

```

1  package com.example.braintimer;
2
3  import androidx.appcompat.app.AlertDialog;
4  import androidx.appcompat.app.AppCompatActivity;
5
6  import android.content.Context;
7  import android.content.DialogInterface;
8  import android.content.Intent;
9  import android.content.SharedPreferences;
10 import android.os.Bundle;
11 import android.os.CountDownTimer;
12 import android.view.View;
13 import android.widget.TextView;
14
15 import com.example.braintimer.db.BrainTimerAppDb;
16
17 import java.util.ArrayList;
18 import java.util.List;
19 import java.util.Random;
20
21 public class PlayingActivity extends AppCompatActivity {
22
23     TextView textViewTimer;
24     TextView textViewQuestionCount;
25     TextView textViewQuestion;
26     TextView textViewAnswer1;
27     TextView textViewAnswer2;
28     TextView textViewAnswer3;
29     TextView textViewAnswer4;
30     SharedPreferences sharedPreferences;
31     CountDownTimer timer;
32     String username;
33     int round = 0;
34     int firstNumber = 0;
35     int secondNumber = 0;
36     int answer = 0;
37     int questionCount = 0;
38     BrainTimerAppDb db;
39
40     @Override
41     public void onBackPressed() {
42
43         timer.cancel();
44         long remainingTimer = Integer.parseInt(textViewTimer.getText().toString()) *
45         1000;
46
47         AlertDialog.Builder dialog = new AlertDialog.Builder(this);
48         dialog.setTitle("Warning");
49         dialog.setMessage("Are you sure you want to exit the game ?");
50         dialog.setNegativeButton("No", new DialogInterface.OnClickListener() {
51             @Override
52             public void onClick(DialogInterface dialog, int which) {
53                 timer = initializeTimerAndReturn(remainingTimer, 1000);
54                 timer.start();
55             }
56         });
57
58         dialog.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
59             @Override
60             public void onClick(DialogInterface dialog, int which) {
61                 Intent intent = new Intent(getApplicationContext(), StartingActivity.
62                 class);
63                 startActivity(intent);
64             }
65         });
66
67         dialog.show();
68     }
69
70     @Override
71     protected void onCreate(Bundle savedInstanceState) {
72         super.onCreate(savedInstanceState);
73         setContentView(R.layout.activity_playing);
74     }
75 }

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72         db = new BrainTimerAppDb(getApplicationContext());
73
74         Intent intent = getIntent();
75         username = intent.getStringExtra("name");
76
77         textViewQuestionCount = findViewById(R.id.textViewQuestionCount);
78         textViewQuestion = findViewById(R.id.textViewQuestion);
79         textViewAnswer1 = findViewById(R.id.textViewAnswer1);
80         textViewAnswer2 = findViewById(R.id.textViewAnswer2);
81         textViewAnswer3 = findViewById(R.id.textViewAnswer3);
82         textViewAnswer4 = findViewById(R.id.textViewAnswer4);
83         textViewTimer = findViewById(R.id.textViewTimer);
84
85         timer = initializeTimerAndReturn(30000,1000);
86
87         timer.start();
88
89         sharedPreferences = this.getSharedPreferences(getApplicationContext().name,
90             Context.MODE_PRIVATE);
91         questionCount = sharedPreferences.getInt("questionCount",10);
92         textViewQuestionCount.setText(String.format("%d/%d",round,questionCount));
93
94         loadQuestion();
95         loadAnswers();
96     }
97     private void loadQuestion(){
98         Random rand = new Random();
99         firstNumber = rand.nextInt(100) + 1;
100        secondNumber = rand.nextInt(100) + 1;
101        answer = firstNumber + secondNumber;
102
103        textViewQuestion.setText(String.format("%d + %d",firstNumber,secondNumber));
104    }
105    private void selectAnswer(int selectedAnswer){
106
107        timer.cancel();
108        long remainingTimer = Integer.parseInt(textViewTimer.getText().toString()) *
109        1000;
110
111        AlertDialog.Builder dialog = new AlertDialog.Builder(this);
112        dialog.setTitle("Warning");
113        dialog.setMessage("Are you sure you want to choose this answer ?");
114        dialog.setNegativeButton("No", new DialogInterface.OnClickListener() {
115            @Override
116            public void onClick(DialogInterface dialog, int which) {
117                timer = initializeTimerAndReturn(remainingTimer,1000);
118                timer.start();
119            }
120        });
121
122        dialog.setPositiveButton("Yes", new DialogInterface.OnClickListener() {
123            @Override
124            public void onClick(DialogInterface dialog, int which) {
125                checkAnswer(selectedAnswer);
126            }
127        });
128
129        dialog.show();
130    }
131    private void checkAnswer(int selectedAnswer){
132        if(selectedAnswer != answer){
133
134            db.insertScore(username,round,questionCount);
135
136            Intent intent = new Intent(getApplicationContext(),StatusActivity.class);
137            intent.putExtra("status","lose");
138            intent.putExtra("correctQuestions",round);
139            intent.putExtra("totalRounds",questionCount);
140            startActivity(intent);
141        }else if(round == questionCount){
142            round++;
143            Intent intent = new Intent(getApplicationContext(),StatusActivity.class);

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143         intent.putExtra("status","win");
144         intent.putExtra("correctQuestions",questionCount);
145         intent.putExtra("totalRounds",questionCount);
146         startActivity(intent);
147     }else{
148         round++;
149
150         loadQuestion();
151         loadAnswers();
152         textViewQuestionCount.setText(String.format("%d/%d",round,questionCount));
153     }
154
155 }
156 private void loadAnswers(){
157     Random rand = new Random();
158     int firstAnswer = rand.nextInt(200) + 2;
159     int secondAnswer = rand.nextInt(200) + 2;
160     int thirdAnswer = rand.nextInt(200) + 2;
161     int realAnswer = answer;
162
163     TextView[] textViews = new TextView[]{textViewAnswer1,textViewAnswer2,
164     textViewAnswer3,textViewAnswer4};
165     int textViewCounter = 0;
166
167     List<Integer> answers = new ArrayList<>();
168     answers.add(firstAnswer);
169     answers.add(secondAnswer);
170     answers.add(thirdAnswer);
171     answers.add(realAnswer);
172
173     while(answers.size() != 0){
174         Random answersRandom = new Random();
175         int randomAnswerIndex = answersRandom.nextInt(answers.size());
176
177         int answer = answers.get(randomAnswerIndex);
178         textViews[textViewCounter].setText(Integer.toString(answer));
179
180         textViews[textViewCounter].setOnClickListener(new View.OnClickListener() {
181             @Override
182             public void onClick(View v) {
183                 selectAnswer(answer);
184             }
185         });
186         textViewCounter++;
187         answers.remove(randomAnswerIndex);
188     }
189 }
190 private CountdownTimer initializeTimerAndReturn(long millisInFuture,long
191 countDownInterval){
192     return new CountdownTimer(millisInFuture,countDownInterval) {
193         @Override
194         public void onTick(long millisUntilFinished) {
195             textViewTimer.setText(Long.toString(millisUntilFinished/1000));
196         }
197
198         @Override
199         public void onFinish() {
200             Intent intent = new Intent(getApplicationContext(),StatusActivity.
201             class);
202             intent.putExtra("status","lose");
203             intent.putExtra("correctQuestions",round);
204             intent.putExtra("totalRounds",questionCount);
205             startActivity(intent);
206         }
207     };
208 }

```