

```

1 import java.util.Scanner;
2
3 /**
4  * @author David Maglica
5  */
6
7 public class Main {
8     public static void main (String[] args) {
9         Quiz quiz = new Quiz();
10        quiz.addQuestion("U kojem jeziku se programira za Android?", "Java");
11        quiz.addQuestion("U kojem jeziku se programira za iOS?", "Objective-C");
12
13        Scanner sc = new Scanner(System.in);
14
15        // Try and catch
16        try {
17            populateQuiz(quiz);
18        } catch (Exception e) {
19            System.out.println("Iznimka uhvaćena: " + e);
20        }
21        System.out.println("Kviz je spreman.");
22
23        int noOfCorrectAnswers = 0;
24        for (int i = 0; i < quiz.getNoOfQuestions(); i++) {
25            System.out.println("\n" + quiz.getQuestion(i) + "?");
26            String answer = sc.nextLine();
27            if (quiz.isCorrectAnswer(i, answer)) {
28                noOfCorrectAnswers++;
29                System.out.println("Točno.");
30            } else {
31                System.out.println("Netočno.");
32            }
33        }
34
35        double totalQ = quiz.getNoOfQuestions();
36        double percentage = noOfCorrectAnswers / totalQ * 100;
37        int totalQInt = (int)totalQ;
38        System.out.println("\n---\nImali ste " + noOfCorrectAnswers + " točnih odgovora od
ukupno "
39            + totalQInt + " pitanja. -> " + percentage + "%");
40    }
41
42    public static void populateQuiz (Quiz quiz) {
43        Scanner sc = new Scanner(System.in);
44        // Ubacivanje custom pitanja
45        String input;    // u ovu varijablu ubacujemo podatak ako korisnik zeli stvoriti
pitanje ili ne
46        String q;        // question
47        String a;        // answer
48
49        System.out.println("Želite li dodati pitanje (da/ne)?");
50        input = sc.nextLine();
51
52        while (input.equalsIgnoreCase("da") && quiz.getNoOfQuestions() < 10) {
53            System.out.println("Unesite vaše pitanje: ");
54            q = sc.nextLine();
55            System.out.println("Unesite točan odgovor na vaše pitanje: ");
56            a = sc.nextLine();
57            ShortAnswerQuestion newQuestion = new ShortAnswerQuestion(q, a);
58            // quiz.addQuestion(q, a);           // Kompozicija

```

```
59         quiz.addQuestion(newQuestion);           // Agregacija
60
61         if (quiz.getNoOfQuestions() < 10) {
62             System.out.println("\nŽelite li dodati još jedno pitanje (da/ne)?");
63             input = sc.nextLine();
64         } else System.out.println("\nDosegli ste maksimalan broj pitanja (10
pitanja).");
65         };
66     }
67 }
68
```

```
1 public class Quiz {
2     private String name;
3     private ShortAnswerQuestion[] questions = new ShortAnswerQuestion[10];
4     private int noOfQuestions = 0;
5     private final int MAX_NO_OF_QUESTIONS = 10; // maksimalan broj pitanja postavljamo na 10
6
7     public Quiz () {
8         name = "initial Quiz";
9     }
10    public Quiz (String name) {
11        this.name = name;
12    }
13
14    public String getName () {
15        return name;
16    }
17
18    // Kompozicija = klasa Quiz interno sadrži objekte questions
19    public void addQuestion (String text, String answer) {
20        if (noOfQuestions == MAX_NO_OF_QUESTIONS) {
21            throw new IllegalStateException("Dosegli ste maksimalan broj pitanja.");
22        }
23        if (noOfQuestions < MAX_NO_OF_QUESTIONS) {
24            questions[noOfQuestions] = new ShortAnswerQuestion(text, answer);
25            noOfQuestions++;
26        } else {
27            System.out.println("Dosegli ste maksimalan broj pitanja.");
28        }
29    }
30    // Agregacija = klasa Quiz ima samo reference na eksterne objekte question
31    public void addQuestion (ShortAnswerQuestion question) {
32        if (noOfQuestions < MAX_NO_OF_QUESTIONS) {
33            questions[noOfQuestions] = question;
34            noOfQuestions++;
35        }
36    }
37
38    public int getNoOfQuestions () {
39        return noOfQuestions;
40    }
41
42    public int getMAX_NO_OF_QUESTIONS () { return MAX_NO_OF_QUESTIONS; }
43
44    public String getQuestion (int index) {
45        return questions[index].getText();
46    }
47
48    public boolean isCorrectAnswer (int questionIndex, String answer) {
49        return questions[questionIndex].isCorrectAnswer(answer);
50    }
51 }
52
```

```
1 public class ShortAnswerQuestion {
2     private String text;
3     private String correctanswer;
4
5     // Konstruktor
6     public ShortAnswerQuestion (String text, String correctanswer) {
7         this.text = text;
8         this.correctanswer = correctanswer;
9     }
10
11     public String getText () {
12         return text;
13     }
14
15     public boolean isCorrectAnswer (String answer) {
16         return correctanswer.equalsIgnoreCase(answer);
17     }
18 }
19
20
```

```
1 public class MaxNumberOfQuestions extends Exception {  
2     public MaxNumberOfQuestions () { super(); }  
3     public MaxNumberOfQuestions (String message) { super(message); }  
4     public MaxNumberOfQuestions (String message, Throwable cause) { super(message, cause); }  
5     public MaxNumberOfQuestions (Throwable cause) { super(cause); }  
6 }  
7
```

```
1 "C:\Program Files\BellSoft\LibericaJDK-19-Full\bin\java.exe" "-javaagent:C:\Program Files\
JetBrains\IntelliJ IDEA 2022.2.3\lib\idea_rt.jar=64989:C:\Program Files\JetBrains\IntelliJ
IDEA 2022.2.3\bin" -Dfile.encoding=UTF-8 -Dsun.stdout.encoding=UTF-8 -Dsun.stderr.encoding=
UTF-8 -classpath D:\Faks\SuvremeneTehnikeProgramiranja\Zadace\Zadaca06\out\production\
Zadaca06 Main
2 Želite li dodati pitanje (da/ne)?
3 da
4 Unesite vaše pitanje:
5 Na kojem jeziku se još može programirati za iOS
6 Unesite točan odgovor na vaše pitanje:
7 Swift
8
9 Želite li dodati još jedno pitanje (da/ne)?
10 ne
11 Kviz je spreman.
12
13 U kojem jeziku se programira za Android??
14 Java
15 Točno.
16
17 U kojem jeziku se programira za iOS??
18 C
19 Netočno.
20
21 Na kojem jeziku se još može programirati za iOS?
22 Swift
23 Točno.
24
25 ---
26 Imali ste 2 točnih odgovora od ukupno 3 pitanja. -> 66.66666666666666%
27
28 Process finished with exit code 0
29
```