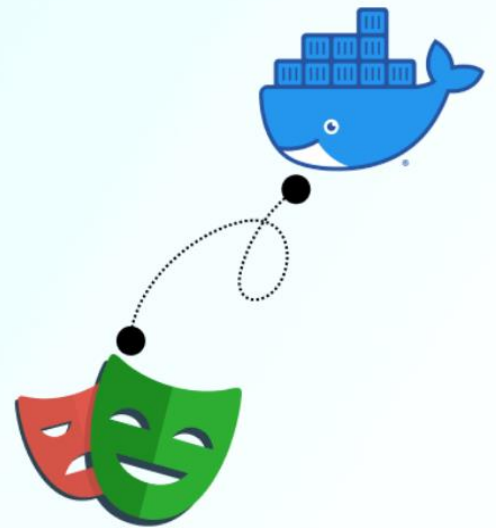


PLAYWRIGHT : MASTERING THE ESSENTIALS PART-7

Playwright Docker Tutorial



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Playwright : Mastering the Essentials - Part 7

Running Playwright Tests in Docker :

This document will guide you through building a Docker image for your Playwright tests, creating a container from that image, and running your tests inside the container.

1. Create a Dockerfile

Create a Dockerfile in the root directory of your Playwright project.

Dockerfile Example:

```
# Use the official Playwright image as the base image
FROM mcr.microsoft.com/playwright:v1.46.0-jammy

# Set the working directory inside the container
WORKDIR /playwrightWithDocker

# Copy the entire project directory to the working directory
COPY . .

# Install dependencies
RUN npm install

# Install Playwright dependencies
RUN npx @playwright/test install
RUN npx playwright install-deps

# Run Playwright tests
CMD ["npx", "playwright", "test"]
```

2. Build the Docker Image

Once your Dockerfile is ready, build the Docker image. This image will contain all the necessary dependencies to run Playwright tests.



Command to Build the Image:

```
docker build -t sonu-playwright .
```

- **-t sonu-playwright** : Tags the image with the name sonu-playwright.
- **.** : Specifies the current directory as the build context.

Running Command to Build the Image :

```
PS C:\Users\Sonu Madheshiya\OneDrive\Desktop\DemoAutomationTools\playwrightDemo> docker build -t sonu-playwright .
[+] Building 23.1s (11/11) FINISHED                                docker:default
=> [internal] load build definition from Dockerfile                0.0s
=> => transferring dockerfile: 506B                                0.0s
=> [internal] load metadata for mcr.microsoft.com/playwright:v1.46.0-jammy 1.3s
=> [internal] load .dockerignore                                   0.0s
=> => transferring context: 2B                                       0.0s
=> CACHED [1/6] FROM mcr.microsoft.com/playwright:v1.46.0-jammy@sha256:860c541d62e212fa2d857afca98730dad12b641f941b9b5ed892e379e9e121bb 0.0s
=> [internal] load build context                                   0.1s
=> => transferring context: 42.49kB                                  0.1s
=> [2/6] WORKDIR /playwrightwithdocker                           0.0s
=> [3/6] COPY . .                                                 0.1s
=> [4/6] RUN npm install                                          1.2s
=> [5/6] RUN npx @playwright/test install                         1.2s
=> [6/6] RUN npx playwright install-deps                         19.0s
=> exporting to image                                             0.2s
=> => exporting layers                                             0.1s
=> => writing image sha256:6b1148df91e40f8f0b0b69dcae0098ca322b3ae4763917d3c2e3585a7f739afe 0.0s
=> => naming to docker.io/library/sonu-playwright                 0.0s
```

3. Check Docker Images:

After building the image, verify that it has been created:

```
docker images
```

Lists all Docker images, including sonu-playwright.

```
PS C:\Users\Sonu Madheshiya\OneDrive\Desktop\DemoAutomationTools\playwrightDemo> docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
sonu-playwright     latest     6b1148df91e4  6 minutes ago  2.08GB
```

4. Run a Container from the Image

Create and run a container from the sonu-playwright image.

Command to Run the Container:

```
docker run -it --name sonu-playwright-container sonu-playwright
```



- **-it** : Runs the container interactively with a terminal attached.
- **--name sonu-playwright-container** : Names the container sonu-playwright-container.
- **sonu-playwright** : The name of the Docker image to use for the container.

Result After Command to Run the Container:

```
PS C:\Users\Sonu Madheshiya\OneDrive\Desktop\DemoAutomationTools\playwrightDemo> docker run -it --name sonu-playwright-container sonu-playwright
Running 6 tests using 6 workers
 6 passed (5.3s)
To open last HTML report run:
  npx playwright show-report
```

5. Check Docker Containers:

After running the container, check the status of all containers:

```
docker ps -a
```

Lists all Docker containers, including sonu-playwright-container, and their statuses (running, stopped, etc.).

```
PS C:\Users\Sonu Madheshiya\OneDrive\Desktop\DemoAutomationTools\playwrightDemo> docker ps -a
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS              PORTS          NAMES
38b87aaf3d33   sonu-playwright "npx playwright test"   4 minutes ago Exited (0) 4 minutes ago           sonu-playwright-container
```

6. View Test Results

The Playwright tests will execute inside the container, and the results will be displayed in your terminal.

```
Running 6 tests using 6 workers
 6 passed (5.3s)
To open last HTML report run:
  npx playwright show-report
```



7. Accessing the Container (Optional)

If you need to access the container's shell:

Command to Access the Container:

```
PS C:\Users\Sonu_Madheshiya\OneDrive\Desktop\DemoAutomationTools\playwrightDemo> docker run -it --name sonu-playwright-container sonu-playwright /bin/bash
root@c2dcd49f4d86:/playwrightWithDocker# ls
Dockerfile  node_modules  package-lock.json  package.json  playwright-report  playwright.config.js  test-results  tests  tests-examples
root@c2dcd49f4d86:/playwrightWithDocker#
```

/bin/bash: Opens a Bash shell in the container, overriding the Dockerfile's CMD.

8. Stopping and Removing the Container

After running your tests, you can stop and remove the container.

Command to Stop the Container:

```
docker stop sonu-playwright-container
```

Command to Remove the Container:

```
docker rm sonu-playwright-container
```

9. Clean Up Docker Resources

Command to Remove the Image:

```
docker rmi sonu-playwright
```

- **sonu-playwright:** The name of the Docker image to remove.

Command to Remove All Stopped Containers:

```
docker container prune
```



Summary of Commands:

- **Build the Image:** docker build -t sonu-playwright .
- **Check Images:** docker images
- **Run the Container:** docker run -it --name sonu-playwright-container sonu-playwright
- **Check Containers:** docker ps -a
- **Stop the Container:** docker stop sonu-playwright-container
- **Remove the Container:** docker rm sonu-playwright-container
- **Remove the Image:** docker rmi sonu-playwright

Stay tuned with [Sonu Madheshiya](#) on LinkedIn for more interesting content on automation testing.