

Javadocs and UML



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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!**



<https://jefmenguin.com/procrastination/>

Javadoc

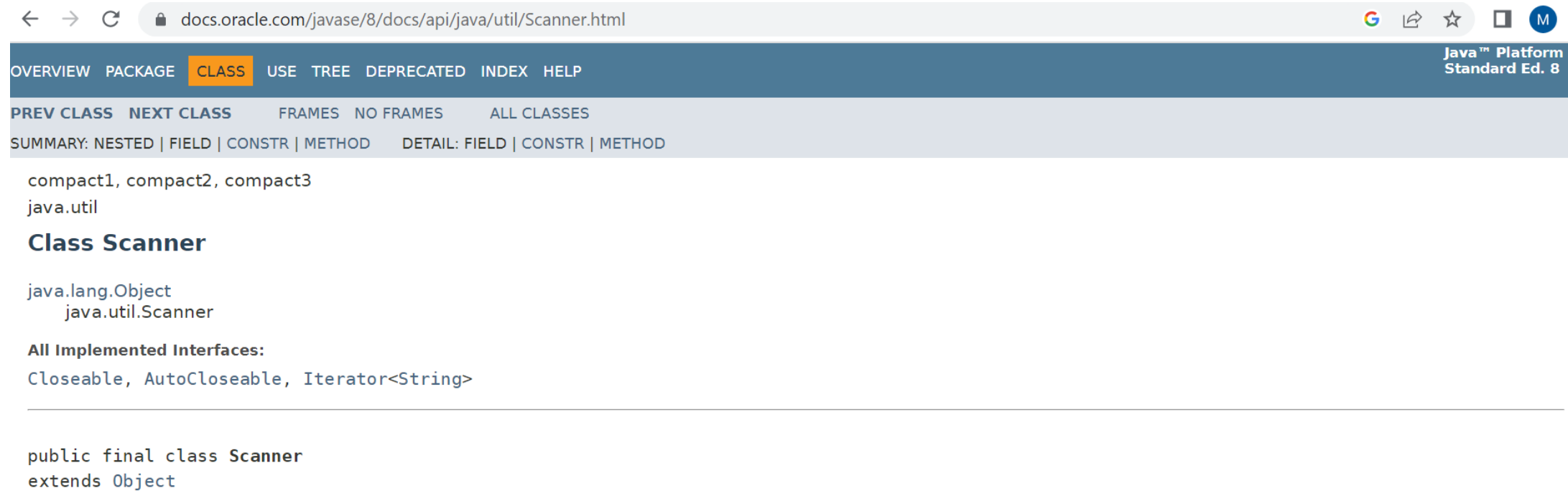
- Parses source code along with specially formatted comments to generate documentation.
- The documentation generated is known as an API (Application Programming Interface).
- Start with `/**` <enter>
- You will have
- `/**`
- `*`
- `*/`

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>



The screenshot shows the Javadoc page for the `java.util.Scanner` class. The browser address bar displays the URL `docs.oracle.com/javase/8/docs/api/java/util/Scanner.html`. The page header includes navigation links: OVERVIEW, PACKAGE, CLASS (highlighted), USE, TREE, DEPRECATED, INDEX, and HELP. The right side of the header indicates the version: Java™ Platform Standard Ed. 8. Below the header, there are links for PREV CLASS, NEXT CLASS, FRAMES, NO FRAMES, and ALL CLASSES. The main content area shows the class hierarchy: `compact1, compact2, compact3` and `java.util`. The class name **Class Scanner** is prominently displayed. Below it, the inheritance path is shown: `java.lang.Object` and `java.util.Scanner`. The section **All Implemented Interfaces:** lists `Closeable, AutoCloseable, Iterator<String>`. At the bottom, the class declaration is shown: `public final class Scanner` and `extends Object`.

← → ↻ docs.oracle.com/javase/8/docs/api/java/util/Scanner.html

OVERVIEW PACKAGE **CLASS** USE TREE DEPRECATED INDEX HELP

PREV CLASS NEXT CLASS FRAMES NO FRAMES ALL CLASSES

SUMMARY: NESTED | FIELD | CONSTR | METHOD DETAIL: FIELD | CONSTR | METHOD

compact1, compact2, compact3
java.util

Class Scanner

java.lang.Object
java.util.Scanner

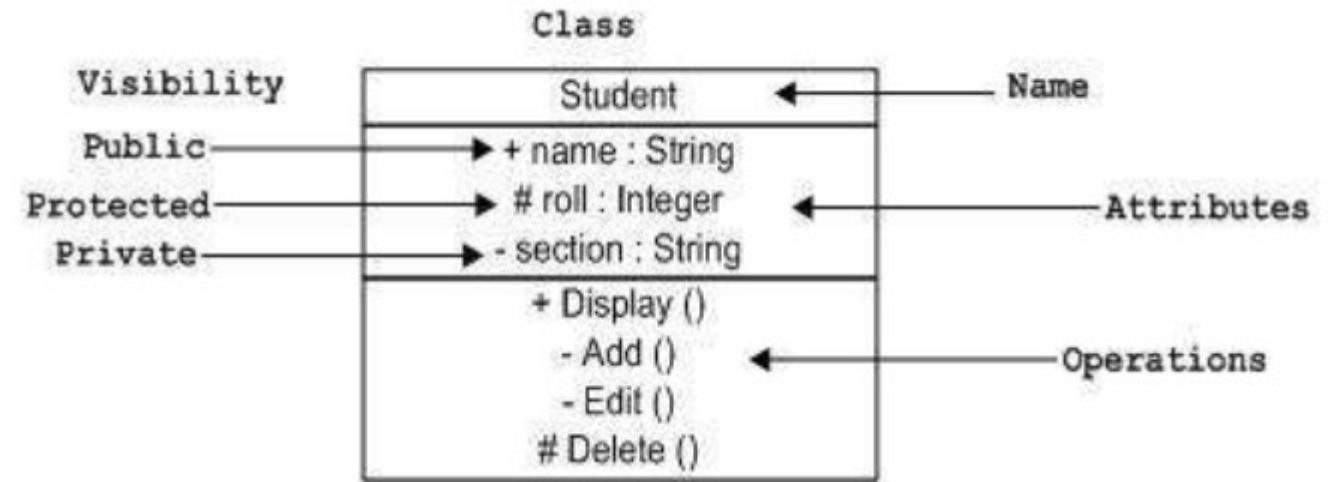
All Implemented Interfaces:
Closeable, AutoCloseable, Iterator<String>

public final class Scanner
extends Object

UML

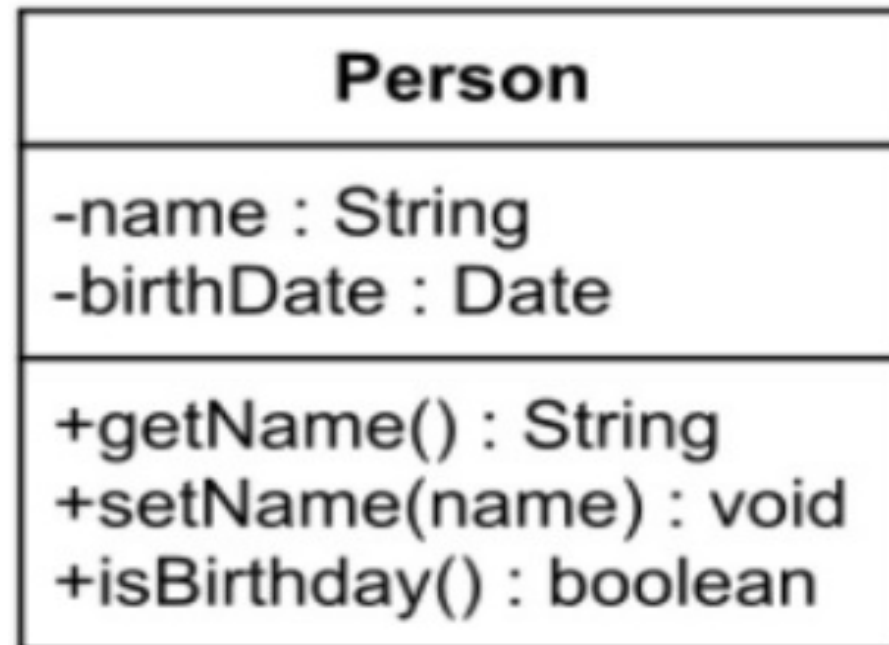
- UML (Unified Modeling Language)
 - is a standard language for specifying, visualizing, constructing, and documenting the artifacts of software systems

- 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.



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.

```
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 😊