

Name- Ankita Chaudhari

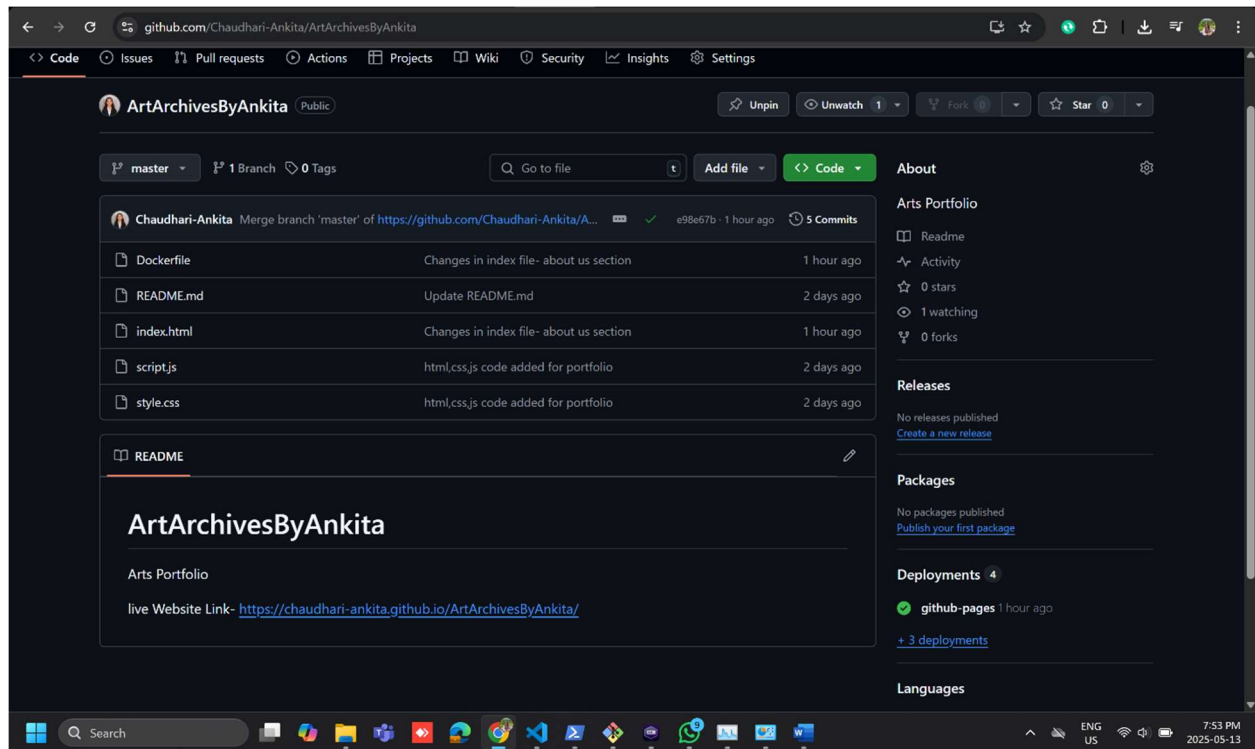
Student ID- 500237991

Assignment-

1. Make or download a freely available html, css, javascript application
2. install - Docker, Podman, Containerd (any 2)
3. containerize the application - Docker, Podman, Containerd (any 2)
4. Take Screenshots for each showing steps in detail and place it in screenshots folder (neatly in 2 folders - platform 1, platform2)
5. upload on github with a neat markdown file

Website Creation

1. Created a Public Repository on Github “**ArtArchivesByAnkita**” with ReadMe.md File.
2. Then cloned the repository on the local system using **git clone** command
3. Open git bash in the repository and using **touch** command created **index.html**, **style.css** and **script.js** files
4. Using HTML, CSS and JavaScript Created an Art Portfolio for my business Art Archives.
5. Pushed the changes on Github using the below commands-
 - **git add .**
 - **git commit -u “comment”**
 - **git push -u origin master**



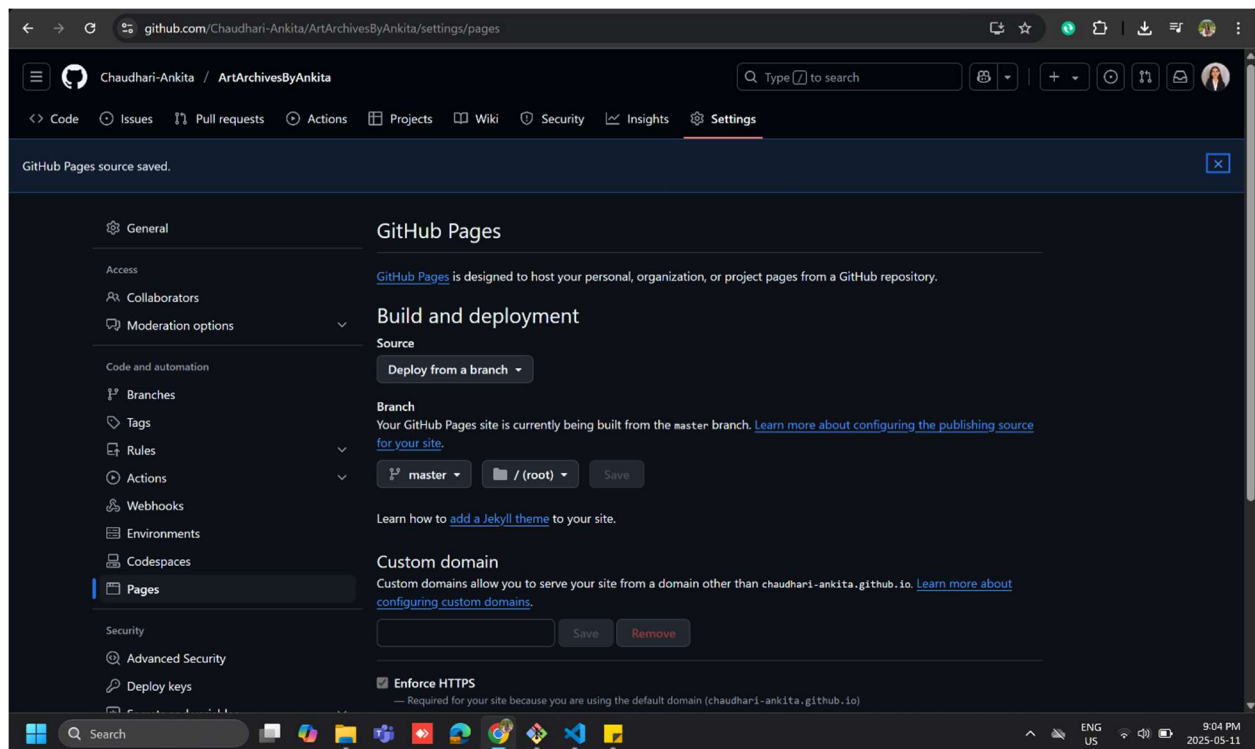
Then Additionally Published the portfolio using **Github Pages**

Github Pages

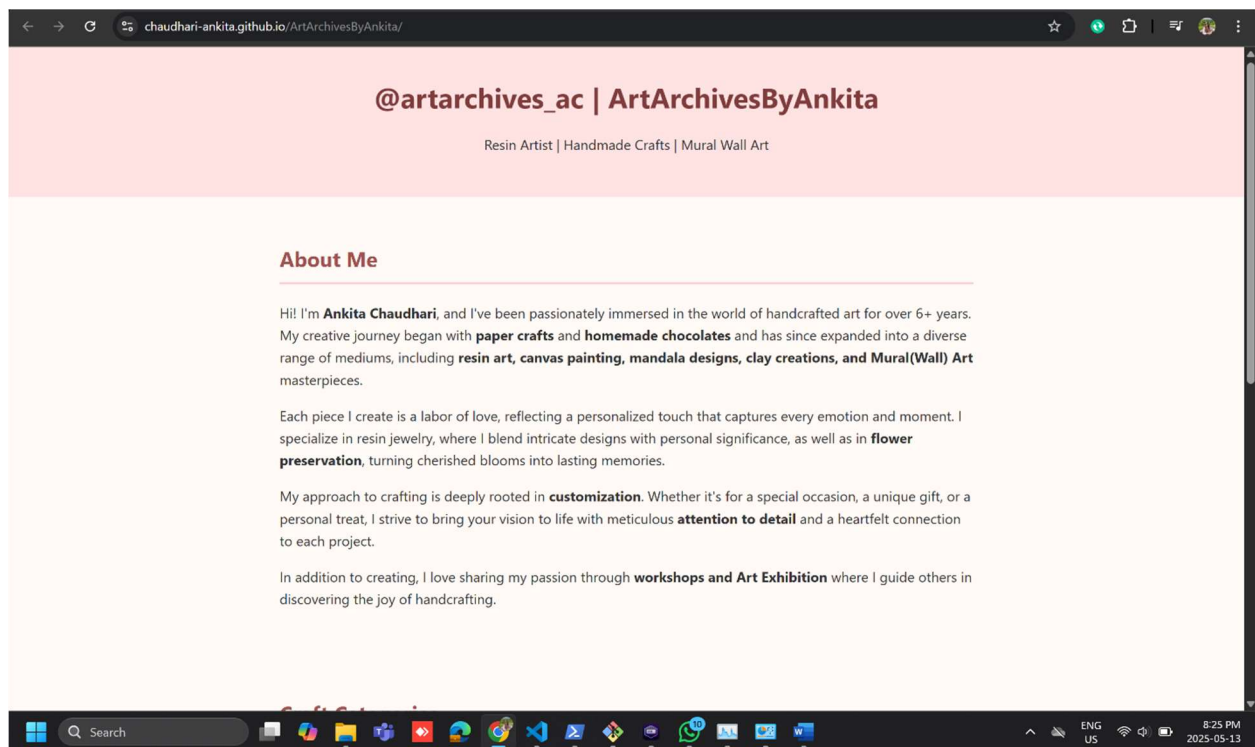
It is used to host personal, organization, or project pages from a GitHub repository.

Steps Followed-

1. Go the “ArtArchivesByAnkita” Repository.
2. Go to Settings.
3. Under Code and Automation-> go to Pages.
4. Under Build And Deployment
 - Select the source “Build from a Branch”
 - Branch “Master”
 - Folder “/(root)”
5. Click on Save

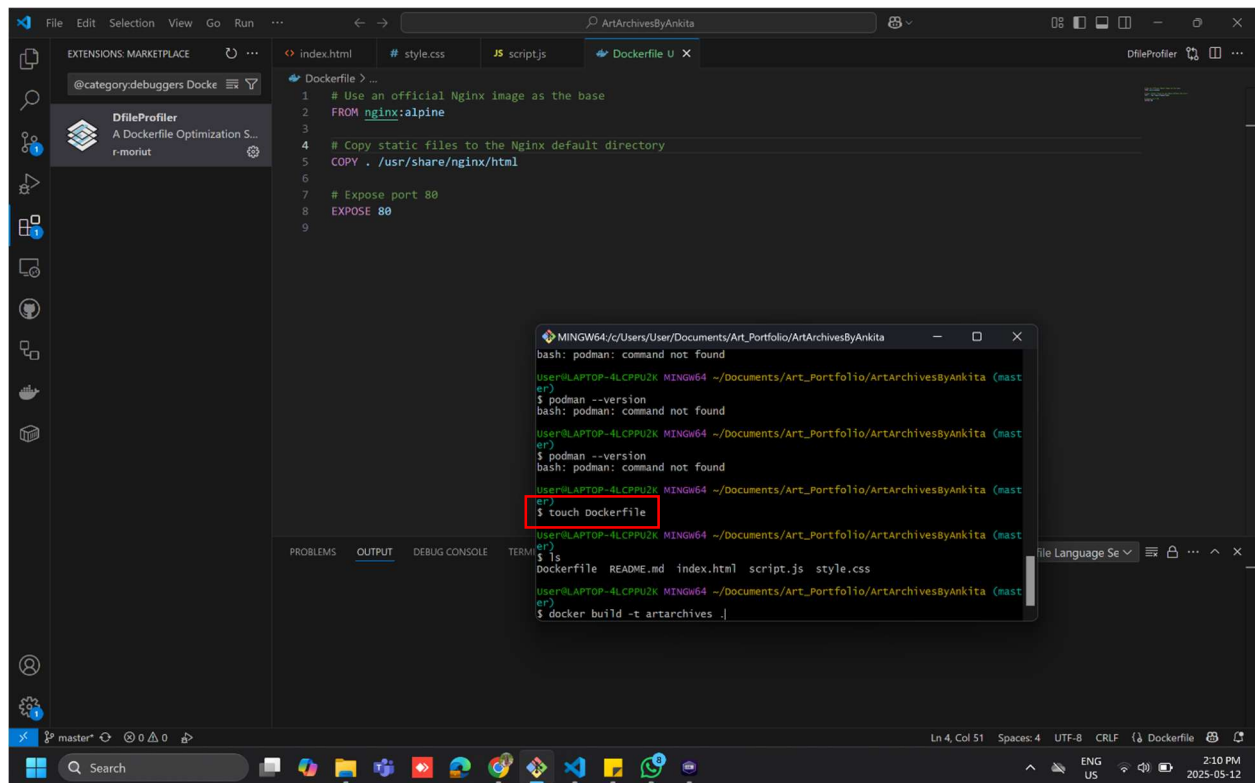


6. After refresh-> link is generated and the website is live now.
7. It can be accessed with “<https://chaudhari-ankita.github.io/ArtArchivesByAnkita/>” link.



Docker File Creation-

1. Installed docker extension for vs code
2. Created a “**Dockerfile**” using **touch** command on git bash



The screenshot shows the Visual Studio Code interface with a Dockerfile being created. The Dockerfile content is as follows:

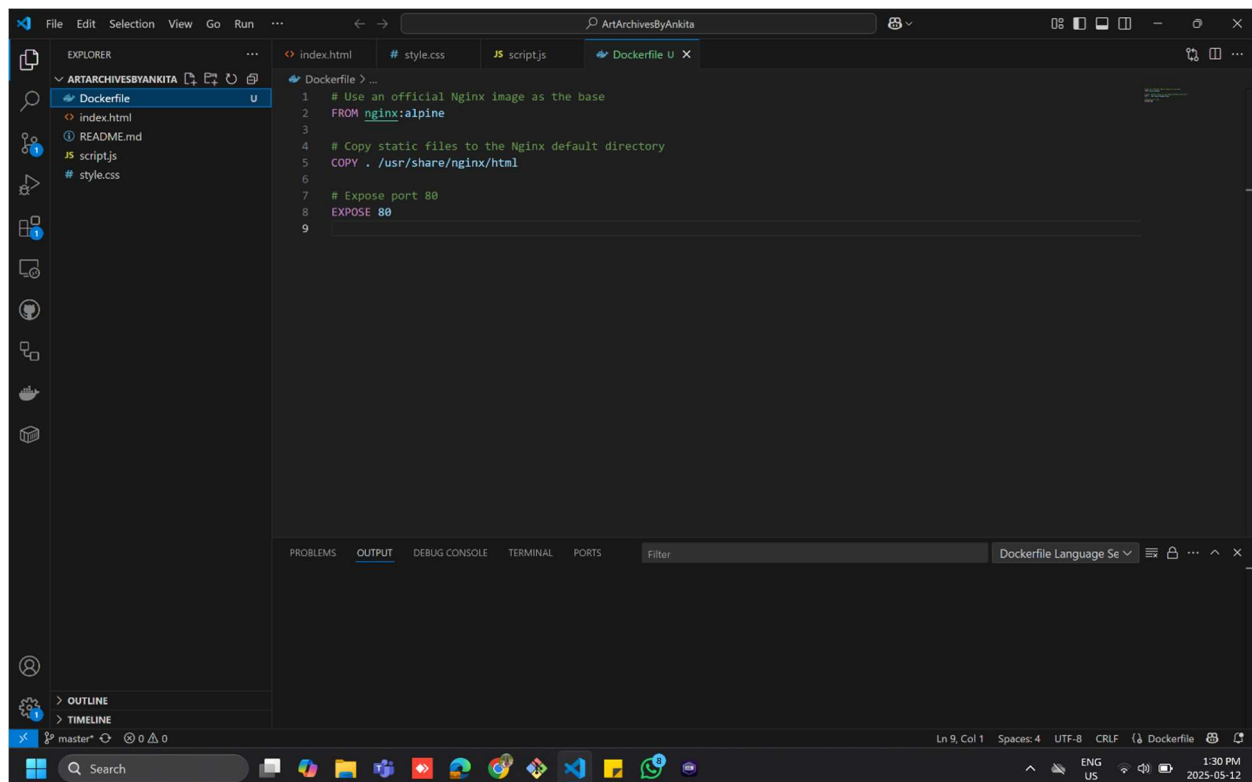
```
1 # Use an official Nginx image as the base
2 FROM nginx:alpine
3
4 # Copy static files to the Nginx default directory
5 COPY . /usr/share/nginx/html
6
7 # Expose port 80
8 EXPOSE 80
9
```

The terminal window shows the following commands and output:

```
bash: podman: command not found
User@LAPTOP-4LCPPU2K MINGW64 ~/Documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ podman --version
bash: podman: command not found
User@LAPTOP-4LCPPU2K MINGW64 ~/Documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ podman --version
bash: podman: command not found
User@LAPTOP-4LCPPU2K MINGW64 ~/Documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ touch Dockerfile
User@LAPTOP-4LCPPU2K MINGW64 ~/Documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ ls
Dockerfile  README.md  index.html  script.js  style.css
User@LAPTOP-4LCPPU2K MINGW64 ~/Documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ docker build -t artarchives .
```

The terminal output indicates that the Dockerfile was successfully created and the build process was initiated.

3. Used port 80 to access the application locally.



4. Pushed the changes to github.

Platform 1- Podman

1. Installed Podman on the system
2. Using command **podman --version** checked if podman is installed successfully with the latest version.
3. Open git bash in your repository folder on system.
4. Run the below commands-
 - **cd ArtArchivesByAnkita**
 - **podman build -t artarchives .**
 - **podman run -d -p 8081:80 artarchives**

-t : Tags the image with name- artarchives

-p 8081:80 : port mapping

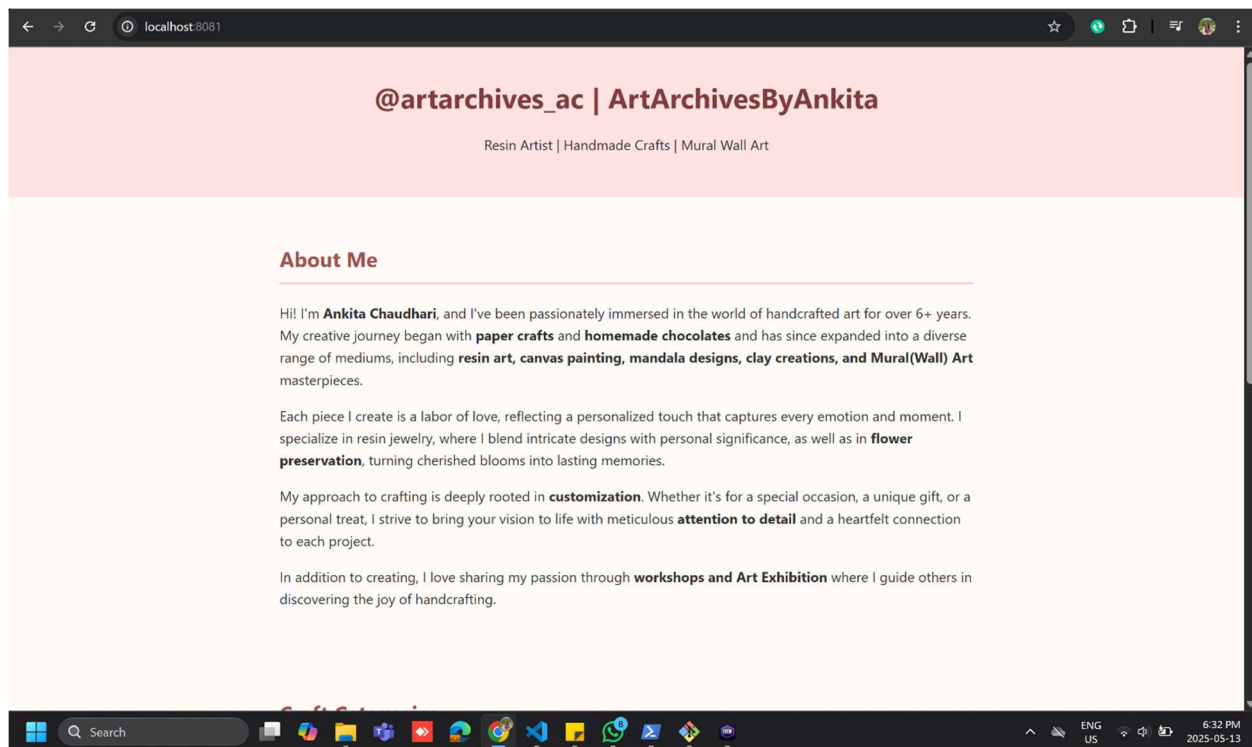
8081- host machine port

80- container port

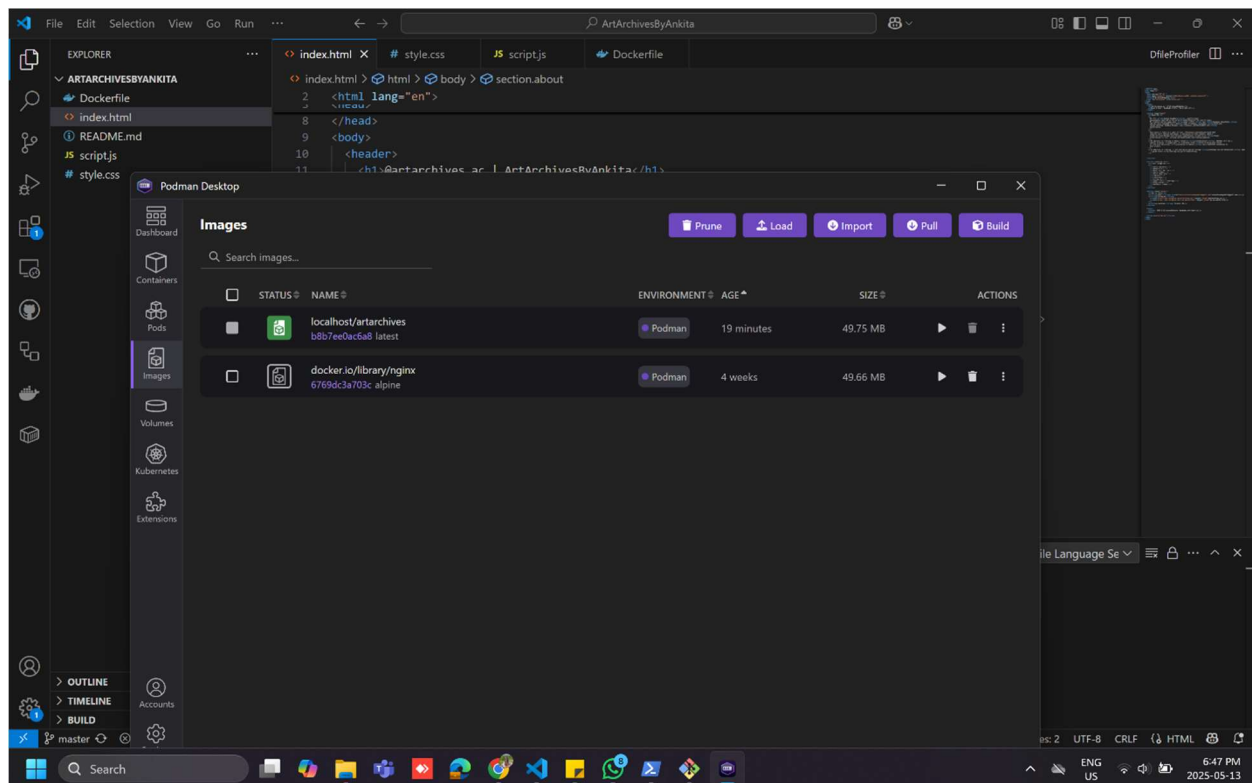
```
MINGW64~/c/Users/User/Documents/Art_Portfolio/ArtArchivesByAnkita
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ git commit -m "Trigger Github Pages rebuild"
On branch master
Your branch is up to date with 'origin/master'.
nothing to commit, working tree clean
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ git push -u origin master
Everything up-to-date
branch 'master' set up to track 'origin/master'.
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ podman --version
podman version 5.4.2
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ cd ArtArchivesByAnkita
bash: cd: ArtArchivesByAnkita: No such file or directory
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ podman build -t artarchives .
STEP 1/3: FROM nginx:alpine
Resolving 'nginx' using unqualified-search registries (/etc/containers/registries.conf.d/99-podman-machine.conf)
Trying to pull docker.io/library/nginx:alpine...
Getting image source signatures
Copying blob sha256:197eb75867ef4fcedd4724f17b0972ab0489436860a594a945f8eaff8155053
Copying blob sha256:b464cfdf2a6319875aeb27359ec549790ce14d8214fcb16ef915e4530e5e4235
Copying blob sha256:f18232174bc91741fdf3da96d85011092101a032a93a388b79e9969c2d5c870
Copying blob sha256:61ca4f733c802afd9e05a32f0de0361bd713b8b53292dc15fb093229f648574
Copying blob sha256:d7e5070240863957ebb0b5a44a5729963c3462666baa2947d00628cb5f2d5773
Copying blob sha256:81bd8ed7ec6789b0cb7f1b47ee731c522f6dba83201ec73cd6bca1350f582948
Copying blob sha256:34a64644b756511a2e217f0508e11d1a572085d66cd6c9a555a082ad49a3102
Copying blob sha256:39c2ddf6010082a4a646e7ca44e95aca9bf3aeabc00f17f7ccc2954004f2a7d
Copying config sha256:6769dc3a703c719c1d2756bda113659be28ae16cf0da58dd5fd823d6b9a050ea
Writing manifest to image destination
STEP 2/3: COPY . /usr/share/nginx/html
--> 3c06a08ec1ed
STEP 3/3: EXPOSE 80
COMMIT artarchives
--> b8b7ee0ac6a8
Successfully tagged localhost/artarchives:latest
b8b7ee0ac6a81912c4699c74b6d89ff34c9c2015a9b64262717b3bfc3b769867
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$
```

```
File Edit Selection View Go Run ... ArtArchivesByAnkita
EXPLORER
ARTARCHIVESBYANKITA
  Dockerfile
  index.html
  README.md
  JS script.js
  style.css
Dockerfile
1 # Use an official Nginx image as the base
2 FROM nginx:alpine
3
4 # Copy static files to the Nginx default directory
5 COPY . /usr/share/nginx/html
6
7 # Expose port 80
8 EXPOSE 80
9
PROBLEMS
MINGW64~/c/Users/User/Documents/Art_Portfolio/ArtArchivesByAnkita
2948
Copying blob sha256:34a64644b756511a2e217f0508e11d1a572085d66cd6c9a555a082ad49a3102
Copying blob sha256:39c2ddf6010082a4a646e7ca44e95aca9bf3aeabc00f17f7ccc2954004f2a7d
Copying config sha256:6769dc3a703c719c1d2756bda113659be28ae16cf0da58dd5fd823d6b9a050ea
Writing manifest to image destination
STEP 2/3: COPY . /usr/share/nginx/html
--> 3c06a08ec1ed
STEP 3/3: EXPOSE 80
COMMIT artarchives
--> b8b7ee0ac6a8
Successfully tagged localhost/artarchives:latest
b8b7ee0ac6a81912c4699c74b6d89ff34c9c2015a9b64262717b3bfc3b769867
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$ podman run -d -p 8081:80 artarchives
0100dff926d356ab042b9ad840b7d6911401e43a280e186c370667bd5d79b36e1
User@LAPTOP-4LCPPU2K MINGW64 ~/documents/Art_Portfolio/ArtArchivesByAnkita (master)
$
```

5. Now go to browser and hit the link - <http://localhost:8081>



6. This will launch the application in a container and can be accessed the site locally.



7. Image created on Podman Desktop.

Platform 2- Docker

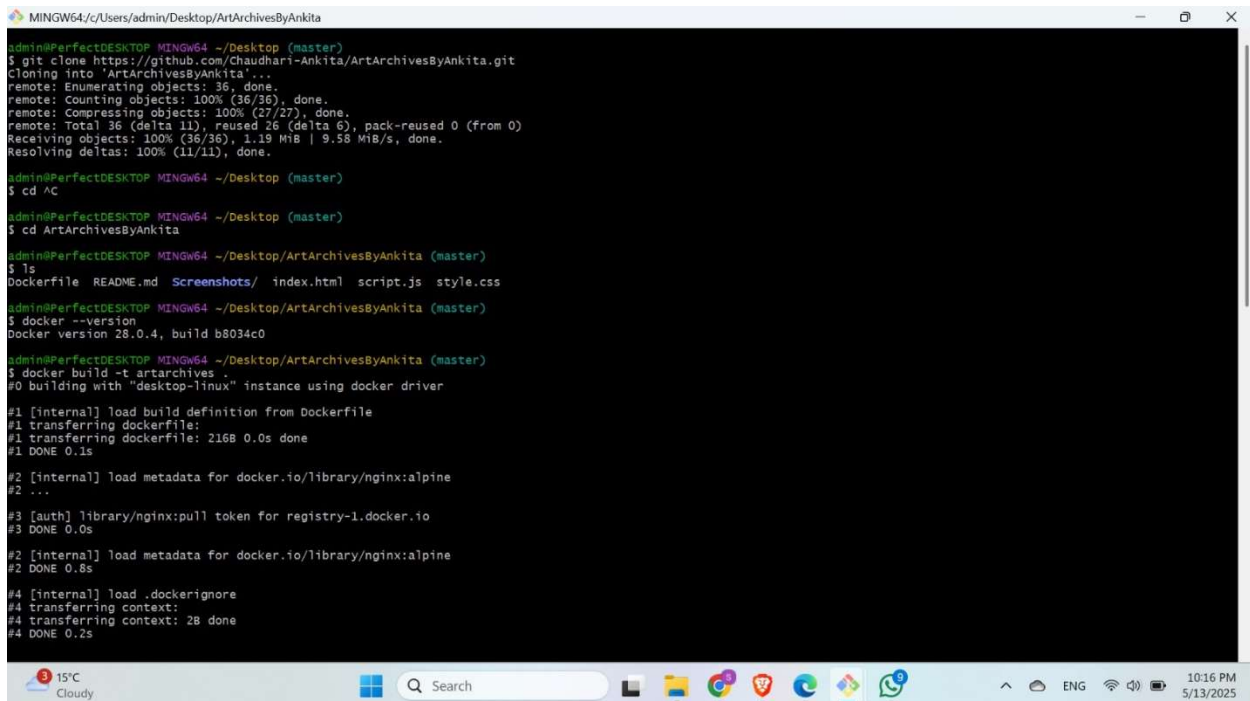
1. Installed Docker on the system
2. Using command **docker --version** checked if podman is installed successfully with the latest version.
3. Open git bash in your repository folder on system.
4. Run the below commands-
 - **cd ArtArchivesByAnkita**
 - **docker build -t artarchives .**
 - **docker run -d -p 8082:80 artarchives**

-t : Tags the image with name- artarchives

-p 8082:80 : port mapping

8082- host machine port

80- Container port



```
MINGW64/c/Users/admin/Desktop/ArtArchivesByAnkita
admin@PerfectDESKTOP MINGW64 ~/Desktop (master)
$ git clone https://github.com/Chaudhari-Ankita/ArtArchivesByAnkita.git
Cloning into 'ArtArchivesByAnkita'...
remote: Enumerating objects: 36, done.
remote: Counting objects: 100% (36/36), done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 36 (delta 11), reused 26 (delta 6), pack-reused 0 (from 0)
Receiving objects: 100% (36/36), 1.19 MiB | 9.58 MiB/s, done.
Resolving deltas: 100% (11/11), done.

admin@PerfectDESKTOP MINGW64 ~/Desktop (master)
$ cd AC
admin@PerfectDESKTOP MINGW64 ~/Desktop (master)
$ cd ArtArchivesByAnkita
admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ ls
Dockerfile  README.md  Screenshots/  index.html  script.js  style.css
admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ docker --version
Docker version 28.0.4, build b8034c0

admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ docker build -t artarchives .
#0 building with "desktop-linux" instance using docker driver
#1 [internal] load build definition from Dockerfile
#1 transferring dockerfile:
#1 transferring dockerfile: 216B 0.0s done
#1 DONE 0.1s
#2 [internal] load metadata for docker.io/library/nginx:alpine
#2 ...
#3 [auth] library/nginx:pull token for registry-1.docker.io
#3 DONE 0.0s
#2 [internal] load metadata for docker.io/library/nginx:alpine
#2 DONE 0.8s
#4 [internal] load .dockerignore
#4 transferring context:
#4 transferring context: 2B done
#4 DONE 0.2s
```



```
MINGW64/c/Users/admin/Desktop/ArtArchivesByAnkita
08a15dd2f3f17a54ef4b76fb8e2f2a10
#6 CACHED

#7 [2/2] COPY . /usr/share/nginx/html
#7 DONE 0.3s

#8 exporting to image
#8 exporting layers
#8 exporting layers 0.7s done
#8 exporting manifest sha256:645fb44804c434045a9d16a1a8c61f51f64c281f47ae61bc94a5df1
b7d47f365 0.0s done
#8 exporting config sha256:261eb81a547b9106db27c18c97Faa1821942aa8e81bf08336b6f49ff8
4f4a68e 0.0s done
#8 exporting attestation manifest sha256:2916b1e15f83b166ec4e019b8b4d51c7ee84717fdb5
6b7b46675f2b79006e2d6 0.1s done
#8 exporting attestation manifest sha256:2916b1e15f83b166ec4e019b8b4d51c7ee84717fdb5
6b7b46675f2b79006e2d6 0.1s done
#8 exporting manifest list sha256:d78c0ef1b8377ce0c03819b6b48e8e700214db3e61c9519be8
36a6a02f65aa25 0.0s done
#8 naming to docker.io/library/artarchives:latest done
#8 unpacking to docker.io/library/artarchives:latest
#8 unpacking to docker.io/library/artarchives:latest 0.2s done
#8 DONE 1.2s

admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ docker run -d -p 8080:80 artarchives
docker: 'docker run' requires at least 1 argument

Usage: docker run [OPTIONS] IMAGE [COMMAND] [ARG...]

See 'docker run --help' for more information

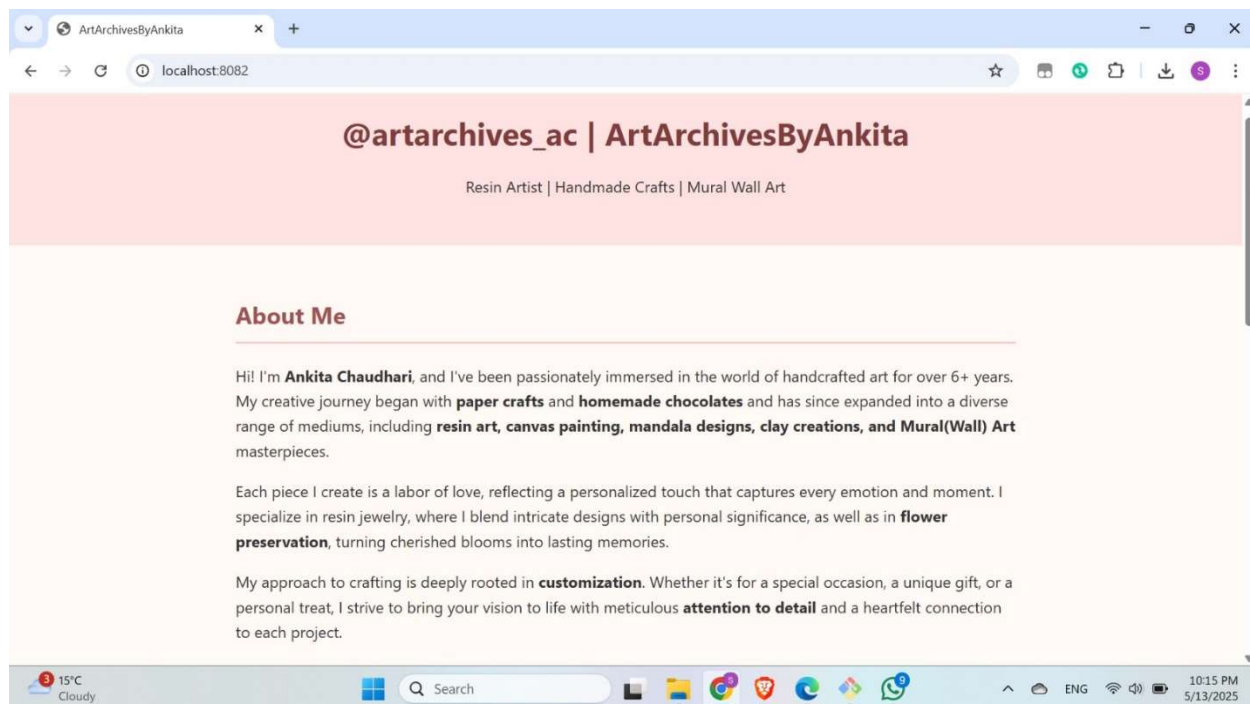
admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ docker run -d -p 8080:80 my-web-app
2ef38ad2da30f651af0b5aa22c6aea562199a426cc3ed51d5e78b2d8d9476c55
docker: Error response from daemon: failed to set up container networking: driver fa
iled programming external connectivity on endpoint competent_heisenberg (b4812c4db29
bcf583eff6e2b4822ca678e18528b05e2830bcd3f1b1b20b15ff9): Bind for 0.0.0.0:8080 failed
: port is already allocated

Run 'docker run --help' for more information

admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$ docker run -d -p 8082:80 artarchives
6785e49ed9d0eb34d52591eb4cfed031b6deb74b4f7eebbeaaee3b6e37430cad

admin@PerfectDESKTOP MINGW64 ~/Desktop/ArtArchivesByAnkita (master)
$
```

5. Now go to browser and hit the link - <http://localhost:8082>



6. This will launch the application in a container and can be accessed the site locally.
7. Image created on Docker desktop