

# Getting Started with ISPIN

with your PC

Step 1. Run ISPIN

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Step 0. Install ISPIN

Step 0.1 Download UNZIP SPIN/ISPIN

Step 0.2 Install GCC for SPIN

Step 0.2.\* Google it, Ah, MINGW

...

Step 0.3 Install TCL(Tool Command Language) for SPIN GUI, e.g. ISPIN

Step 0.3.\* Google it, Ah, TCL/TK

...

Problems summary:

Deploy a program with a specific dependencies, and the target running environment can be quite different.

# **Running ISPIN via a Container method using Docker**

**Rigorous Methods for Software Engineering**

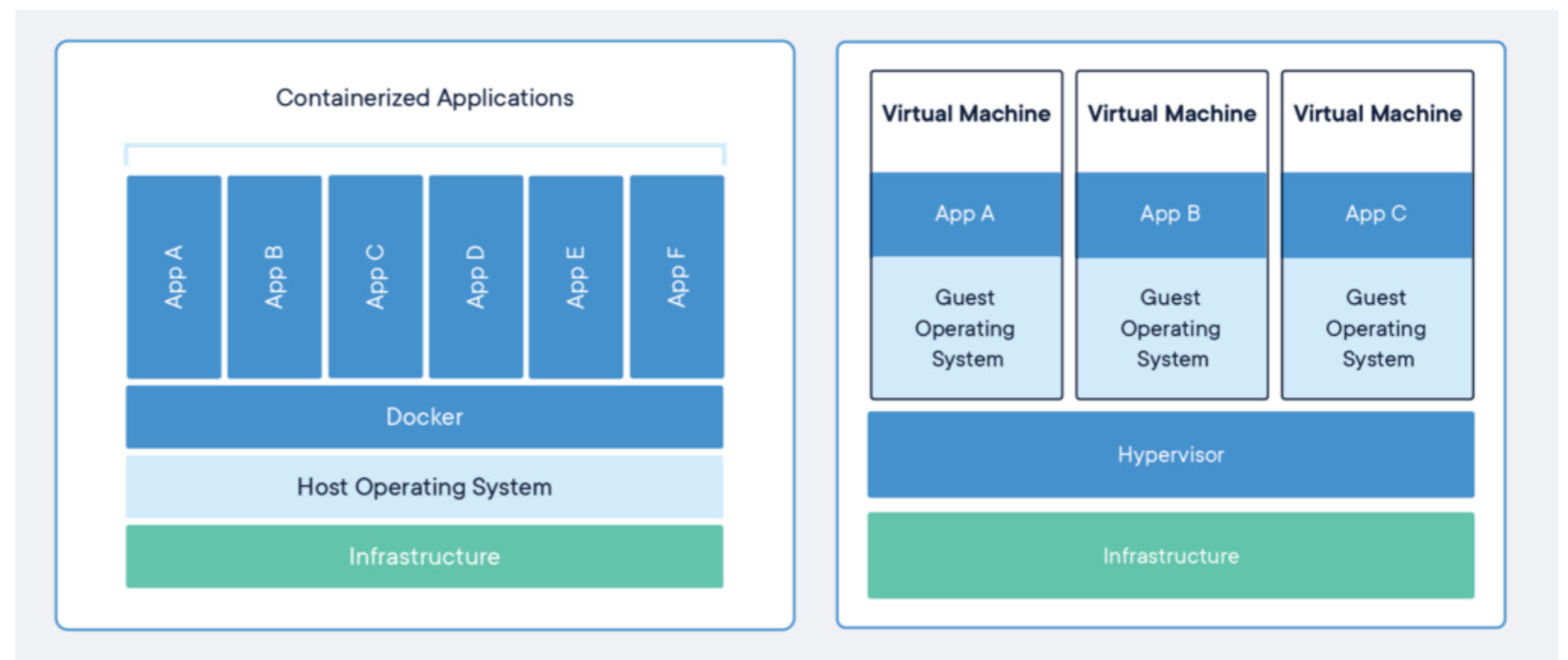
# Docker

*an open-source project that automates the deployment of software applications inside containers by providing an additional layer of abstraction and automation of OS-level virtualization on Linux.*

In a nutshell

- An open virtualisation platform, *containerisation*, to set up independent environment for applications.
- Specify library dependency with a script, dockerfile, and build runnable layered image.
- Runs an application as a container via an *image*.
- More lightweight than VM, i.e. multiple containers run on a single OS instance to share OS level resource.

Extended reading: [A nice answer on StackOverflow for Container VS VM.](#)



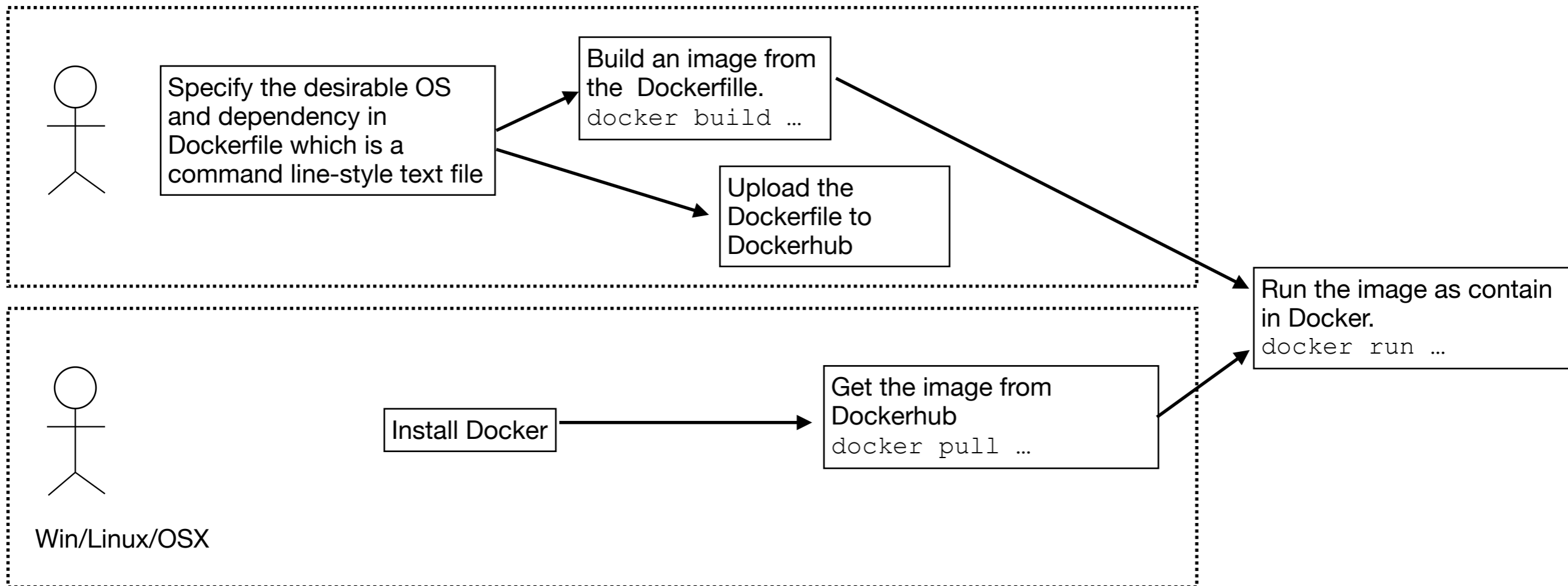
# Workflow

```
FROM python:3.8
# set a directory for the app
WORKDIR /usr/src/app

# copy all the files to the container
COPY . .
# install dependencies
RUN pip install --no-cache-dir -r requirements.txt

EXPOSE 5000

CMD ["python", "./app.py"]
```



**Demo**