

ANNOTATIONS AND JAVA DOC

JAVA DOC

- There is a tool called java doc that will help to prepare the documentation for the classes.
- Java provides some tags for java documentation those are known as java doc tool.
- The tags for class or a package are:
 - @author:
Adds the author name of the class.
 - @version:
Adds a version subheading with specified version text to generated docs.
 - @since:
To mention when was the version written or how long it may be valid.
 - @see:
Adds a see also heading with a link for example to see the references to the given link.
- The tags for methods are:
 - @param:
To mention the parameters taken by particular product.
 - @return:
To mention the value returned by the method.
 - @throws/@exception:
To know the exception thrown by the method.
 - @deprecated:
To mention whether the method is deprecated or not that is the method may not be used longer.

- **@code:**
Displays text in code font without interpreting the text as HTML mark-up or nested java doc tags.
- The other tags available are:
 - **@link:**
To provide the link for particular resource.
 - **@value:**
To provide value for any static variable or a member.
 - **@serial:**
To mention the serial id for serialization.

BUILT-IN ANNOTATIONS IN JAVA

- Annotations are used for giving attributes or defining the attributes for a class or a interface or methods.
- Annotations are useful for giving meta data to class or interface or a method.
- Built-in annotations can be categorised into two:
 - ➔ Applied to code:

These are set of annotations applied upon the code.so, this type of annotation gives the hint to the compiler so that it avoids showing errors and warnings.

The in-built annotations applied to the code are:

 - **@Override:**
It informs the compiler that the element is meant to over ride an element declared in a superclass.
 - **@deprecated:**
It indicates that the marked element is deprecated and should no longer be used.

- **@FunctionalInterface:**

Indicates that the type declaration is intended to be a functional interface

- **@SuppressWarnings:**

It tells the compiler to suppress specific warnings that it would otherwise generate.

- **@SafeVarArgs:**

When it is applied to a method or a constructor, it asserts that the code does not perform potentially unsafe operations on its varargs parameter.

➔ **Applied to other annotations:**

These are set of annotations applied upon user-defined annotation.

The different user-defined annotations are:

- **@Retention:**

It specifies how the marked annotations are stored.

- **@Documented:**

It indicates that whenever the specified annotation is used those elements should be documented using java doc tool

- **@Target:**

It marks another annotation to restrict what kind of java element the java elements can be applied to.

- **@Inherited:**

It indicates that the annotation type can be inherited from super class.

- **@Repeatable:**

It indicates that the marked annotation can be applied more than once to the same declaration or type used.

➤ **Meta data:**

Metadata is "data that provides information about other data". In other words, it is "data about data."