

Use of JavaDoc

Step 1: Create HTML file from the Square example

Square.java

```
/**
 * Square is a class to model square.
 * <pre>
 *   Square c = new Square(3);
 *   c.enlarge(1);
 * </pre>
 * @author Bill Clinton (clinton@yahoo.com)
 * @version 0.1 1 January 2000
 */

public class Square {
    // attribute comment: --- 2%
    /**
     * s is the length of a square's side
     */
    private int s;

    // method comment: --- 3%
    /**
     * Enlarge the side of the square
     *
     * @param r the value to be added to the length of each side
     */
    public void enlarge(int r) {
        s += r;
    }

    // method comment: --- 3%
    /**
     * Compute the area of a square
     *
     * @return the area of the square
     */
    public double area() {
        return s * s;
    }
}
```

```
}  
}
```

Generate HTML files:

```
Yogeshwars-MacBook-Pro:week9_lab yogeshwarkulkarni$ javadoc *.java  
Loading source file Square.java...  
Constructing Javadoc information...  
Standard Doclet version 1.8.0_111  
Building tree for all the packages and classes...  
Generating ./Square.html...  
Generating ./package-frame.html...  
Generating ./package-summary.html...  
Generating ./package-tree.html...  
Generating ./constant-values.html...  
Building index for all the packages and classes...  
Generating ./overview-tree.html...  
Generating ./index-all.html...  
Generating ./deprecated-list.html...  
Building index for all classes...  
Generating ./allclasses-frame.html...  
Generating ./allclasses-noframe.html...  
Generating ./index.html...  
Generating ./help-doc.html...
```

Index.html

PACKAGE	CLASS	TREE	DEPRECATED	INDEX	HELP
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[PREV CLASS](#) [NEXT CLASS](#) [FRAMES](#) [NO FRAMES](#)

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

Class Square

java.lang.Object
 Square

```
public class Square  
extends java.lang.Object
```

Square is a class to model square.
 Square c = new Square(3);
 c.enlarge(1);

Constructor Summary

Constructors
Constructor and Description
Square()

Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type		Method and Description
double		<code>area()</code> Compute the area of a square
void		<code>enlarge(int r)</code> Enlarge the side of the square
Methods inherited from class java.lang.Object		
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait		

Constructor Detail

Square
<code>public Square()</code>

Method Detail

enlarge
<code>public void enlarge(int r)</code> Enlarge the side of the square Parameters: r - the value to be added to the length of each side
area
<code>public double area()</code> Compute the area of a square Returns: the area of the square

Step 2: Add JavaDoc to the Date class and create HTML file

Date.java

```
/**
 * Date is a class to model square.
 * <pre>
 *   Date c = new Date(4,4,2020);
 *   c.nextDay();
 *   c.theDayBeforeYesterday();
 * </pre>
 * @author Juilee Panse (juilee@yahoo.com)
 * @version 0.1 4 March 2020
 */

public class Date {
    /**
     * day is the day of Date
     */
    private int day;

    /**
     * month is the day of Date
     */
    private int month;

    /**
     * year is the year of Date
     */
    private int year;

    /**
     * The constructor to create an object
     * @param day is the day of Date
     * @param month is the month of Date
     * @param year is the year of Date
     */
    public Date (int day, int month, int year){
        this.day = day;
        this.month = month;
        this.year = year;
    }
}
```

```
/**
 * set the Day of Date
 * @param day of the Date
 */
public void setDay(int day){
    this.day = day;
}
```

```
/**
 * set the Month of Date
 * @param month of the Date
 */
public void setMonth(int month){
    this.month = month;
}
```

```
/**
 * set the year of Date
 * @param year of the Date
 */
public void setYear(int year){
    this.year = year;
}
```

```
/**
 * get the Day of Date
 * @return day of Date
 */
public int getDay(){
    return this.day;
}
```

```
/**
 * get the Month of Date
 * @return month of Date
 */
public int getMonth(){
    return this.month;
}
```

```
/**
 * get the year of Date
 * @return year of Date
 */
public int getYear(){
```

```

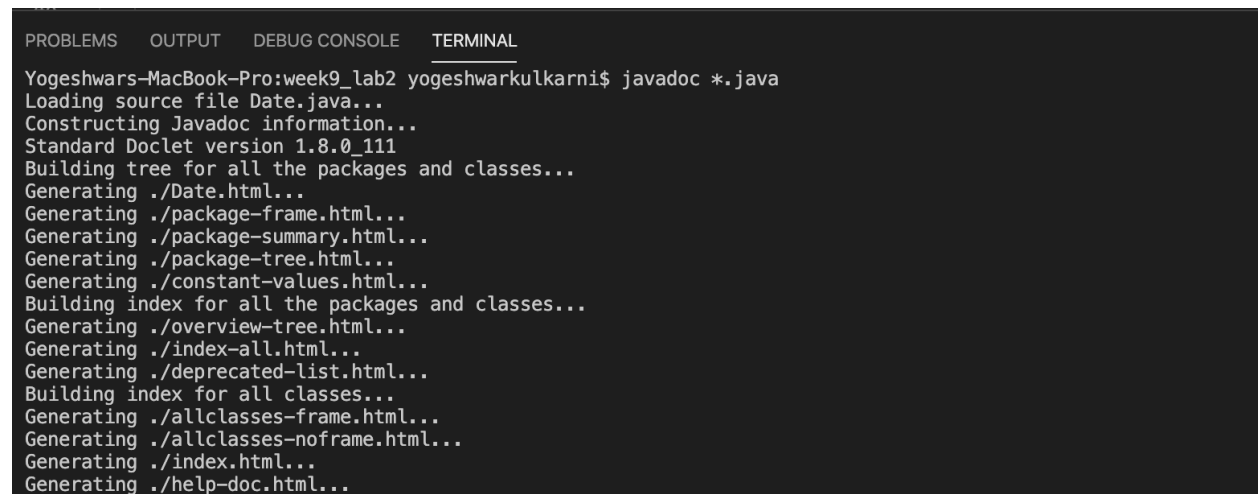
        return this.year;
    }

    /**
     * Change the Day to the next day
     */
    public void nextDay() {
        this.day += 1;
    }

    /**
     * Change the Day to the day before yesterday
     */
    public void theDayBeforeYesterday() {
        this.day -= 2;
    }
}

```

Generate HTML files:



The screenshot shows a terminal window with the following output:

```

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
Yogeshwars-MacBook-Pro:week9_lab2 yogeshwarkulkarni$ javadoc *.java
Loading source file Date.java...
Constructing Javadoc information...
Standard Doclet version 1.8.0_111
Building tree for all the packages and classes...
Generating ./Date.html...
Generating ./package-frame.html...
Generating ./package-summary.html...
Generating ./package-tree.html...
Generating ./constant-values.html...
Building index for all the packages and classes...
Generating ./overview-tree.html...
Generating ./index-all.html...
Generating ./deprecated-list.html...
Building index for all classes...
Generating ./allclasses-frame.html...
Generating ./allclasses-noframe.html...
Generating ./index.html...
Generating ./help-doc.html...

```

Index.html

PACKAGE

CLASS

TREE

DEPRECATED

INDEX

HELP

PREV CLASS

NEXT CLASS

FRAMES

NO FRAMES

SUMMARY: NESTED | FIELD | CONSTR | METHODDETAIL: FIELD | CONSTR | METHOD

Class Date

java.lang.Object
Date

public class Date
extends java.lang.Object

Date is a class to model square.
Date c = new Date(4, 4, 2020);
c.nextDay();
c.theDayBeforeYesterday();

Constructor Summary

Constructors

Constructor and Description

Date(int day, int month, int year)
The constructor to create an object

Method Summary

All MethodsInstance MethodsConcrete Methods

Modifier and Type	Method and Description
int	getDay() get the Day of Date
int	getMonth() get the Month of Date
int	getYear() get the year of Date
void	nextDay() Change the Day to the next day
void	setDay(int day) set the Day of Date
void	setMonth(int month) set the Month of Date
void	setYear(int year) set the year of Date
void	theDayBeforeYesterday() Change the Day to the day before yesterday

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Date

```
public Date(int day,
            int month,
            int year)
```

The constructor to create an object

Parameters:

day - is the day of Date

month - is the month of Date

year - is the year of Date

Method Detail

setDay

```
public void setDay(int day)
```

set the Day of Date

Parameters:

day - of the Date

setMonth

```
public void setMonth(int month)
```

set the Month of Date

Parameters:

month - of the Date

setYear

```
public void setYear(int year)
```

set the year of Date

Parameters:

year - of the Date

getDay

```
public int getDay()
```

get the Day of Date

Returns:

day of Date

getMonth

```
public int getMonth()
```

get the Month of Date

Returns:

month of Date

getYear

```
public int getYear()
```

get the year of Date

Returns:

year of Date

nextDay

```
public void nextDay()
```

Change the Day to the next day

theDayBeforeYesterday

```
public void theDayBeforeYesterday()
```

Change the Day to the day before yesterday