Docker Hub - Remote Repository of Images

Remote repository for all custom and standard images

We'll cover the following

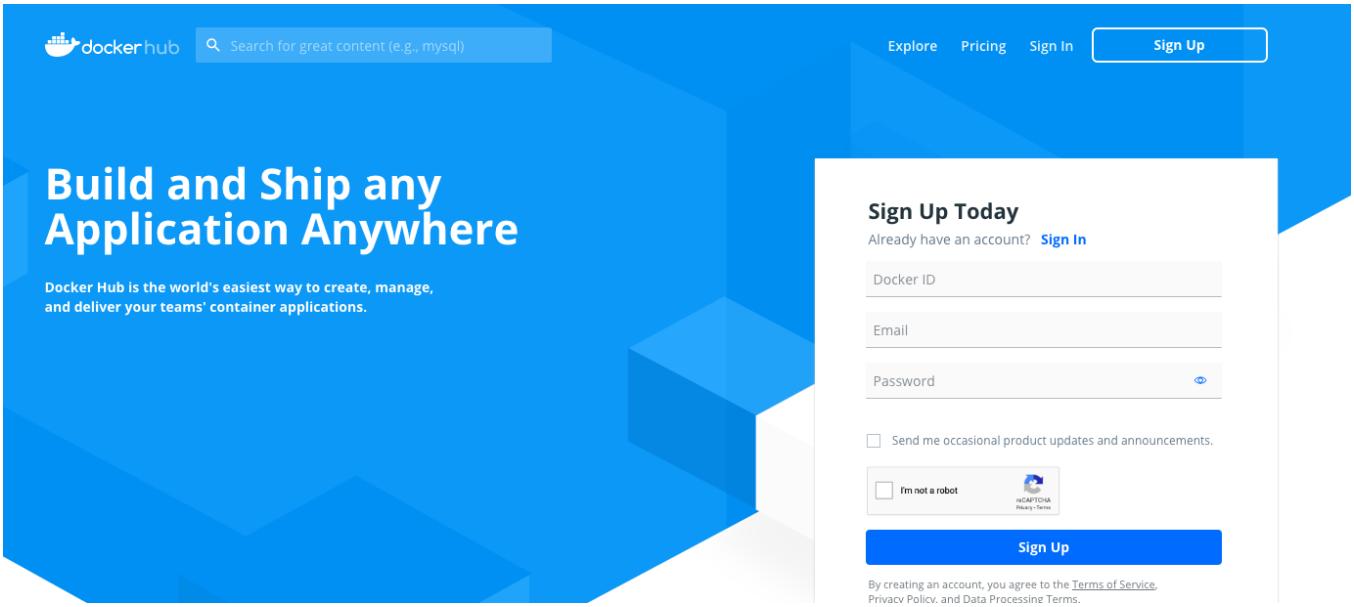
Docker Hub

Docker Hub is a remote repository for custom and Docker's official images. To push or pull images to and fro from the Docker Hub, you need a Docker Hub account. If you have one, you can skip the next section.

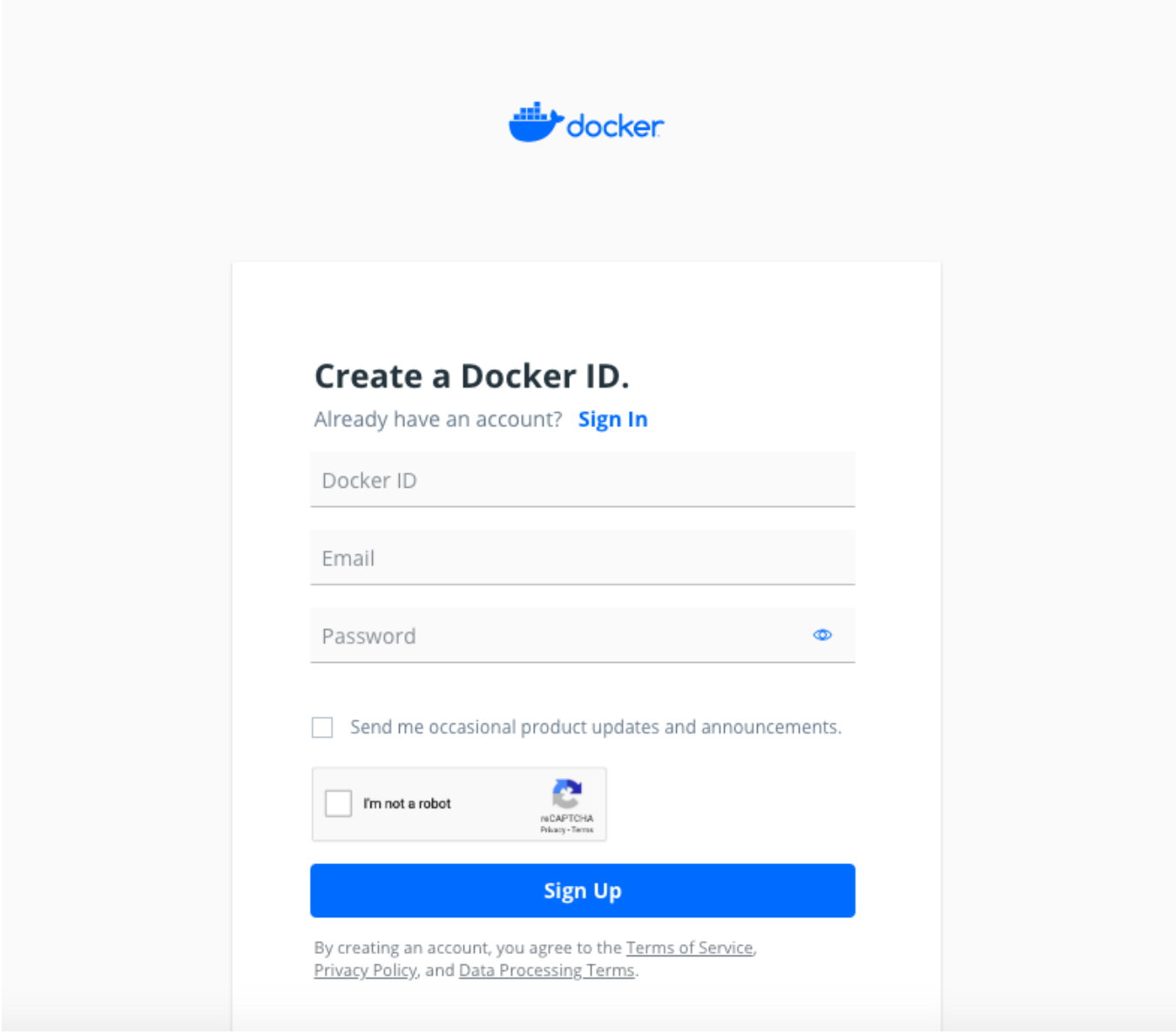
Docker Hub account

To create a Docker Hub account, follow these steps:

1. Open the Docker Hub website



2. Click on the sign up button in the upper right corner



3. Enter a unique id, email and password. That's it. You have a Docker Hub account now.

Pushing an app image

Why should we push images to Docker Hub? There are many reasons. Some of them are:

1. Saves space: In the previous lesson "Troubleshooting in Docker", we discussed the space issue. If we build our image and push it to Docker Hub, we don't have to rebuild the image on production systems. This will save us a lot of space and time.
2. Easy access: You can access your image from any other machine, provided you have an active internet connection.

Steps to push an image

- type `docker login` on the command prompt or terminal

- enter your login credentials

```
$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don
't have a Docker ID, head over to https://hub.docker.com to create one.
Username: Myusername
Password:
Login Succeeded
```

Once you are logged in,

- Tag the app image with your username

```
$ docker tag flask_app:1.0 venky8283/flask_app:1.0

$ docker images
REPOSITORY                          TAG                 IMAGE ID
            CREATED              SIZE
flask_app                           1.0                 3507ec2e185
1        35 hours ago        952MB
venky8283/flask_app                 1.0                 3507ec2e185
1        35 hours ago        952MB
```

- Push the image using `docker push <username>/flask_app:1.0`

It will take some time but once it's done, go to your Docker Hub homepage and check out the image you just pushed.

Running an app on different machines

Let's try to access the pushed image from different machines. If you don't have another laptop, no worries. Login to your laptop using another user account.

Check to make sure that you can access Docker without any issues by running the `$docker version` command.

If everything goes well, proceed or check out the previous lesson "Troubleshooting in Docker", if you face any issue.

- Type `docker run -p 5000:5000 <username>/flask_app:1.0`

This command will pull the image and run your app.

If you just want to pull the image, then type `docker pull <username>/flask_app:1.0`.

We are nearly at the end of the Docker fundamentals. From the next section, we will move into a more advanced section.

So, I advise you to solve all exercises and revise one more time.

Congratulations to you. You've made it so for. Take a break now and grab a cup of coffee.