Bootcamp TOC

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| 1 | UNIX and Linux Essentials - Classroom (Campus Only) |
| 2 | XML Fundamentals - Classroom (Campus Only) |
| 3 | Oracle Database 19c: SQL workshop - Classroom (Campus Only) |
| 4 | Fundamentals of Java 17 - Classroom (Campus Only) |
| 5 | JPA with Eclipselink - Classroom (Campus Only) |
| 6 | Oracle WebLogic Server 14c: Administration I - Classroom (Campus Only) |
| 7 | REST Services & Webservices - Classroom (Campus Only) |
| 8 | Micro Services Architecture, Spring Boot features, Kafka (Basics) - Classroom (Campus Only) |
| 9 | Developing Web Applications with JavaScript, HTML5, and CSS  - Classroom (Campus Only) |
| 10 | Ojet and Angular JS, Node JS and Knockout JS - Classroom (Campus Only) |
| 11 | Introduction to Devops - Classroom (Campus Only) |

* Unix
* XML
* Oracle Database
* Java 17
* Eclipse Link for JPA
* Weblogic Server
* WebService
* Microserivce
* Web - HTML, CSS & Javasccript
* OJET
* DevOps

Case Study -> Incremental based approach

Unix

* It is a powerful OS which can be connected by multiple users at a time
* Terminal Based

:wq : Write & Quit

:q : Quits without saving

i : When you open vi editor, type “i” to insert the content

cp: to copy

mv: to rename

touch : to create files

ls : to list

vi : to edit

echo : to print

cat > : to overwrite

cat >> : to append

Search for below software in oracle-emp

1. Git -> present
2. JDK 17 -> present
3. Eclipse IDE for enterprise ->
4. Oracle Database 19c -> You must use pc name which is less than 14 characters & while installing you must use mobile hotspot
5. Weblogic Server
6. VS Code

Install Git -> Git can also be used to try all the Unix related commands, the main purpose of GIT is to collaborate | integrate everyone’s work

XML: Extensible Markup Language, it is mainly used to transform the data as well to configure the applications

Transforming: One Application can share the data in XML and another application parses the XML and converts to the structure it understands

App1 (Java) XML App2 (C#)

Application configuration: When the application want to connect to the database or want to configure server properties then they can use XML as it’s structure is strict.

ex:  
<server>  
 <port>9090</port>  
 <context-path>/api</context-path>  
 <protocol>HTTP</protocol>  
</server>

Rules of XML

1. An XML file must use tags
2. You need to have only one root tag
3. Tags must nest properly, below XML is invalid because of improper nesting

<server>  
 <port>9090 <context-path>/api</port></context-path>  
</server>

1. You can create your own XML tags & can also define/declare those tags in a schema

Two types of XML

1. Well formed that follows all the basic rules like proper nesting, case sensitivity, only one root tag
2. Valid XML: this follows Well formed + XML schema

XML Schema are of 2 types

1. DTD - Document Type Definition - Plain text syntax
2. XSD - XML Schema Definition - Uses XML syntax

XML Schema: These are the rules that declares the XML elements & their attributes, so that you can only use the tags & attributes declared in the Schema

Syntax of DTD:

<!ELEMENT element\_name (#PCDATA or child\_element) >  
<!ATTLIST element\_name attribute\_name value\_type some\_option >

PCDATA: Parsed Character Data -> You can’t use any reserved symbols here  
value\_type of an attribute can be CDATA: Character Data  
some\_option: can be #REQUIRED, #IMPLIED, #FIXED

#REQUIRED: Mandatory

#IMPLIED: Optional

#FIXED: Constants like bank\_name, college\_name,

Wild cards like: \*, +, ? would specify how many times a tag can repeat

“\*” : 0 or more  
“+” : 1 or more  
“?” : 0 or 1

XSD: XML Schema Definition, It is also used to apply schema rules, but it has wider range of types & occurrences, the rule is done using UI

XSD has many types like

* integer, long, float, string
* complex type : a tag that has child tags