**Docker and how its works / Docker File :**

**Docker Components:**

Docker is composed of following four components

1. Docker Client and Daemon.
2. Images
3. Docker registries
4. Containers
5. How Does Docker Work?

Docker has a client-server architecture. Docker Daemon or server is responsible for all the actions that are related to containers. The daemon receives the commands from the Docker client through CLI or REST API’s. Docker client can be on the same host as a daemon or it can be present on any other host.

1. **Images** are the basic building blocks of Docker. Containers are built from images. Images can be configured with applications and used as a template for creating containers. It is organized in a layered fashion. Every change in an image is added as a layer on top of it.
2. **Docker registry** is a repository for Docker images. Using Docker registry, you can build and share images with your team. A registry can be public or private. Docker Inc provides a hosted registry service called Docker Hub. It allows you to upload and download images from a central location. If your repository is public, all your images can be accessed by other Docker hub users. You can also create a private registry in Docker Hub. Docker hub acts like git, where you can build your images locally on your laptop, commit it and then can be pushed to the Docker hub.
3. **Container** is the execution environment for Docker. Containers are created from images. It is a writable layer of the image. You can package your applications in a container, commit it and make it a golden image to build more containers from it. Two or more containers can be linked together to form tiered application architecture. Containers can be started, stopped, committed and terminated. If you terminate a container without committing it, all the changes made to the container will be lost.

### **Conclusion:**

1. The best feature of Docker is collaboration. Docker images can be pushed to a repository and can be pulled down to any other host to run containers from that image. Moreover, Docker hub has thousands of images created by users and you can pull those images down to your hosts based on your application requirements. We will cover a more practical implementation of Docker in coming series of articles.