## Docker CheatSheet

Docker is a containerization technology that uses OS-level virtualization to package data science applications. It is an open-source project for automating the deployment of applications as portable, self-sufficient containers that can run on the cloud or on-premises.

### Pull
Pull an image from the Docker Hub.

```
docker pull <image-name>
```

### Push
Push an image to a registry.

```
docker push <image-name>
```

### Run
Run a container from an image.

```
docker run <options> <image-name>
```

Run a container from the "python" image and map port 80 on the host machine to port 80 on the container.

```
docker run -p 80:80 python
```

### Remove
Remove a specific image.

```
docker rmi <image-id>
```

Remove a stopped container.

```
docker rm <container-id>
```

### Display Logs
Display logs for debugging the containers.

```
docker logs
```

### Display Info
Display more granular information on the system-wide installation of Docker.

```
docker info
```

### Build
Build an image from a Dockerfile.

- The `-t` flag specifies the name of the image.
- The `-` at the end specifies the build context, which is the current directory.

```
docker build -t <image-name> .
```

### Image
Display the list of all the downloaded images.

```
docker images
```

### Start
Restart a previously stopped container.

```
docker start <container-id>
```

### Stop
Stop a running container.

```
docker stop <container_id>
```

### Exec
Run a command inside a running container.

```
docker exec -it <container-id> /bin/bash
```

### Version
Check the version of docker installed in your working environment.

```
docker version
```

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