



# Dockerize Your Projects

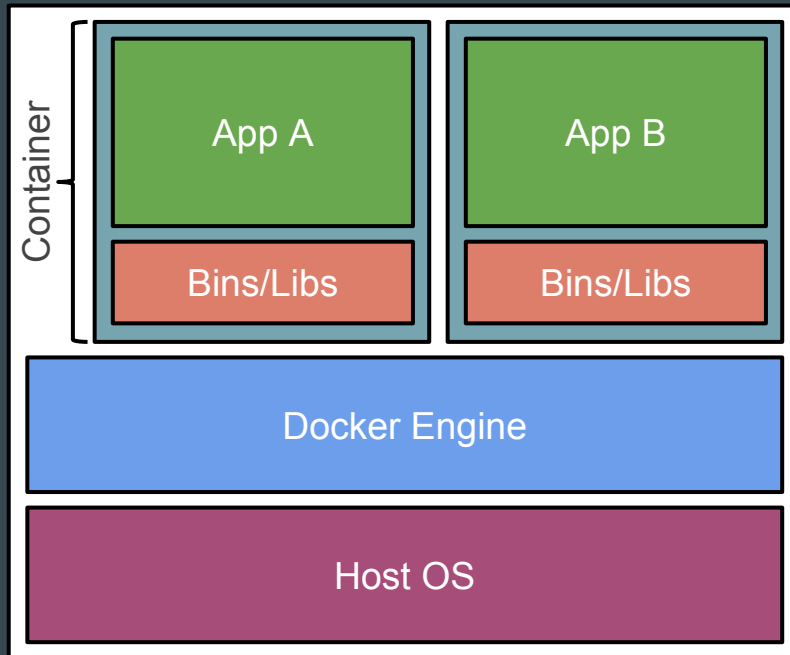


A Brief Introduction to Containerization

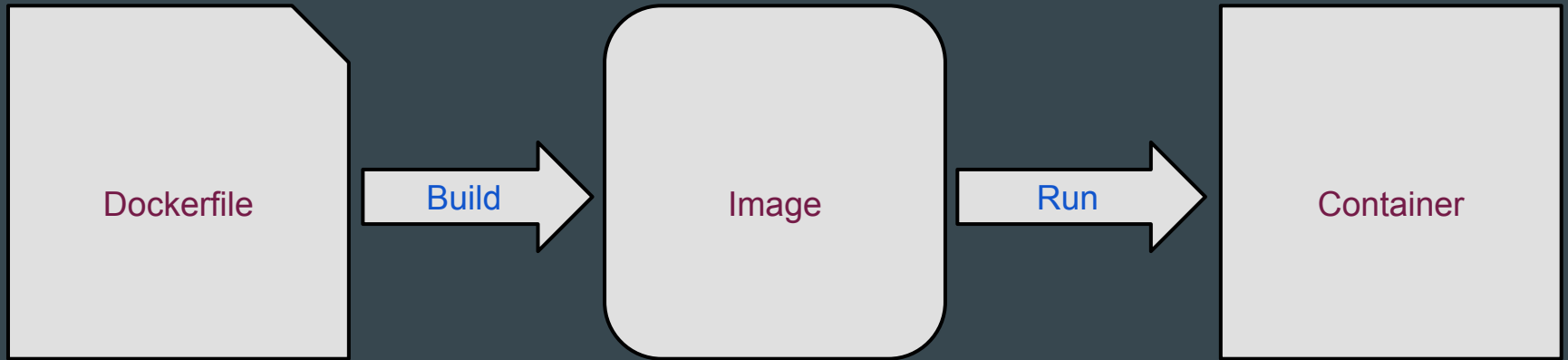
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# Docker

- Application container
- Packages dependencies
- Isolates applications
- Lighter than a virtual machine
- Open-source



# Dockerization



# Example

main.py

```
#!/usr/bin/env python

import sys
import requests
from bs4 import BeautifulSoup

r = requests.get(sys.argv[-1])
data = r.text
soup = BeautifulSoup(data)
for link in soup.find_all("a"):
    print(link.get("href"))
```

Dockerfile

```
FROM python
MAINTAINER Sawood Alam <@ibnesayeed>

RUN pip install beautifulsoup4
RUN pip install requests
ADD main.py /app/
WORKDIR /app
RUN chmod a+x main.py
ENTRYPOINT ["/main.py"]
```

# Try It

```
me@thishost$ ls
>> Dockerfile  main.py
# Build the image from the Dockerfile
me@thishost$ docker build -t ibnesayeed/urlextractor .
>> Layered docker images...
# Run the container from the image
me@thishost$ docker run ibnesayeed/urlextractor http://www.cs.odu.edu/
>> Extracted links...
# Push the image to the registry
me@thishost$ docker push ibnesayeed/urlextractor
# Log in to a different host
me@thishost$ ssh you@otherhost
# Run the container on the other host
you@otherhost$ docker run ibnesayeed/urlextractor http://www.cs.odu.edu/
>> Pull the image from the registry
>> Extracted links...
```

# References

- <https://www.docker.com/>
- <https://docs.docker.com/>
- <https://training.docker.com/>
- <https://hub.docker.com/>
- <https://hub.docker.com/r/ibnesayeed/url extractor/>
- <https://gist.github.com/ibnesayeed/d9a2616c391364c36d612301c4689389>