**DevOps Build Engineer –Zycus Level 1 -- Assignment**

1 . Write a build script to generate 3 different flavors (variations) of the artifact (jar , war, ear ) for the same code base with the only change of configuration files amongst them (properties , xml , txt ..etc) using any build tool (ANT ,Maven , Gradle).

Ans : Suppose we have parent project with build.xml and subfolders containing individual modules

build.xml

ear-module/

ejb-module/

web-module/

The build.xml calls ant for each module and then assembles them together to result ear.

This is sample from single-ant having multiple modules. I prefer to have individual ant files in each module that is called from master folder. Dependencies can be tricky in ant. This is probably the reason why people favour maven/graddle over ant.

<target name="war" depends="ejb">

<mkdir dir="${build.dir}/war" />

<path id="web-classpath">

<path refid="classpath" />

<file file="${build.dir}/${ant.project.name}.jar" />

</path>

<javac srcdir="web-module/java" classpathref="web-classpath" destdir="${build.dir}/war" debug="true"

source="${compiler.source.level}" target="${compiler.target.level}" encoding="${src.encoding}"/>

<war destfile="${build.dir}/${ant.project.name}.war" webxml="web-module/war/WEB-INF/web.xml">

<webinf dir="web-module/war/WEB-INF">

<exclude name="web.xml"/>

<exclude name="classes/\*\*"/>

<exclude name="lib/\*\*"/>

</webinf>

<classes dir="${build.dir}/war" />

<lib dir="web-module/war/WEB-INF/lib"/>

<fileset dir="web-module/war">

<exclude name="WEB-INF/\*"/>

<exclude name="META-INF/\*"/>

</fileset>

</war>

</target>