Javadocs and UML

Colorado State University

Department of Computer Science

Slides Originally Created by Marcia Moraes (marcia.moraes@colostate.edu)

Announcements

- Reminder – readings are due **before** lecture

- Office Hours/Student Hours and Help Desks
    - Go to them! They make a difference

- **This week – Exam Module**
    - **You need to work to have this module open so you can do your Exams**
    - **Catch up if you are behind!**
    - **Ask for help, if you need! Don't hesitate to reach out!**
    - **TAs and myself are here to help you to succeed in this course!**
    - **Don't procrastinate!**

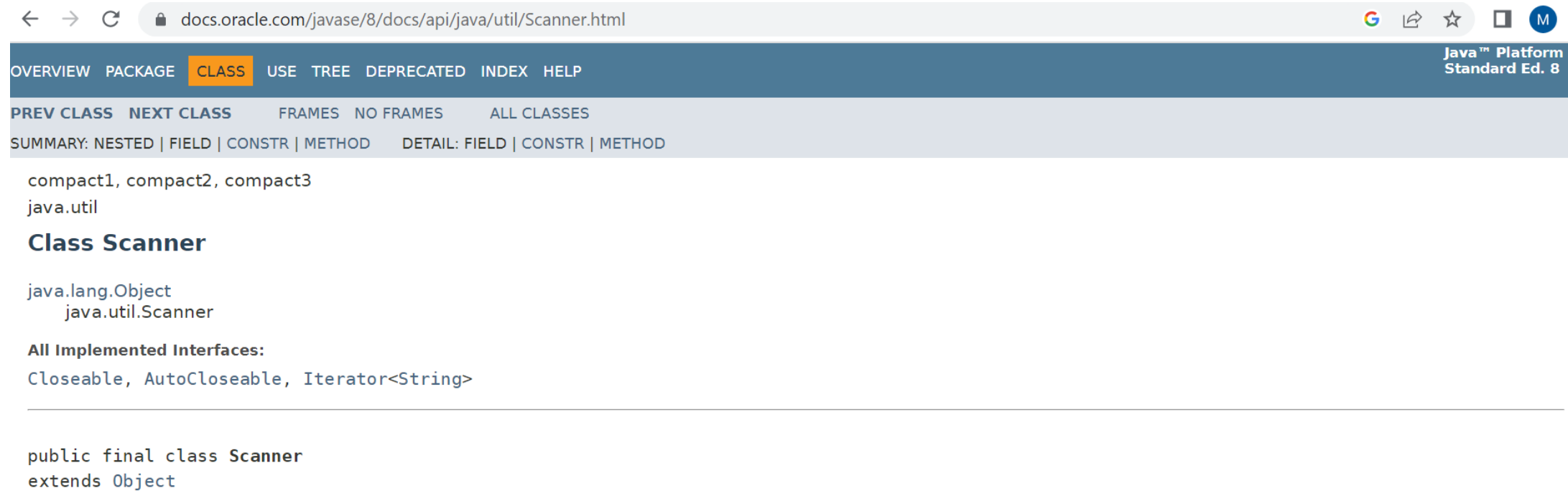Colorado State University

Javadoc

- Parses source code along with specially formatted comments to generate documentation.

- The documentation generated is known as an API (Application Programming Interface).

- Start with /** <enter>

- You will have

- /**

- *

- */

Common block tags used in Javadoc comments.

Block tag	Compatibility	Description
@author	classes	Used to specify an author.
@version	classes	Used to specify a version number.
@param	methods, constructors	Used to describe a parameter.
@return	methods	Used to describe the value or object returned by the method.
@see	all	Used to refer reader to relevant websites or class members.

Javadoc

- https://docs.oracle.com/javase/8/docs/api/java/util/Scanner.html

UML

- UML (Unified Modeling Language)

  - is a standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems

- Class Notation – Basics

  - Diagram is divided into three parts.

  - The top section is used to name the class.

  - The second one is used to show the attributes of the class.
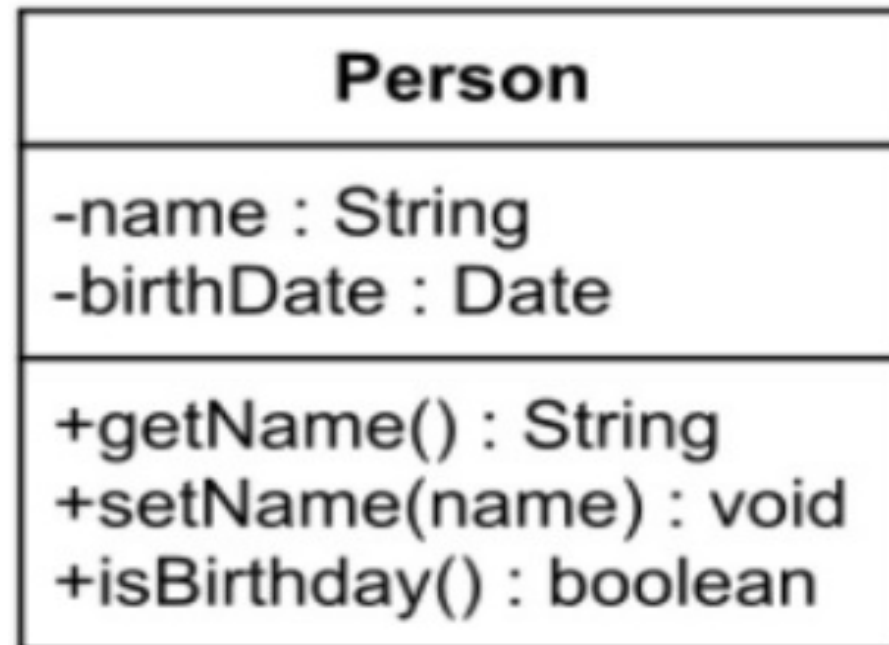
  - The third section is used to describe the operations/methods performed by the class.
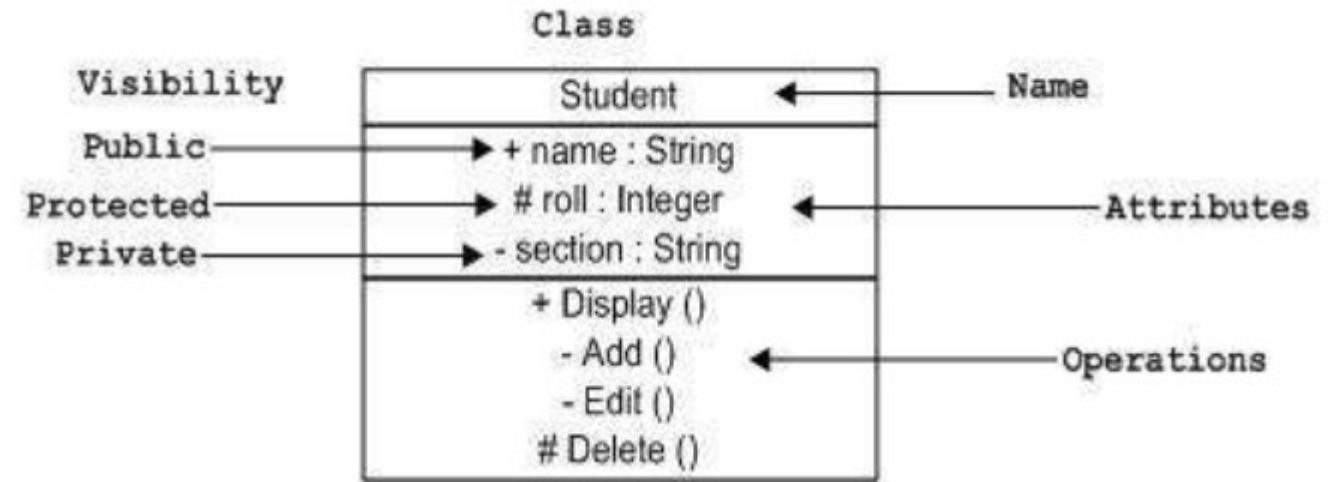
Group Practice Activity 1

- Use the UML class diagram presented below to identify the class name, attributes, and methods. Indicate the visibility of the attributes and methods.

Person
-name : String -birthDate : Date
+getName() : String +setName(name) : void +isBirthday() : boolean

Group Practice Activity 2

- Use the Javadocs description provided in the code below to implement the method and make the correct calls in the main.

```java
public class Practice2 {
    /**
     * Main method used to call other methods
     * @parameter String args[]
     */
    public static void main(String args[]){
        //write the instructions necessary to call the
        //method you will implement
    }
    /**
     * minMax method
     * Asks the user to enter the total number to be read.
     * Determines and print the min and max of the numbers read.
     * @param Scanner in
     */
}
```

Worksheet

- Attendance for today's class will be a worksheet

- Each table will receive a worksheet

- Remember to write the name of all participants in your table in a legible way ☺