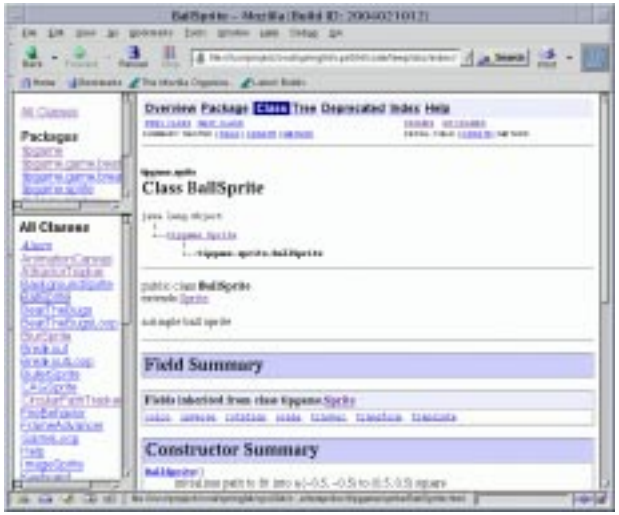
Javadoc



The Plan

- What is Javadoc?
- Writing Javadoc comments
- Using the Javadoc tool
- Practice

What is Javadoc?

Javadoc is a way to comment your code that enables automatic generation of web pages that document your code.

Why use Javadoc?

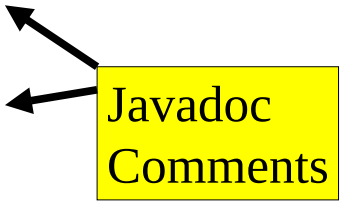
- **It's much faster than generating webpages documenting your code.**
- **It's standard documentation which means it's easy to use and the structure is given.**

Writing Javadoc Comment

- **Javadoc comments start with /** and end with */**
- **The placement of the comment is important.**
- **The following can be commented:**
  - **classes**
  - **methods**
  - **instance variables**
  - **static variables**

Writing Javadoc Comment

```
package tipgame;
/**
 * Used to enable timed events.
 * @author Jam Jenkins
 */
public interface Alarm
{
   /** creates alarm */
   public void alarm();
}
```



Commenting a Class

- Put the comment immediately before the class declaration.
- Briefly describe the purpose of the class in 2-3 sentences.
- Optionally include
  - @author tag
  - @version tag
  - others

Commenting a Class

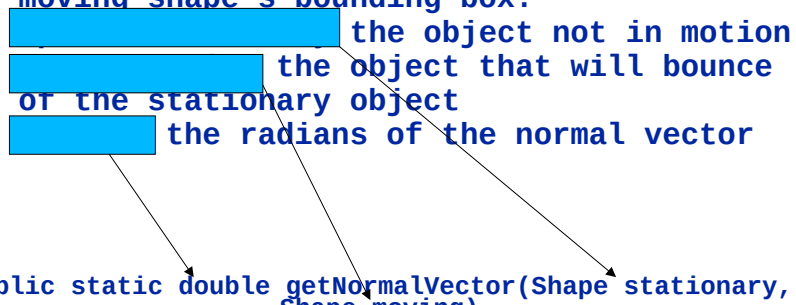
```
/**
 * This class uses polling rather
 * than events for keyboard input.
 *
 * @author Jam Jenkins */

public class Keyboard implements
```


Commenting a Method

- Put the comment immediately before the method declaration.
- Briefly describe the purpose of the method in a short phrase or 2-3 sentences. Include more detail if necessary
- Include these tags if needed
  - @param name – describes parameter
  - @return – describes the return value

Commenting a Method

```
/** Simulates the surface normal used for
 * bouncing the moving object off of the
 * stationary object.  Normal is in the
 * direction from the surface of the
 * stationary object to the center of the
 * moving shape's bounding box.
 * [redacted]  the object not in motion
 * [redacted]  the object that will bounce
 * of the stationary object
 * [redacted]  the radians of the normal vector
 *
```



```
public static double getNormalVector(Shape stationary,
                                     Shape moving)
```


Commenting Instance and Static Variables

- Put the comment immediately before the variable declaration.
- Briefly describe the purpose of the variable in a short phrase. Include more detail only if absolutely necessary.
- No tags needed.

Commenting Instance and Static Variables

```
/** shape should initially be centered at (0, 0) */
private GeneralPath shape;

/** transformed shape */
private GeneralPath shapeTransformed;

/** applied to the shape prior to drawing it */
private AffineTransform transform;

/** the fill color of the shape, black by default */
protected Color color;
```


For more information...

Visit the article:

How to Write Doc Comments for the Javadoc Tool

`http://java.sun.com/j2se/javadoc/writingdoccomments/index.html`

Generating HTML using the Javadoc Tool in Eclipse

1. Highlight the project you want to javadoc in the Project Explorer
2. Select File->Export->Javadoc
3. Under the 'Javadoc command:' enter the location of javadoc if it is not already there. The location should be something like: C:\Program Files\Java\jdk1.5.0\bin\javadoc.exe
4. For the 'visibility' select Private
5. Select 'Use Standard Doclet'
6. For the 'Destination', enter where you want the html code generated to go. The html in the location you choose will be overwritten with the javadoc generated HTML, so make sure not to choose a place which already has an index.html you'd like to keep.
7. Click on 'Finish'
8. If you get the source files out of sync with file system error then say okay, highlight your project, right click and select refresh. This will resync your files. Repeat the instructions above.

Practice

- Put Javadoc comments in one of the previous homework assignment's source code.
- Generate the javadoc HTML files
- Post the HTML files to your web site. When transferring the files, be sure to transport them into an empty directory. DO NOT transfer them directly into your public_html page because this will overwrite your index.hml. Instead transfer them into a subdirectory of public_html.