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Assignment 2-6

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Create Docker Container Environment (NVIDEIA Docker or any other)

DOCKER:

Docker is a papular containerization platform that enables developers to package their ~~applicants~~ applications and their dependencies into a container. These containers can then be deployed on any system with Docker installed, making it a highly portable and flexible solution for deploying applications

Features of Docker

- Docker has the ability to reduce the size of development by providing a smaller footprint of the operating system via Containers.
- With containers, it becomes easier for teams across different units, such as development, QA and operations to work seamlessly across applications.
- You can deploy Docker containers anywhere, on any physical and virtual machines and even on the cloud.
- Since Docker containers are pretty lightweight, they are very easily scalable.

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Components.

⇒ Docker has the following components.

- Docker for Mac – It allows one to run Docker containers on the Mac OS
- Docker for Linux – it allows one to run Docker containers on Linux OS.
- Docker for Windows – it allows one to run Docker containers on Windows OS
- Docker Engine – it is used for building Docker images and creating Docker containers
- Docker Hub – This is the registry which is used to host various Docker images.
- Docker Compose – This is used to define applications using multiple Docker Containers.

Conclusion:

Using Docker containers, including NVIDIA Docker, for machine Learning and data science applications can improve portability, reproducibility, scalability, and security.

It can also simplify the development process and make it easier to share applications with others.