**Dive into Docker**

* Easy to install and run software without worrying about underlying dependencies
* Docker is platform or eco system that supports running containers

1. Docker Client (CLI) : Command to interact with docker server
2. Server (Daemon) : responsible for creating images and running containers
3. Machines
4. Images : Single file contains all the dependencies and configuration to run the program.
5. Hub
6. compose

Container:

* Instance of images,
* separate hardware memory.
* A process or list of processes that have a grouping of resources specifically for it.

How does it work?

* Check the copy in the local image directory. If not, download it from the hub.
* Kernel is responsible for allotting the hardware resources
* Namespacing : Isolating the resources per process
* Control groups: Limit amount of resources user per process
* NS and Control group specific for linux kernel not for windows or mac.
* Docker installation behind the scene runs a linux virtual machine which allottes the NS and CG.