cis111-2023-3-project01

v2023-11-03

Content

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Submission

Due: 2023-11-19T23:00

Submit your Project2023_3_01.java before due date via YULearn.

Description:

In this project you are expected to draw 2 letters as we did in week03 where the circles shoul be tangent to each other.

- 1. Select the first 2 letters either in your name or your lastname.
- 2. You will write a code to draw the selected letters in upper case form.
- 3. Use the template below:

```
Java
package project01;
import java.io.File;
import hblib.io.svg.*;
public class Project2023_3_01 {
    public static void main(String[] args) {
        Paper paper = new Paper(0, 0, 600, 300);
        final String MY_NAME = "YourName";
        final String MY_ID = "YourStudentNumber";
        String nameId = MY_NAME + "_" + MY_ID;
        /**/System.out.println("nameId: " + nameId);
        final int HEIGHT = 10;
        final int X_0 = 50; // x of the center of the upper-left circle
        final int Y_0 = 50; // y of the center of the upper-left circle
        final int RADIUS = 10; // radius of the circles
        int circleNumberOf = HEIGHT;
        Circle cTmp;
        for (int i = 0; i < circleNumberOf; i++) {
            cTmp = new Circle(X_0 + 10 * i, Y_0 + 20 * i, RADIUS);
            cTmp.setColorFill(SVGLib.COLOR_CONIFER);
            cTmp.setColorStroke(SVGLib.COLOR_BLACK);
            cTmp.setStrokeWidth(5);
            paper.add(cTmp);
        // to html
        String fileName = "Project2023_3_01_" + nameId;
        /**/System.out.println("fileName: " + fileName);
        String pathToFile = "_generated" //
                + File.separator + "project01" //
                + File.separator;
       paper.toHtml(pathToFile, fileName);
```

- 4. You need to modify src:
 - Add package project01 in src
 - Add class Project2023_3_01.java in project01.
 - Copy the given template in Project2023_3_01.java.
- 5. You need to modify <u>_generated</u>:
 - Add directory project01 in _generated so that file
 Project2023_3_01_Veli0zoglu_12345.html is generated in _generated/project01.
- 6. MY_NAME is your name in english alphabet without space in between. MY_ID is your student

number.

- 7. The **HEIGHT** of the letters is 10, that is, 10 circles.
 - You decide on the proper *width* of each letter. Of course, the width of letter "I" should be less than that of letters "N" or "M".
 - You decide the *space* between the letters.

Example: If student Veli Özoğlu with student number 12345, then nameId becomes Veli0zoglu_12345. Then the letters would be either VE or OZ.

Evaluation criteria

- When X_0 and/or Y_0 are changed, both letters should go to the new location.
- When RADIUS is changed, the shape should be preserved.