

## Devops

### LAB PRGM-1

- > create a folder -> txt file
- > open the folder in git bash
- > git init
- > git branch -m main
- > git config --local user.email "20cse0140@vvce.ac.in"

or

git config --local user.name "\_\_\_\_"

- > git add hello.txt
- > git commit -m "committed"
- > git remote add origin "https://....."
- if origin already exist -
  - git remote remove origin
  - git remote add origin "https://....."
- > git push origin main
- > perform some changes
- > git clone "https://..."
- > git status
- > git log
- > git reset --hard

clone-new file

pull-existing file

### LAB PRGM-2

- > create a folder

-> add txt file  
-> git init  
-> git add .  
-> git commit -m "first commit"  
-> git checkout -b "branch1"  
-> edit the txt(dont change the entire txt)  
-> git add .  
-> git commit -m "second commit"  
-> git checkout "master"  
-> edit -> save  
-> git add .  
-> git commit -m "third commit"  
-> git diff branch1 master  
-> git merge branch1  
-> change  
-> git add .  
-> git commit -m "hsdhsde"  
-> git merge branch1

### LAB PRGM-3

-> create a folder  
-> VS code - open the folder created - create a python file  
    print("Hello world")  
-> github - create repository  
-> open gitbash in the folder  
    commands  
git init  
git config --local user.email "20cse0140@vvce.ac.in"  
git add .

git commit -m "committed"

git remote add origin "https://..."

if origin already exist

git remote remove origin

git remote add origin "https://....."

git push origin master

-> open jenkins(browser - localhost:8080 -> username-admin passwords-(progm files->jenkins->.err file->copy the credentials) - 77200362a5234caa9a214b167b3b3812

-> new item

-> name -> freestyle -> ok

-> git project -> paste the url of github repo

-> poll SCM-( \* \* \* \* \*)

-> save

-> Build now

#### LAB PRGM-4

-> create folder

-> vs code -> open folder

-> create a java file - hello.java

-> write a code

-> create - Dockerfile

FROM openjdk

WORKDIR /app

COPY . /app

RUN javac hello.java

CMD ["java","hello"]

-> terminal

javac hello.java

java hello

`docker build -t womba .`

`docker images`

#### LAB PRGM-5

-> docker

-> search -> mysql -> pull

-> open cmd

\*first cmd

`docker run mysql`

`docker run -e MYSQL_ROOT_PASSWORD="root123" -d mysql`

\*sec cmd

`docker container ls`

`docker inspect //name//`

(copy the ip address)

\*third cmd

`docker run -it mysql /bin/bash`

`mysql -h //paste the ip addresss// -u root -p`

`root123`

`show databases;`

#### LAB PRGM-6

-> create folder

-> vs code -> open folder

-> create a java file - hello.java

-> write a code

-> create - Dockerfile

FROM openjdk

WORKDIR /app

COPY . /app

RUN javac hello.java

CMD ["java","hello"]

-> terminal

javac hello.java

java hello

docker build -t repository\_name .

docker images

docker tag repository\_name docker\_username/newname:v1.9

(newname-lowercase only)

docker images

docker push docker\_username/newname:v1.9

-> dockerhub -> repository -> refresh

## LAB PRGM-7

-> Open eclipse

-> File -> new -> other -> maven -> maven project -> Next -> next -> all catalog -> maven-archetype-quickstart(org) -> next -> both same(readdatafromjson) -> finish

-> // in the console - Y //

readdatafromjson -> right click -> new -> file -> name(student.json) -> finish (get student.json in the list)

```
{"firstname" : "puneeth",
```

```
"lastname" : "shaiva"} - save
```

-> browser - maven repository

-> search bar - simple JSON

-> click on JSON.simple -> 1.1.1 -> copy the code

-> back to eclipse -> pom.xml -> replace dependency by the copied code -> save

-> readdatafromjson -> src/main -> readdatasort pkg -> right click -> new -> class -> readjson.java

-> paste the code

code

```
package readdatafromjson.readdatafromjson;
```

```
import java.io.FileReader;
```

```
import java.io.IOException;
```

```
import java.text.ParseException;
```

```
import org.json.simple.JSONObject;
```

```
import org.json.simple.parser.JSONParser;
```

```
public class readjson {
```

```
    public static void main(String[] args) throws IOException, ParseException,  
org.json.simple.parser.ParseException {
```

```
        FileReader reader = new FileReader("student.json");
```

```
        JSONParser jsonParser = new JSONParser();
```

```
        JSONObject studentObj = (JSONObject) jsonParser.parse(reader);
```

```
        String fname = (String) studentObj.get("firstname");
```

```
        String lname = (String) studentObj.get("lastname");
```

```
        System.out.println("First Name: " + fname);
```

```
        System.out.println("Last Name: " + lname);
```

```
        reader.close();
```

```
    }
```

```
}
```

LAB PRGM 8

- > Jenkins -> sign in(user-admin, password-prgmfiles->jenkins->.err->copy credentials)
- > manage jenkins -> plug-ins -> available plug-ins -> search(slack) ->
- (if not installed -> installed plug-ins -> right top -> install -> available plug-ins -> search(slack))
- > click on slack -> 2nd link -> type(#devops-demo) -> add jenkins
- > copy redentials (step 3)
- > save settings
- > prev tab
- > manage jenkins
- > system
- > under slack
- workspace : vvcegroup
- credentials : add -> jenkins -> secret txt(sec drop down) -> paste the credentials (secret) ->
- add -> drop down(select secreet text) -> save
- > new item -> name -> fresstyle -> ok -> build steps -> execute window batch command(java --
- version) -> post -> build (slack notifications - check all)
- > save -> build now

## LAB PRGM-9

- > browser -> selenium download -> click on java -> save -> extract
- > select browser -> chrome -> documentation
- > older releases -> downloads
- > chromedriver win64 -> copy and paste the link in new tab -> save -> extract

open eclipse

- > File -> new -> other -> Maven -> Maven Project -> next -> next -> maven-archetype-quickstart
- (select org) -> name for id's (selenium)
- > selenium -> right click -> build path -> configure build path -> lib -> module path -> add external
- jars -> selenium (select all except lib) -> open -> apply and close

-> again right click -> build path -> configure build path -> modulepath -> lib -> select all -> open -> apply and close

-> selenium -> src -> right click -> new -> class -> Launchchrome -> finish

-> copy paste the code

```
package selenium.selenium;

import java.time.Duration;
import java.util.concurrent.TimeUnit;

import org.openqa.selenium.By;
import org.openqa.selenium.chrome.ChromeDriver;

public class Chromelauncher {

    public static void main(String[] args) throws InterruptedException {

        // TODO Auto-generated method stub

        System.setProperty("webdriver.chrome.driver", "C:\\\\Users\\\\wwwpr\\\\Downloads\\\\chromedriver-
win64\\\\chromedriver.exe");

        ChromeDriver driver = new ChromeDriver();
        driver.manage().window().maximize();
        driver.get("http://www.vvce.ac.in/");
        //Thread.sleep(100);
        driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS);
        driver.findElement(By.xpath("//span[text()='x'][1]")).click();
        //System.out.println(driver.getTitle());

    }

}
```