

Contents:

Location: D:\Notes

- GIT
- Docker

GIT**Linux Command:**

```
> git --version
> cd d:/ ----- Using git bash
```

General Git Command

```
> git config --global user.name "Bimal1993"
> git config --global user.email arbimalkumar.1993@gmail.com
> git init
> git status
> git add src / git add --all --- Can use any add command add all or specific
> git commit -m "First commit"
```

Create a repo:

Push Local Repository to GitHub:

```
> git remote add origin https://github.com/Bimal1993/gitdemo.git
> git push --set-upstream origin master
```

To generate Token:

Settings => Developer Settings => Personal Access Token => Generate New Token => Fillup the form => click Generate token => Copy the generated Token,

Add or make changes to the file:

```
> git add src
> git commit -m "Second commit"
> git push --set-upstream origin master

> git log //To check git logs
```

Git Branch:

```
> git branch developer1
> git branch
  developer1
* master
```

```
$ git checkout developer1
```

Git Merge:

```
$ git branch
* developer1
  Master
```

```
$ git checkout master
$ git merge developer1
$ git add src
$ git commit -m "new code from branch developer"
$ git push --set-upstream origin master
```

Delete branch

```
$ git push --delete origin developer1
```

Git conflicts:

```
<<<<<<< HEAD
```

```
open an issue
```

```
=====
```

```
ask your question in IRC.
```

```
>>>>>>>
```

Docker

It include all dependency with version.

```
> docker -v
```

```
https://hub.docker.com/
```

```
> docker images
```

```
> docker pull bimal1993/docker-demo1
```

```
> docker images
```

```
> docker run bimal1993/java-docker-app
```

Create application:

Create a spring boot application

Dockerfile

```
FROM openjdk:8-jdk-alpine
```

```
EXPOSE 8080
```

```
ARG JAR_FILE=target/*.war
```

```
COPY ${JAR_FILE} app.war
```

```
ENTRYPOINT ["java","-jar","app.war"]
```

Option to build a docker file:

```
// build images.
```

```
20: docker build -f Dockerfile -t bimal1993/docker-demo1 .
```

```
//push images
```

```
21: docker push bimal1993/docker-demo1
```

```
//pull images
```

```
22: docker pull bimal1993/docker-demo1
```

```
// run image
```

```
23: docker run bimal1993/docker-demo1
```

```
// to remove image
24: docker rmi -f bimal1993/docker-demo1
```

1: create docker File.

```
DockerFile
FROM openjdk:8
ADD target/docker-spring-boot-.jar docker-spring-boot.jar
EXPOSE 8085
ENTRYPOINT ["java" "-jar" "docker-spring-boot.jar"]
```

```
$ docker -v
$ docker build -f docker -t docker-spring-boot .
$ docker images
$ docker run -p 8085:8085 docker-spring-boot
```

2: Docker run on background.

```
$ docker run -p 500:5000 -d bimal1993/java-docker-app2:firsttry
$ docker logs image-id (to check logs)
$ docker logs -f image-id (following logs)
```

3: Remove

```
$ docker images // to check docker images
$ docker container ls -a
$ docker container stop "container-id" //stop container.
$ docker container prune // remove all exited container.
$ docker image rm "image-d" // to remove an image " docker image rm 4bf278546754 7a9513ab1412 "
```

Plugin:

App.java

```
public class App {
    public static void main(String[] args) {
        System.out.println("Jenkins, docket automation");
        AutomationDocker docker=new AutomationDocker();
        System.out.println("Current Status: "+docker.getAutomationStatusInfo());
    }
}
```

AutomationDocker.java

```
public class AutomationDocker {
    public String getAutomationStatusInfo() {
        return "Running";
    }
}
```

```
}
```

Dockerfile

```
FROM openjdk:8-jdk-alpine
EXPOSE 8080
ARG JAR_FILE=target/*.jar
COPY ${JAR_FILE} app.jar
ENTRYPOINT ["java","-jar","app.jar"]
```

Steps to configure Jenkins:

Sample console output:

Docker hub view:

Local machine view: