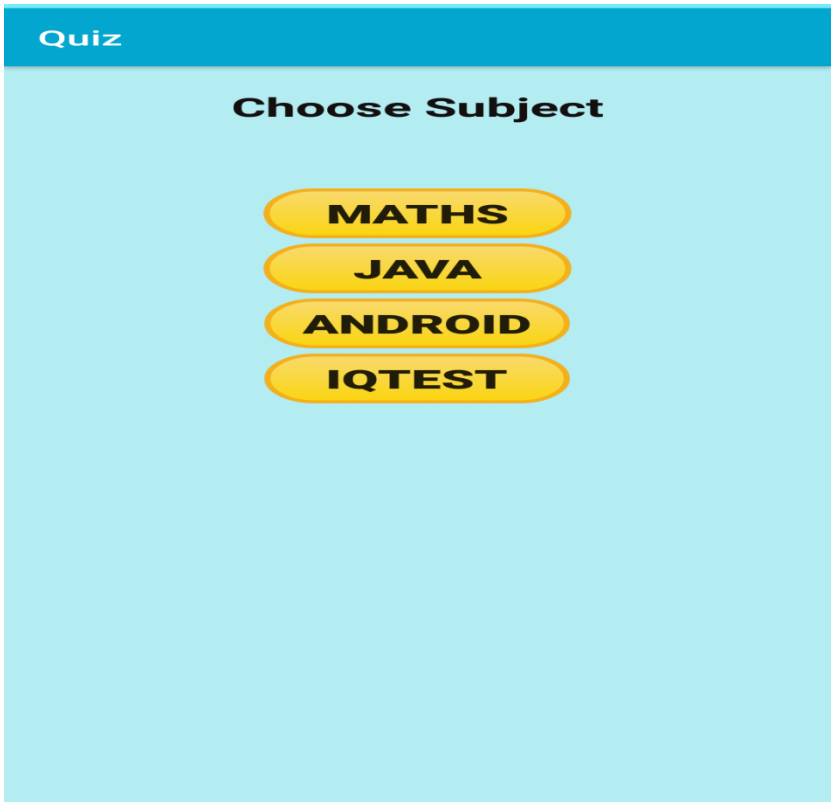
4.4 Snapshots of project

1) first page



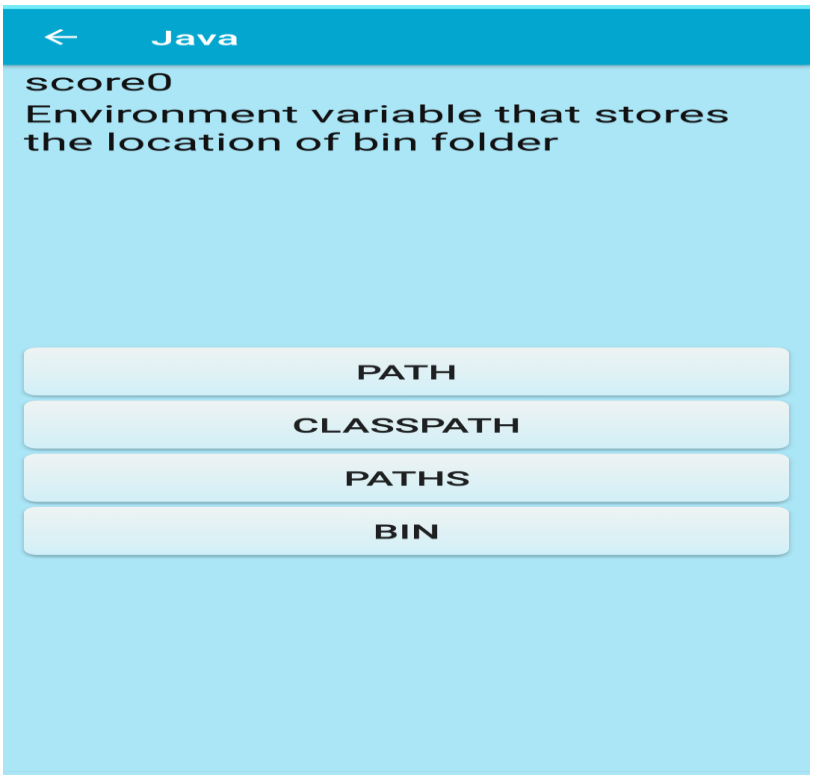
- This is the main page of application.
- After clicking on this page you will move to next page

2) second page



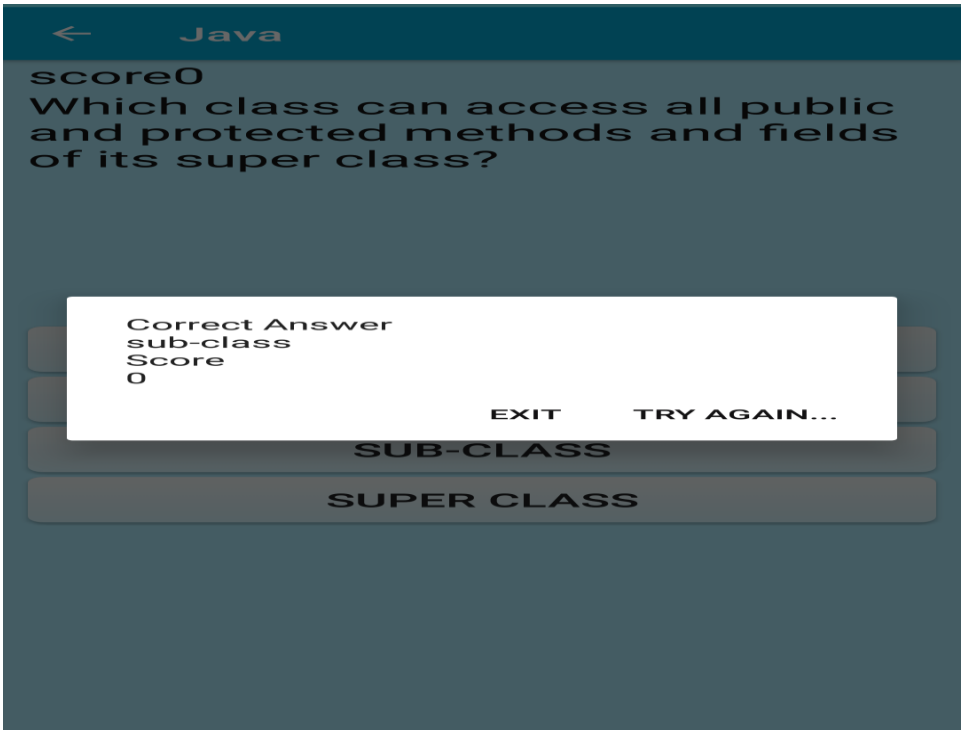
- So in this quiz page their are four subjects maths, java, android, iQtest.
- You have to choose any one of the subject.
- So for eg: we have choose java subject.
- In next page you will see how the questions is there and how the result will show.

3) third page



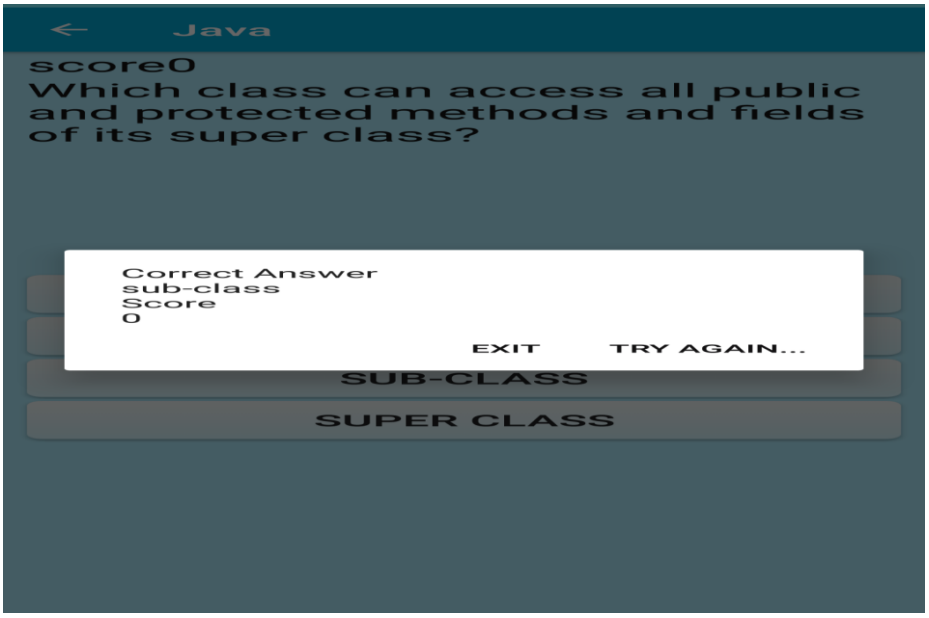
- In this page you can see that there is one question with four options.
- You have to choose the correct one

4) fourth page



- After choosing the answer the result will display.so in this if the answer is wrong it will display the correct answer with score.
- If you want to play from the beginning then you have to choose try again option.

5) fifth page



- If the option is correct then it will show correct answer with result.
- Then if you don't want to play then choose exit option.