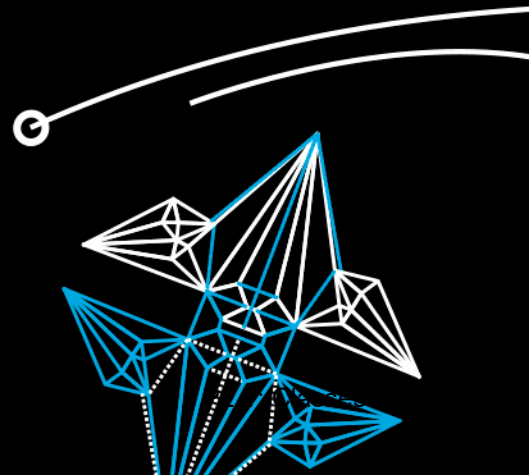
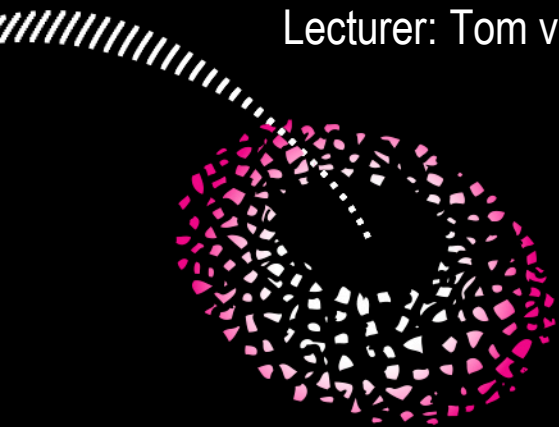
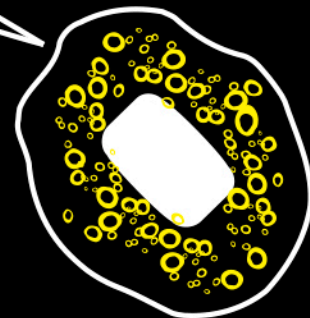


UNIVERSITY OF TWENTE.

Documentation

Topic of Software Systems (TCS module 2)

Lecturer: Tom van Dijk



DOCUMENTATION

- External documentation
 - System Design
 - User Manual
 - API Specification
- Documentation in the code
 - Comments
 - Javadoc

DOCUMENTATION

Single line comments start with //

```
public static void main(String[] args) {  
    // First we print out a test message  
    System.out.println("Hello this is a test");  
  
    // Then we say some more things  
    System.out.println("some more things");  
}
```

DOCUMENTATION

Multi-line comments start with `/*` and end with `*/`

```
/*  
 * Now we need to do a number of steps.  
 * First we want to read a person's name.  
 * After that, we tell them the number of letters in the name.  
 */  
System.out.print("Your name: ");  
String name = getStringFromConsole();  
System.out.println("Your name " + name + " has " + name.length() + "characters");  
  
// That's it!  
}
```

DOCUMENTATION

Javadoc starts with `/**` and ends with `*/`

Automatically generate Javadoc documentation

Typically in front of classes and methods

DOCUMENTATION

```
/**
 * Compute the distance between two points in a two-dimensional space
 *
 * The distance between two points is obtained by means of a simple application of the Pythagorean theorem.
 * We get the distances between the two x coordinates and the two y coordinates and since the coordinate
 * system is orthogonal, we can simply apply  $c = \sqrt{a^2 + b^2}$  to obtain the distance between the points.
 *
 * @param firstX the x coordinate of the first point
 * @param firstY the y coordinate of the first point
 * @param secondX the x coordinate of the second point
 * @param secondY the y coordinate of the second point
 * @return the distance between the two points
 */
public static double computeDistance(double firstX, double firstY, double secondX, double secondY) {
    return Math.sqrt(Math.pow(secondX-firstX, 2) + Math.pow(secondY-firstY, 2));
}
```

DOCUMENTATION

Tips

- Document your **choices**
- Keep your documentation **up to date**
- **Always** write Javadoc when creating methods and classes

DOCUMENTATION

Reading Javadoc

Search for “Java 11 Math” in your browser:

<https://docs.oracle.com/en/java/javase/11/docs/api/java.base/java/lang/Math.html>

Search for “Java 11 String” in your browser:

<https://docs.oracle.com/en/java/javase/11/docs/api/java.base/java/lang/String.html>