Usecase where docker is most useful

1. You are a developer in a team
2. Want to quickly deploy application to qa environment

Step 1: check if docker is installed

Graphical user interface, text, application

Description automatically generated

Docker run in28min/todo-rest-api-h2:1.0.0.RELEASE

A spring boot app is bring launched up!

1. But java is not installed ? how is it running ?
2. Docker – makes deploying applications a cake walk!

Docker behind the scenes

1. Docker run in28min/todo-rest-api-h2:1.0.0.RELEASE

Image is downloaded from hub.docker.com 🡪 docker registry (contains a lot of repos)

Hub.docker.com is a public registry 🡪 anyone can access

Hub.docker.com/in28min/todo-rest-api-h2 🡪 this is a repository

The repository hosts a multitude of tags 🡪 which are versions

What does image contain 🡪 all the things that the application needs to run

Image – a static template 🡪 a set of bytes

When the image is downloaded 🡪 and when it is running 🡪 then it is called a container

Docker run -p 5000:5000 in28min/todo-rest-api-h2:1.0.0.RELEASE

Hostport 🡪 first

Containerport 🡪 second

To run the application , you need to specify both hostport and containerport

You don’t want the application to be tied to the terminal

Docker run -p 5000:5000 -d in28min/todo-rest-api-h2:1.0.0.RELEASE

-d means detached

Docker container ls

See all the running containers

Docker run -p 5001:5000 -d in28min/todo-rest-api-h2:1.0.0.RELEASE

To run another container of the same image

Docker images

To show all the images present LOCALLY that have been pulled from docker hub

Docker container stop <container id>

To stop the container from ruynning

Diagram

Description automatically generated

Why is docker popular?

Chart, treemap chart

Description automatically generated

Chart

Description automatically generated with low confidence

Vms are heavyweight – need guest os and host os!

Docker dun need guest os

Docker tag in28min/todo-rest-api-h2:1.0.0.RELEASE in28min/todo-rest-api-h2:latest

Docker pull just pulls, but doesn’t run

Docker official images 🡪 curated set of docker repos that are stored on dockerhub

Docker image history 🡪 instructions run to create that image

Docker image inspect

Docker image remove