1. **Glassfish server installation and running java servlet application:**

I. Checking if java is installed in the system:

 # java -version

ii. If java is not installed we can install it by running the command :

#sudo apt-get install openjdk-8-jre

```
manish@manish-pc:~$ java -version
openjdk version "1.8.0_292"
OpenJDK Runtime Environment (build 1.8.0_292-8u292-b10-0ubuntu1~20.04-b10)
OpenJDK 64-Bit Server VM (build 25.292-b10, mixed mode)
manish@manish-pc:~$
```

iii. We need to locate java's installation directory, export a **JAVA_HOME** variable from the ~/.profile file and append its path to bin directory to our PATH variable in ~/.profile file.

```
export FISH="/opt/glassfish5/bin"
export GO_PATH="/usr/local/go/bin"
export JAVA_HOME="/usr/lib/jvm/java-1.8.0-openjdk-amd64"
export CHROME_DRIVER="/home/manish/Documents/apps"
export PATH="$FISH:$PATH:$FLUTTER_PATH:$JAVA_HOME/bin:$ADB_PATH:$CHROME_DRIVER:$GO_PATH"
```

We can apply the changes running :

 # source ~/.profile

Iv. Now we can download and install java glassfish server:

The java glassfish server 4.4.1 zip file was downloaded from:

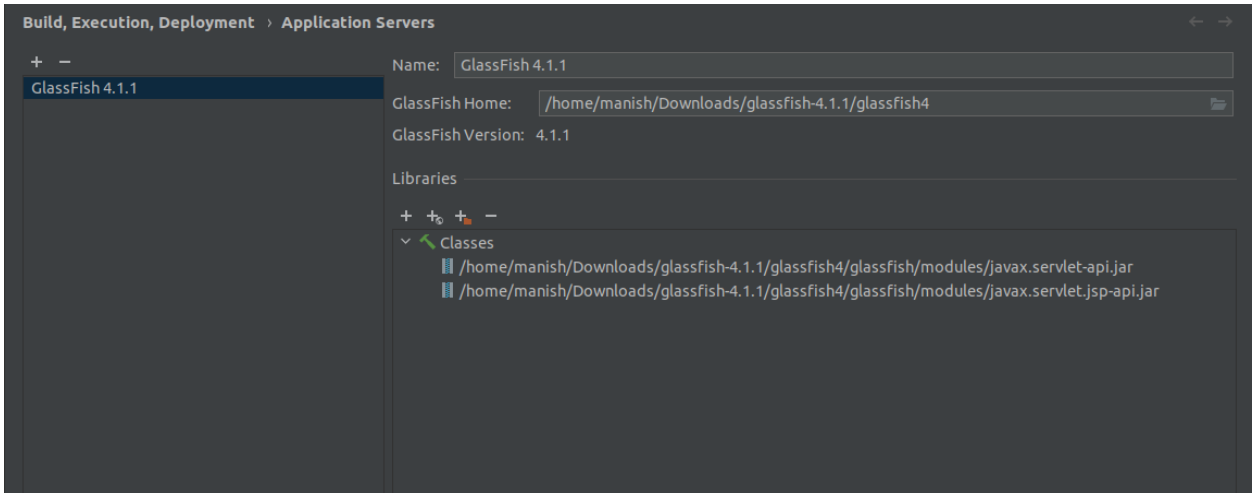
https://download.oracle.com/glassfish/4.1.1/release/glassfish-4.1.1.zip

The glassfish-4.1.1.zip file was extracted using the **unzip** command**:**

 # unzip glassfish-4.1.1.

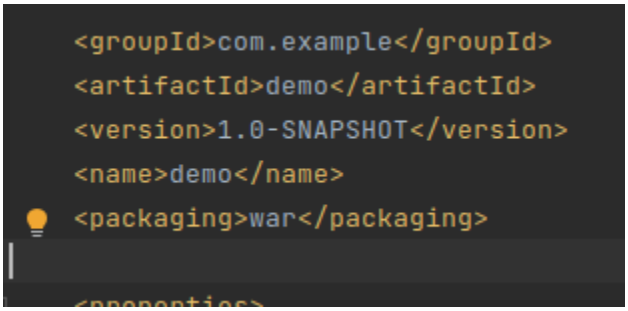
V. Created a new java 8 ee web application with maven using Intellij idea

Vi. In intellij's application server settings, added glassfish's extracted path.



Vii. Edited the pom.xml to set packaging to war

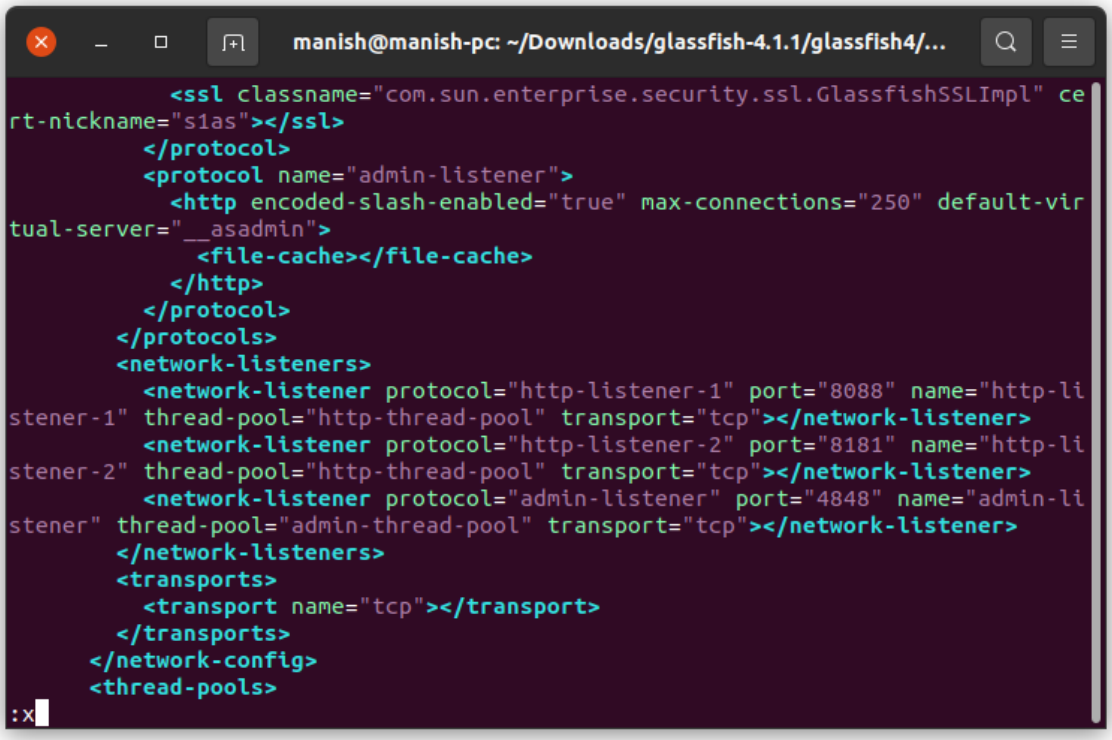
 # <packaging> war</packaging>



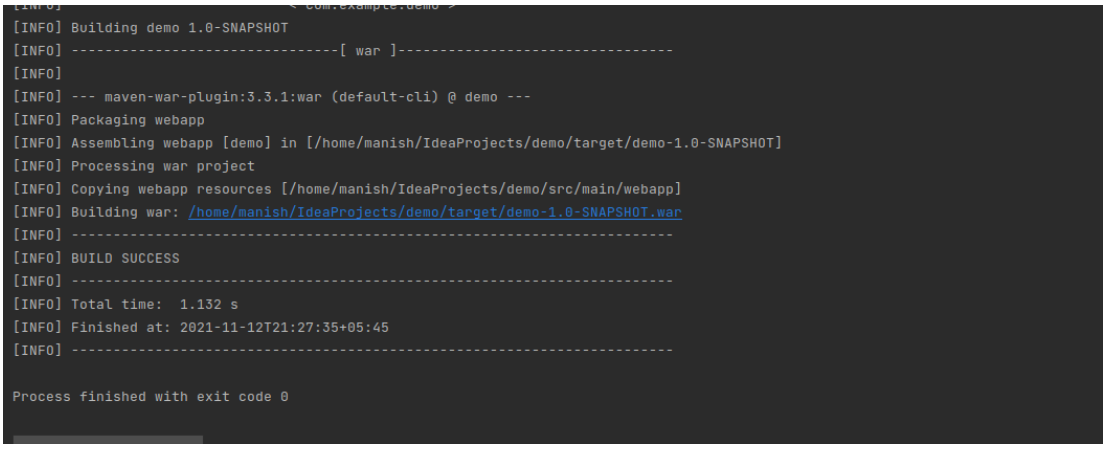
Viii. Editied the domain.xml file and edited the http server port from 8080 to 8088.

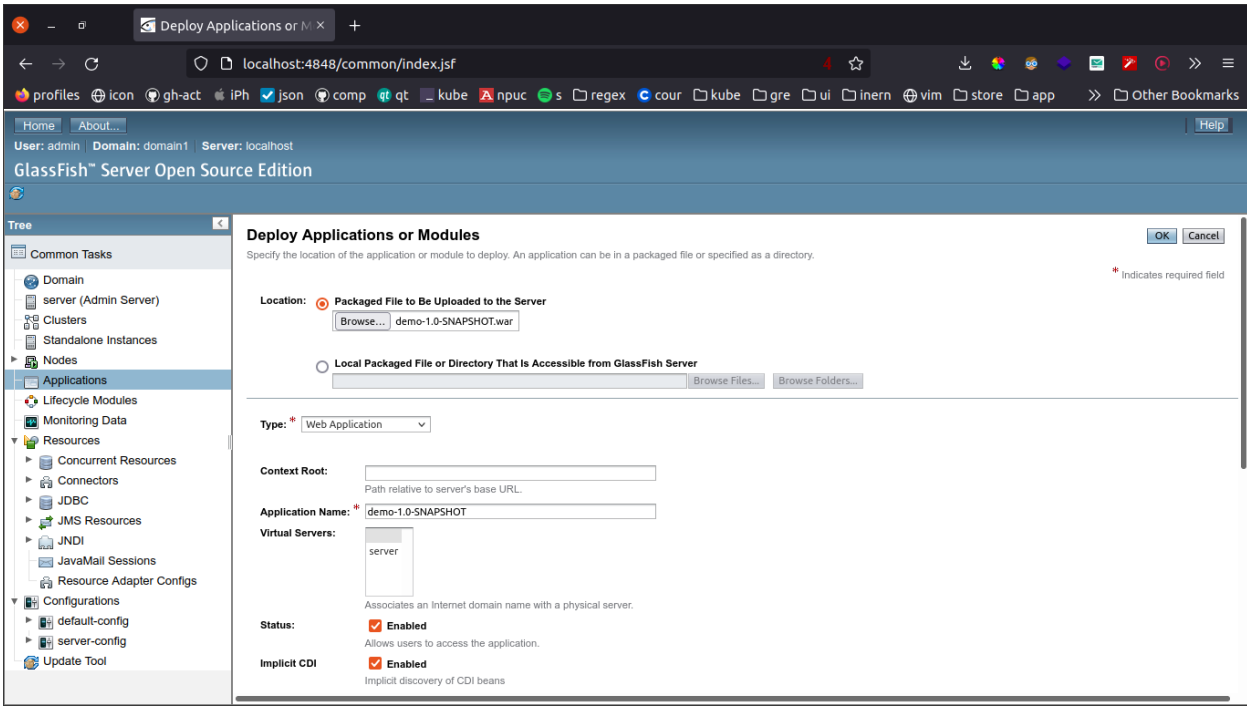
The config file is present in :

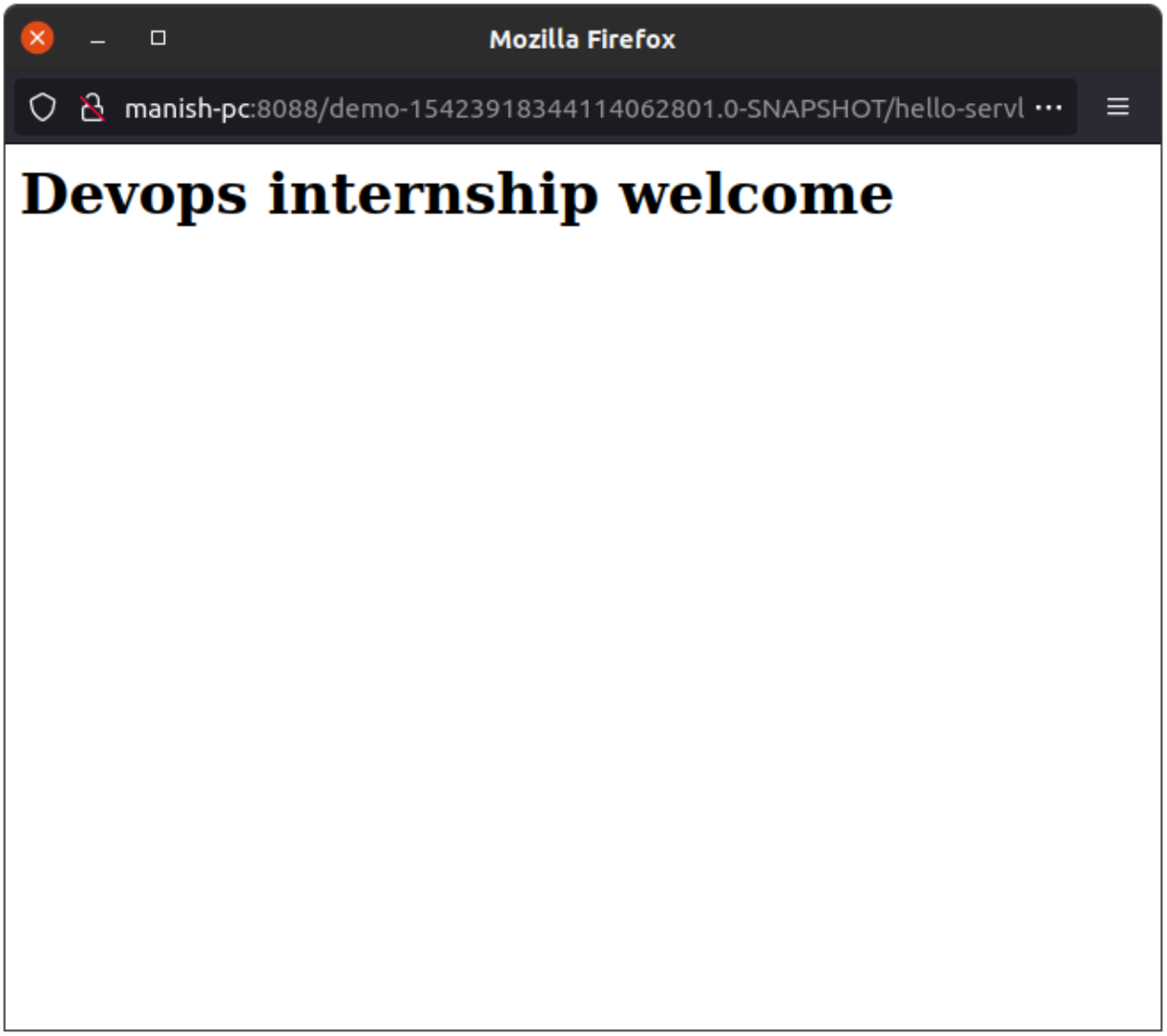
glassfish-4.1.1/glassfish4/glassfish/domains/domain1/config/



ix. opened the admin page of the glassfish server and uploaded the demo war file generated in the source project folder using maven's war plugin.




Deploy Applications or M
localhost:4848/common/index.jsf
profiles icon gh-act iPh json comp qt kube npuc s regex cour kube gre ui inern vim store app Other Bookmarks
Home About...
Help
User: admin | Domain: domain1 | Server: localhost
GlassFish™ Server Open Source Edition
Tree
Common Tasks
Domain
server (Admin Server)
Clusters
Standalone Instances
Nodes
Applications
Lifecycle Modules
Monitoring Data
Resources
Concurrent Resources
Connectors
JDBC
JMS Resources
JNDI
JavaMail Sessions
Resource Adapter Configs
Configurations
default-config
server-config
Update Tool
Deploy Applications or Modules
OK
Cancel
Specify the location of the application or module to deploy. An application can be in a packaged file or specified as a directory.
* Indicates required field
Location:
Packaged File to Be Uploaded to the Server
Browse...
demo-1.0-SNAPSHOT.war
Local Packaged File or Directory That Is Accessible from GlassFish Server
Browse Files...
Browse Folders...
Type: *
Web Application
Context Root:
Path relative to server's base URL.
Application Name: *
demo-1.0-SNAPSHOT
Virtual Servers:
server
Associates an Internet domain name with a physical server.
Status:
Enabled
Allows users to access the application.
Implicit CDI
Enabled
Implicit discovery of CDI beans


Mozilla Firefox
manish-pc:8088/demo-1542391834411406280 1.0-SNAPSHOT/hello-servl
Devops internship welcome


JSP - Hello World — Mozilla Firefox
manish-pc:8088/demo-1542391834411406280 1.0-SNAPSHOT/
Hello Devops internship!
Hello Servlet