Components in a docker environment work together to deliver an application, just like a shipping yard, a manifest and shipping containers work to make import / exporting goods possible.

## Docker Engine

engine

Another name for docker daemon, or runtime

shipping yard

provides services needed to run a container

file systems

network stacks

process hierarchy

access to kernel

resource allocation

Provides a common runtime environment that any container can run in without change across hosts and platforms

Enables application portability

images

Manifest

List of everything in the container, plus instructions on how to build it

Containers require an image

Gives the container a spec

like templates in a vm world

docker will pull the image from docker hub if not available locally

images are comprised of multiple layers

containers

shipping container

Standardizes transportation of goods, or in this case, applications

launched from images

running realization of an image

registry

Stores location of image repositories

Official docker registry is hub.docker.com

repositories

Stores trusted images

Contains images

There’s separate repos for different packages

There are both official and user repos

Official repos are managed by both docker and various companies / organizations responsible for the various packages

User repos are images created by members of the docker community

Be careful about running user repos