**Commonly Used (Basic) Annotations In JAXB**

* We Know That Annotations provide metadata on
* Packages
* Classes
* Fields and
* Methods
* Also each annotation type has its own set of annotation elements
* JAXB can be used in two ways
* Create Java Beans on our own by using JAXB Annotation
* Generating & Using Java Beans using XSD

1. **@XmlRootElement**

* A class that describes an XML element that is to be a top-level element, should be annotated with XmlRootElement
* This annotation should be used with a Class Name
* When a top level class is annotated with the @XmlRootElement annotation, then its value is represented as XML element in an XML
* It has 2 Optional Annotation Elements

1. name :-

* It’s the name of the XML root element
* Default name is derived from the class name

1. namespace :-

* “namespace” name of the XML element
* default is the empty namespace

2. **@XmlElement**

* This annotation helps to define an element in an XML
* This Annotation should be used with Class Variables/Getter Methods
* By Default JavaBeans Property Names are used as element names
* The “name” element of this annotation defines name for an Element in XML.

3. **@XmlAttribute**

* specifies the attribute for XML element
* This Annotaion should be used with class variables / Getter Methods
* By default JavaBeans Property Names are used as Attribute names.

4. **@XmlType(propOrder = { “field2”,”field”,..})**

* This annotation should be used with a Class Name
* This annotation with element “propOrder” allows to define the order in which the fields are written in an XML file.

**5. @XmlElementWrapper**

* XmlElementWrapper generates a wrapper element around XML representation.
* This is primarily intended to be used to produce a wrapper XML element around collections
* by default JavaBeans Property Names are used as Element Wrapper name
* the “name” element of this annotation defines name for an Element in XML

**6. @XmlAccessorType**

* This annotation defines the way class level annotation needs to be treated.
* If @XmlAccessorType (XmlAccessType.FIELD) then Class Variables should have JAXB Annotations
* If @XmlAccessorType (XmlAccessType.PROPERTY) then Class Getter Methods should have JAXB Annotations
* if @XmlAccessorType (XmlAccessType.NONE) then either Class Getter Methods/Class Variables (one of them) should have JAXB Annotations
* This annotation should be used with a Class Name along with @XmlRootElement
* If we have JAXB annotations for Class Getter Methods then this annotation can be avoided.