WIPRO EXERCISE

Steps to build my-website

Step 1: Create Project Directory

Open your terminal and run:

```
mkdir my-website
cd my-website
```

Step 2: Create Website Content

Create a file named `index.html` with the following content:

File: `index.html`

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>My Docker Website</title>
</head>
<body>
  <h1>Welcome to My Docker Website!</h1>
  <p>This is a simple static website hosted using Nginx and Docker.</p>
</body>
</html>
```

Step 3: Create Dockerfile

Create a file named `Dockerfile` in the same directory:

File: `Dockerfile`

```
# Use the official Nginx image from Docker Hub
FROM nginx:alpine

# Copy the website files to the Nginx HTML directory
COPY index.html /usr/share/nginx/html/index.html

# Expose port 80 for the web server
EXPOSE 80

# Start Nginx when the container launches
CMD ["nginx", "-g", "daemon off;"]
```

Step 4: Build and Run the Docker Container

1. **Build the Docker image:**
2. `docker build -t my-website .`
3. **Run the Docker container (map container port 80 to host port 8080):**
4. `docker run -d -p 8080:80 --name my-website-container my-website`

Step 5: Access the Website

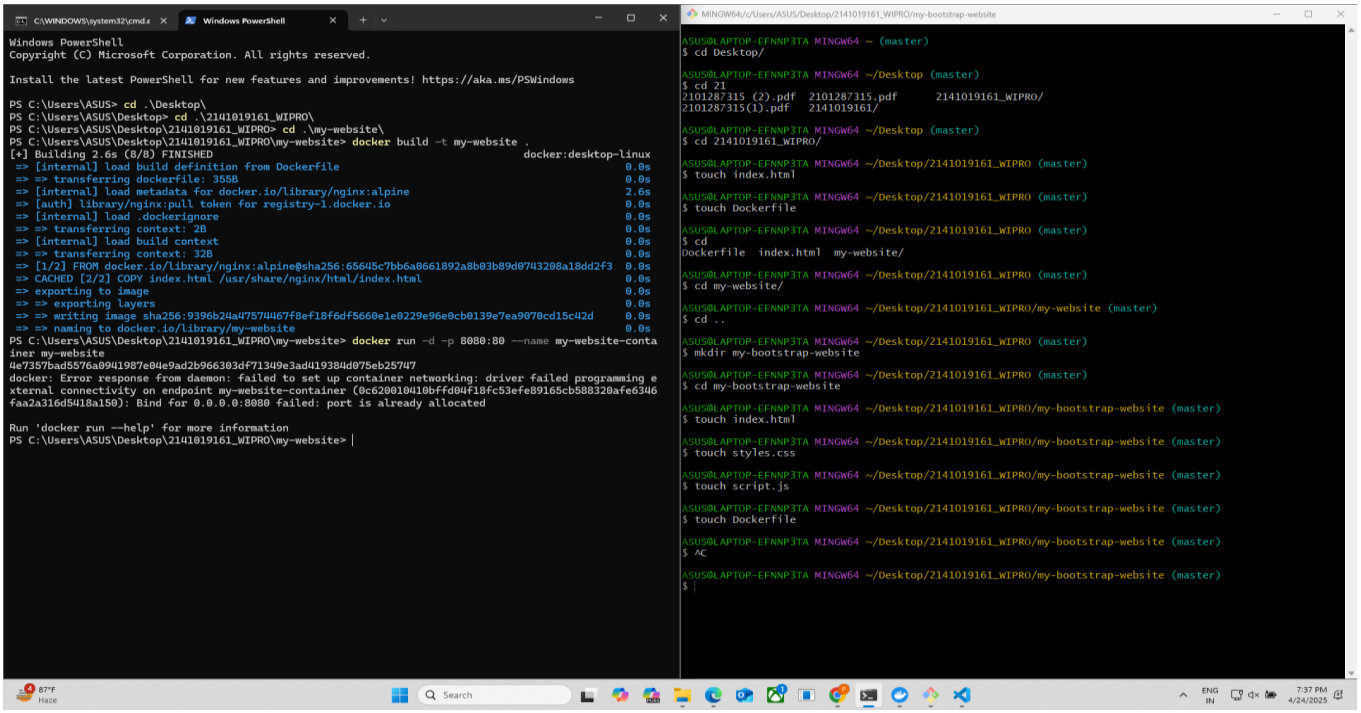
Open your browser and go to:
 http://localhost:8080
You should see the "Welcome to My Docker Website!" page.

Step 6: Stop and Clean Up (Optional)

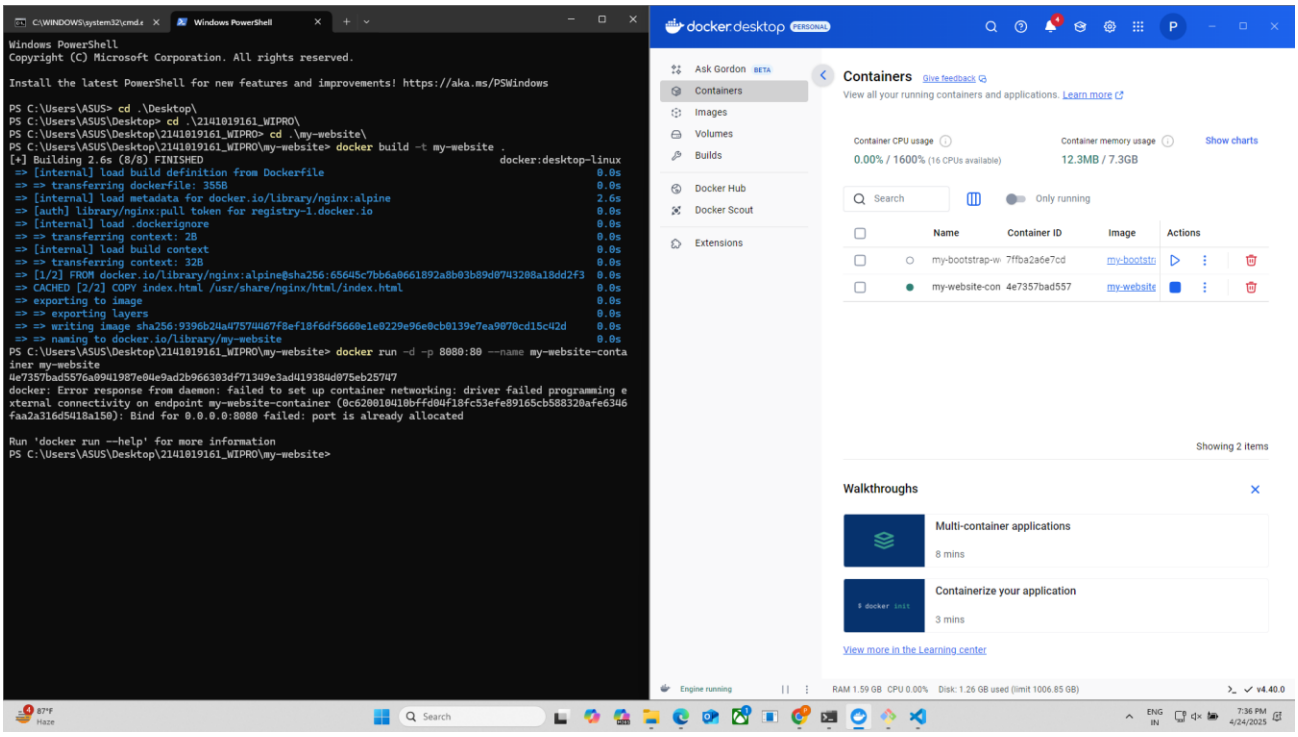
1. **Stop and remove the container:**
2. `docker stop my-website-container`
3. `docker rm my-website-container`
4. **Remove the Docker image:**
5. `docker rmi my-website`

SCREENSHOT OF THE STEPS

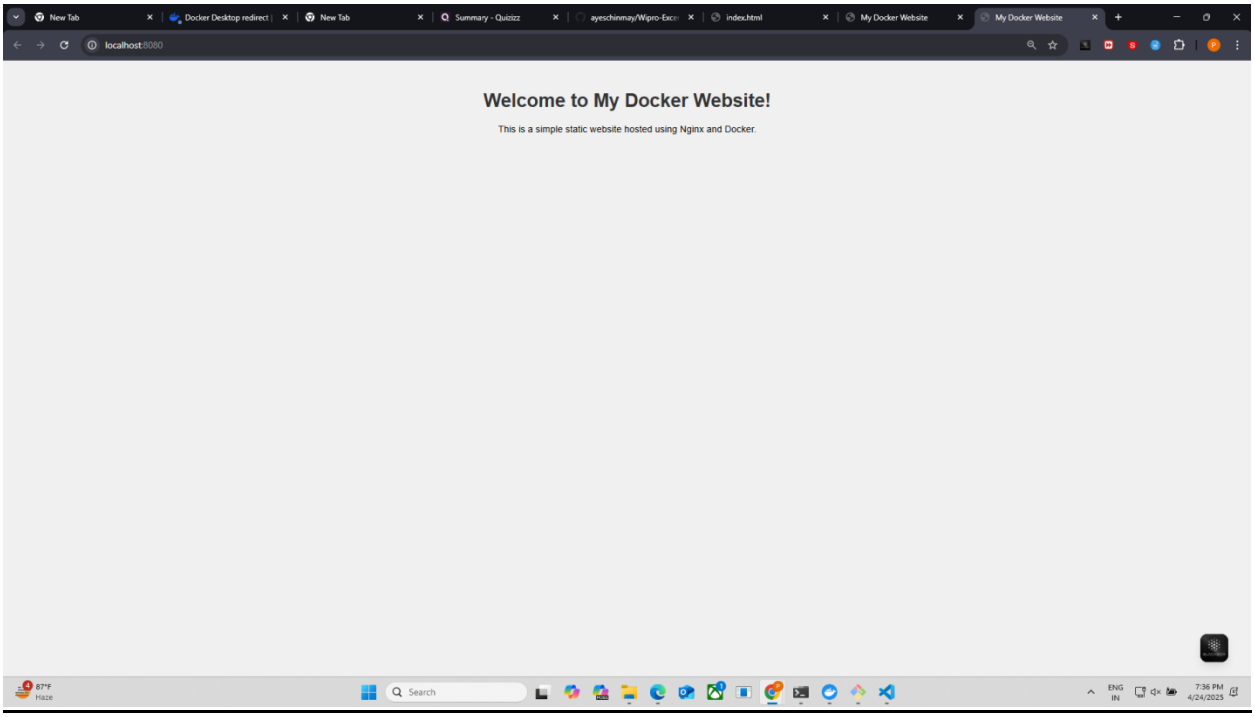
STEP-1



STEP-2


Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\ASUS> cd .\Desktop\
PS C:\Users\ASUS\Desktop> cd .\2141019161_WIPRO\
PS C:\Users\ASUS\Desktop\2141019161_WIPRO> cd .\my-website\
PS C:\Users\ASUS\Desktop\2141019161_WIPRO\my-website> docker build -t my-website .
[+] Building 2.6s (8/8) FINISHED docker:desktop-linux
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 355B 0.0s
=> [internal] load metadata for docker.io/library/nginx:alpine 2.6s
=> [auth] library/nginx:pull token for registry-1.docker.io 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 32B 0.0s
=> [1/2] FROM docker.io/library/nginx:alpine@sha256:65645c7bb6a0661892a8b03b89d0743208a18dd2f3 0.0s
=> CACHED [2/2] COPY index.html /usr/share/nginx/html/index.html 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:9396b24a47574467f8ef18f6df5660e1e0229e96e0cb0139e7ea9070cd15c42d 0.0s
=> => naming to docker.io/library/my-website 0.0s
PS C:\Users\ASUS\Desktop\2141019161_WIPRO\my-website> docker run -d -p 8080:80 --name my-website-container my-website
4e7357bad5576a099i1987e04e9ad2b966303df713u9e3ad419384d075eb257u7
docker: Error response from daemon: failed to set up container networking: driver failed programming external connectivity on endpoint my-website-container (0c620018410bffd04f18fc53efe89165cb588320afe6346faa2a316d5418a150): Bind for 0.0.0.0:8080 failed: port is already allocated
Run 'docker run --help' for more information
PS C:\Users\ASUS\Desktop\2141019161_WIPRO\my-website>
docker desktop
Ask Gordon
Containers
Images
Volumes
Builds
Docker Hub
Docker Scout
Extensions
Containers
View all your running containers and applications.
Container CPU usage
0.00% / 1600% (16 CPUs available)
Container memory usage
12.3MB / 7.3GB
Show charts
Search
Only running
Name
Container ID
Image
Actions
my-website-con
4e7357bad557
Showing 2 items
Walkthroughs
Multi-container applications
8 mins
Containerize your application
3 mins
View more in the Learning center
Engine running
RAM 1.59 GB CPU 0.00% Disk: 1.26 GB used (limit 1006.85 GB)

STEP-3


localhost:8080
Welcome to My Docker Website!
This is a simple static website hosted using Nginx and Docker.

Steps to build my-bootstrap-website

Step 1: Create Project Directory

Open your terminal and run:

```
mkdir my-bootstrap-website
cd my-bootstrap-website
```

Step 2: Create Website Files

File: ***`index.html`***

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>My Docker Website</title>
  <meta name="viewport" content="width=device-width, initial-scale=1">

  <!-- Bootstrap CSS CDN -->
  <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css
" rel="stylesheet">

  <!-- Custom CSS -->
  <link rel="stylesheet" href="styles.css">
</head>
<body>
  <div class="container text-center mt-5">
    <h1>Welcome to My Docker Website!</h1>
    <p class="lead">
      This website uses Bootstrap, jQuery, and custom CSS, hosted with Nginx
and Docker.
    </p>

    <button id="toggleButton" class="btn btn-primary mt-3">Toggle
Message</button>
    <p id="message" class="mt-3 d-none">Hello! This message was toggled using
jQuery.</p>
  </div>

  <!-- jQuery CDN -->
  <script src="https://code.jquery.com/jquery-3.7.1.min.js"></script>

  <!-- Custom JS -->
  <script src="script.js"></script>
</body>
</html>
```

File: `styles.css`

```
body {
  background-color: #f8f9fa;
  font-family: Arial, sans-serif;
}

h1 {
  color: #343a40;
}

.lead {
  color: #6c757d;
}
```

File: `script.js`

```
$(document).ready(function() {
  $('#toggleButton').click(function() {
    $('#message').toggleClass('d-none');
  });
});
```

Step 3: Create Dockerfile

File: `Dockerfile`

```
# Use the official Nginx image from Docker Hub
FROM nginx:alpine

# Copy website files to the Nginx HTML directory
COPY index.html /usr/share/nginx/html/
COPY styles.css /usr/share/nginx/html/
COPY script.js /usr/share/nginx/html/

# Expose port 80 for the web server
EXPOSE 80

# Start Nginx when the container launches
CMD ["nginx", "-g", "daemon off;"]
```

Step 4: Build and Run the Docker Container

1. **Build the Docker image:**

```
docker build -t my-bootstrap-website .
```

2. **Run the Docker container:**

```
docker run -d -p 8080:80 --name my-bootstrap-website-container my-bootstrap-website
```

Step 5: Access the Website

Open your browser and visit:

 http://localhost:8080

You should see a Bootstrap-styled page with a button and a message that toggles using jQuery.

Step 6: Stop and Clean Up (Optional)

1. **Stop and remove the container:**

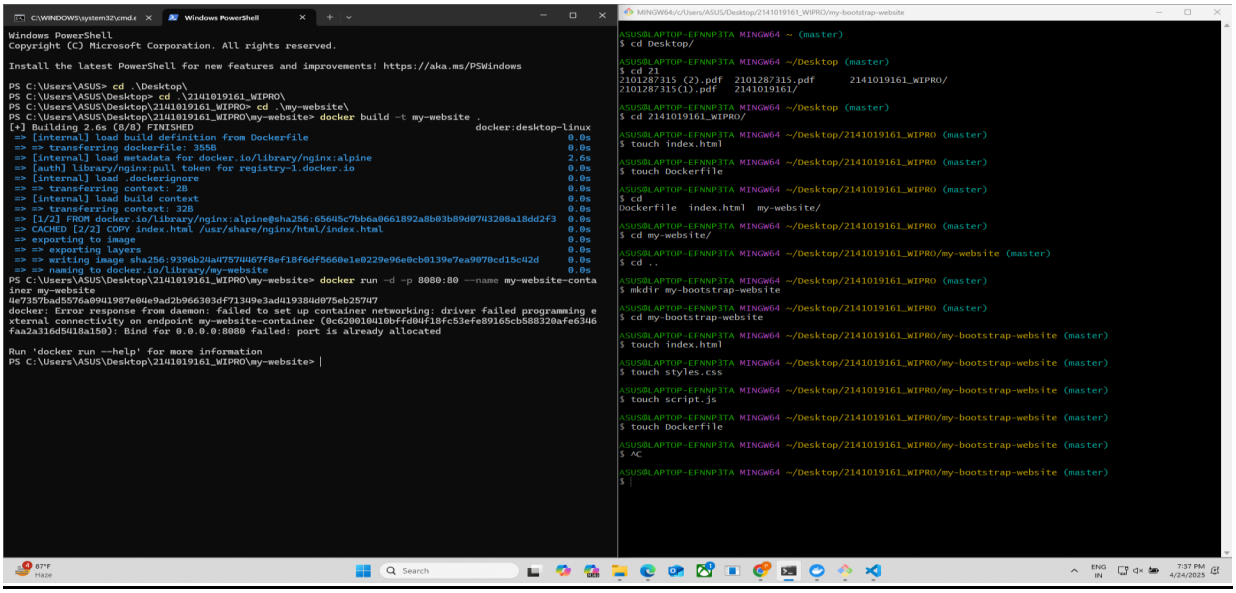
```
docker stop my-bootstrap-website-container
docker rm my-bootstrap-website-container
```

2. **Remove the Docker image:**

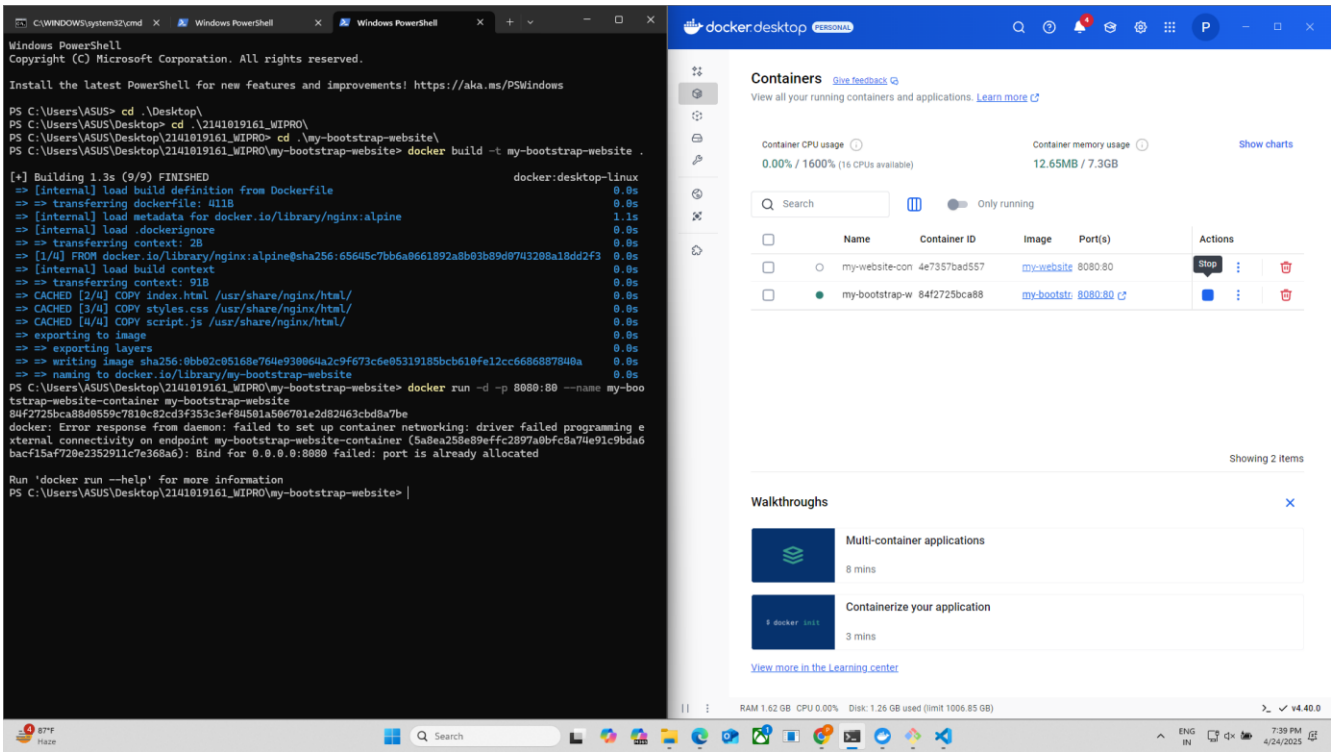
```
docker rmi my-bootstrap-website
```

SCREENSHOT OF THE STEPS

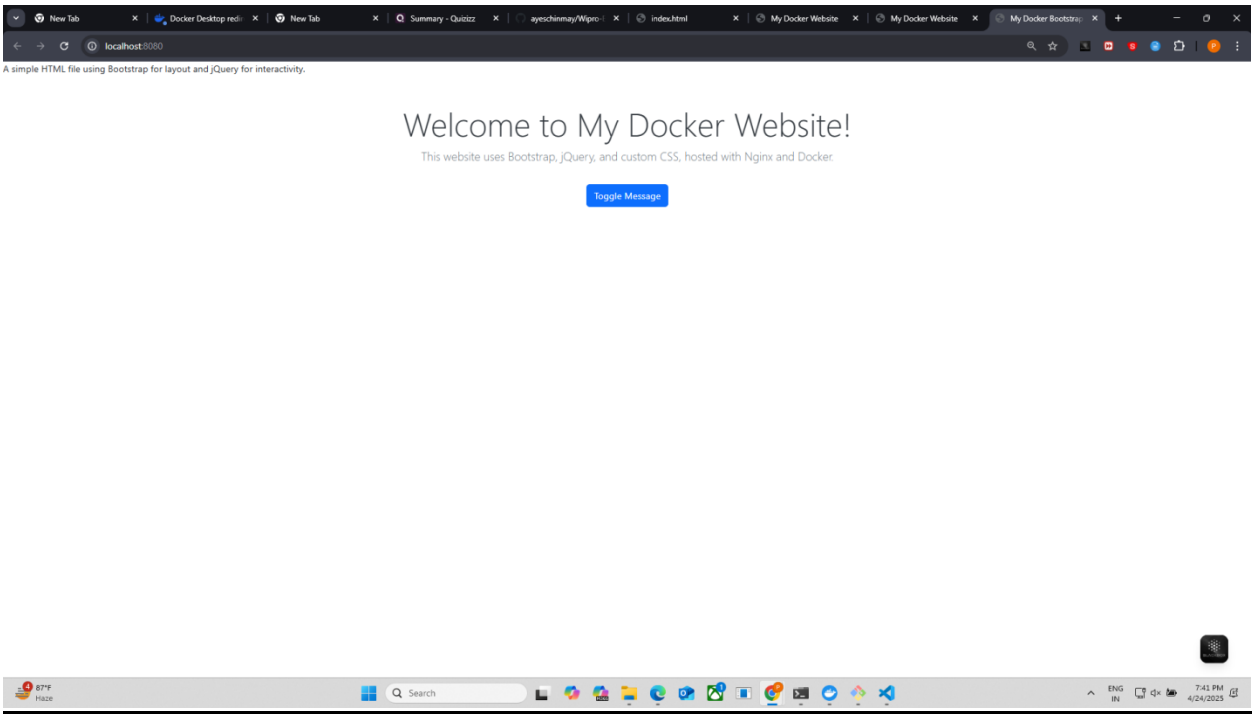
STEP-1



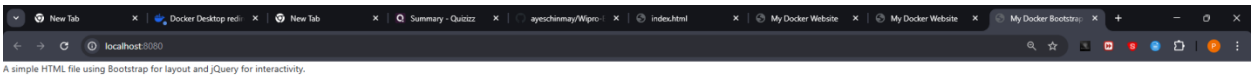
STEP-2


Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Users\ASUS> cd .\Desktop\
PS C:\Users\ASUS\Desktop> cd .\21141019161_WIPRO\
PS C:\Users\ASUS\Desktop\21141019161_WIPRO> cd .\my-bootstrap-website\
PS C:\Users\ASUS\Desktop\21141019161_WIPRO\my-bootstrap-website> docker build -t my-bootstrap-website .
[+] Building 1.3s (9/9) FINISHED docker:desktop-linux
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 411B 0.0s
=> [internal] load metadata for docker.io/library/nginx:alpine 1.1s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/4] FROM docker.io/library/nginx:alpine@sha256:65645c7bb6a0661892a8b03b89d0743208a18dd2f3 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 91B 0.0s
=> CACHED [2/4] COPY index.html /usr/share/nginx/html/ 0.0s
=> CACHED [3/4] COPY styles.css /usr/share/nginx/html/ 0.0s
=> CACHED [4/4] COPY script.js /usr/share/nginx/html/ 0.0s
=> exporting to image 0.0s
=> => exporting layers 0.0s
=> => writing image sha256:0bb02c05168e764e930064a2c9f673c6e05319185bcb610fe12cc6686887840a 0.0s
=> => naming to docker.io/library/my-bootstrap-website 0.0s
PS C:\Users\ASUS\Desktop\21141019161_WIPRO\my-bootstrap-website> docker run -d -p 8080:80 --name my-bootstrap-website-container my-bootstrap-website
84f2725bca88d0559c7810c82cd3f353c3ef84501a506701e2d82463cbd8a7be
docker: Error response from daemon: failed to set up container networking: driver failed programming external connectivity on endpoint my-bootstrap-website-container (5a8ea258e89effc2897a0bfc8a74e91c9bda6bacf15af720e2352911c7e368a6): Bind for 0.0.0.0:8080 failed: port is already allocated
Run 'docker run --help' for more information
PS C:\Users\ASUS\Desktop\21141019161_WIPRO\my-bootstrap-website>
docker desktop
Containers
Give feedback
View all your running containers and applications. Learn more
Container CPU usage
0.00% / 1600% (16 CPUs available)
Container memory usage
12.65MB / 7.3GB
Show charts
Search
Only running
Name
Container ID
Image
Port(s)
Actions
my-website-con
4e7357bad557
my-website
8080:80
Stop
my-bootstrap-w
84f2725bca88
my-bootstr
8080:80
Showing 2 items
Walkthroughs
Multi-container applications
8 mins
Containerize your application
3 mins
View more in the Learning center
RAM 1.62 GB CPU 0.00% Disk: 1.26 GB used (limit 1006.85 GB)
v4.40.0

STEP-3


localhost:8080
A simple HTML file using Bootstrap for layout and jQuery for interactivity.
Welcome to My Docker Website!
This website uses Bootstrap, jQuery, and custom CSS, hosted with Nginx and Docker.
Toggle Message

STEP-4



A simple HTML file using Bootstrap for layout and jQuery for interactivity.

Welcome to My Docker Website!

This website uses Bootstrap, jQuery, and custom CSS, hosted with Nginx and Docker.

Toggle Message

Hello! This message was toggled using jQuery.