**Assignments -- 12th April**

**What is Localhost?**

A localhost is **the standard host name provided to the address of the local computer in computer networking**. The localhost denotes the host name used in communicating with the loopback network interface; that is, with software on the computer that originated the transmission.

**What is 127.0.0.1 Ip address?**

The address 127.0. 0.1 is the **standard address for IPv4 loopback traffic**; the rest are not supported by all operating systems. However, they can be used to set up multiple server applications on the host, all listening on the same port number. The IPv6 standard assigns only a single address for loopback: ::1.

**What do you mean by loopback?**

Loopback is the routing of electronic signals or digital data streams back to their source without intentional processing or modification. It is primarily a means of testing the communications infrastructure.

**What is a Port?**

 When a computer system seeks to connect to another computer, the port serves as a communication endpoint. It is also possible for different services running on the same computer to expose various ports and communicate with one another using these ports.

**What are reserved ports?**

**Port numbers in the range 1 to 1023 are considered “reserved”**

**What port is reserved for http**?

**Port 443**: This is the Hypertext Transfer Protocol (HTTP) Secure that combines the HTTP with a cryptographic protocol, which can be used for payment transactions and other secure transmission of data from Web pages.

**What port is reserved for https?**

**Port 443**

**Assignments -- 13th April**

**What is the difference between IP address and Mac Address?**

The IP address of a device mainly helps in identifying the connection of a network (using which the device is connecting to the network). The MAC Address, on the other hand, ensures the computer device's physical location. It helps us to identify a given device on the available network uniquely.

**What is the default port for Apache?**

**Port 80.**

**What is JDK?**

The JDK is a development environment for building applications, applets, and components using the Java programming language. The JDK includes tools useful for developing and testing programs written in the Java programming language and running on the Java platform.

It contains JRE plus Development tools.

**What is JRE?**

It is the most common environment available on devices to run java programs. The source Java code gets compiled and converted to Java bytecode. If you wish to run this bytecode on any platform, you require JRE. The JRE loads classes, verify access to memory, and retrieves the system resources. JRE acts as a layer on the top of the operating system.

**##Assignments -- 14th April**

**What is a Data Center?**

 A data center is a physical facility that organizations use to house their critical applications and data. A data center's design is based on a network of computing and storage resources that enable the delivery of shared applications and data. The key components of a data center design include routers, switches, firewalls, storage systems, servers, and application-delivery controllers.

**What are the different types environments discussed in the class?**

1. Pre-Prod Environment.
2. Production Environment.
3. Test Environment.

**What are the different operations teams discussed in the class?**

1. Admin Team.
2. Network Team.
3. DBA Team.
4. Security Engineering Team.

**Who are Deployment/Build engineers?**

**What kind of work is done by developers?**

They build the code and compile and execute.They do User testing.

**What kind of work is done by testers?**

They test all the application that is working properly or not according to the client requirements and they write test cases.

**Change the tomcat port to 9999, 7777, 8888 and test.**

**##Assignments -- 15th April**

**What is a Java Archive file?**

JAR (Java Archive) is **a platform-independent file format that aggregates many files into one**. Multiple Java applets and their requisite components (. class files, images and sounds) can be bundled in a JAR file and subsequently downloaded to a browser in a single HTTP transaction, greatly improving the download speed.

**What do you mean by compiling a code?**

A [compiler](https://www.thoughtco.com/definition-of-compiler-958198) is a [program](https://www.thoughtco.com/what-is-a-programming-language-958332) that translates human-readable [source code](https://www.thoughtco.com/source-code-definition-958200) into computer-executable machine code.

**What happens when you compile a code?**

A compiler takes the program code (source code) and **converts the source code to a machine language module (called an object file)**. Another specialized program, called a linker, combines this object file with other previously compiled object files (in particular run-time modules) to create an executable file.

**What are jar, war, ear files and their differences?**

A **JAR** file is a file with Java classes, associated metadata, and resources such as text and images aggregated into one file.

A **WAR** file is a file that is used to distribute a collection of JAR files, JSP, Servlet, XML files, static web pages like HTML and other resources that constitute a web application.

An **EAR** file is a standard JAR file that represents the modules of the application, and a metadata directory called META-INT which contains one or more deployment descriptors.

**##Assignments -- 16th April**

1. **How do you deploy a war file on tomcat server?**
2. Copy the updated .war files such as accounts.war, mbaasportal.war, and workspace.war.
3. Paste the files in the following location:
   1. For Tomcat, <User install directory>\apache-tomcat-9.0.33\webapps.
   2. For Tomcat, add the jboss-client.jar
      1. Copy the .jars from \QuantumFabric\_Plugins\middleware\
      2. Paste the jars into  <TOMCAT-HOME>\lib
4. Configure your app server (Tomcat) as a service. This step is optional.
5. **How do you access a custom html file from tomcat server?**