XML (eXtensible Markup Language)

* SGML (Standard Generalized Markup Language)
  + From the 50s
  + End tags were optional
* Good XML documents (valid xml document) have DTD to start of the xml document
* DTD(Data Type Definition)
  + It defines what tags belong in this documents
  + How those tags are related
* XML namespaces
  + If you have two tags of the same name you can give them different namespaces so that the DTD does not confuse the two

<employee>

<name>Adam</name>

<phone>5555555555</phone >

</employee>

<company>

<department>

<name:company>training</name>

<phone:company></phone>

<employee>

<name : employee>Adam</name>

<phone :employee>5555555555</phone >

</employee>

<employee>

<name>Ricky</name>

<phone>5555555555</phone >

</employee>

<department>

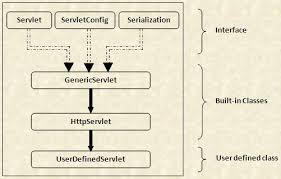
<department>

<name>sales</name>

<phone></phone>

<department>

</company>



* Servlet methods
  + doPut
  + doPost
  + doDelete
  + doGet
    - service()
      * delegates the request doGet or doPost or doDelete based on the http verb
      * Oracle mentions that there is no need to override this method
* RequestDispatcher methods
  + Forward
    - Move the http request and response objects to another servlet
    - One request and response object
  + Include
    - Copy the http request and response objects into another servlet
    - BOTH servlets actually process the request

Thread Lifecycle

1. New
   1. Create the thread object new keyword
2. Runnable
   1. Thread.start()
   2. Signals to Java that you CAN start running this thread
3. Running
   1. Executing doing its stuff
4. Blocked (does not always happen)
   1. Occurs when a thread is trying to access something but can’t because another thread is blocking it
5. Terminated
   1. Thread has finished no more code for the thread to execute

Final

* Java key word
* On a variable means that it is a constant
* On a method cannot be overridden
* On a class cannot be inherited

Finally

* Try catch finally block
* Block of code that always executes

Finalize

* A method that gets called when a object is garbage collected
* You should never use it