Docker Microsoft SQL Server

Introduction

In this article, the tasks we'll perform will be explained regardless of the operating system. Even though we'll download the Docker Desktop application, we'll use Docker through the terminal. Although I use Windows, you can follow along with any operating system without any issues.

Even though there is a Linux version of SQL Server, there is no macOS version. If we want to use SQL Server as a database on macOS and work locally, we can use Microsoft SQL Server through Docker.

Tasks:

- Install Docker on our computer
- Download the Microsoft SQL Server Image
- Create a container with this image
- Launch the container

Let's Start

Docker is used to run software packages called Containers.

Containers are virtual computers that hold certain technologies packaged together. These Containers' images are provided to us by Docker itself, official developers, or communities.

We can create multiple Containers with one Image.

You can find images of many technologies from https://hub.docker.com/.

Installing Docker

First, let's install the Docker Desktop application. The installation steps are well explained on the https://docs.docker.com/ site. You can click the links for Mac or Windows.

If you are a Linux user, unfortunately, there is no Docker Desktop support, so you should install Docker engine. Since I will be managing everything through the terminal, it won't be an issue.

After completing the installation, we need to create an account on https://www.docker.com/.

Then, we log in by typing "docker login" in the terminal and entering our account information.

Installing Microsoft SQL Server

Now we are ready to download the SQL Server image from Docker Hub (https://hub.docker.com/r/microsoft/mssql-server). We can create a container with this image by running the command "docker pull mcr.microsoft.com/mssql/server:2022-latest" in the terminal to pull the SQL Server image from remote.

Let's create a container named "SqlServerCtis465" with the command:

docker run -e "ACCEPT_EULA=Y" -e "MSSQL_SA_PASSWORD=Ctis465!" -p 1433:1433

--name SqlServerCtis465 -d mcr.microsoft.com/mssql/server:2022-latest

Explanation:

- ACCEPT_EULA: Accepts the SQL Server user agreement

- SA_PASSWORD: System administrator password

- -p 1433:1433: Maps the container port to the server port

Let's launch the container we created with the command "docker start SqlServerCtis465".

Now we can use Microsoft SQL Server through the Docker Container we created.

References

https://medium.com/@m.cllglr/docker-ile-sql-server-eecbcd42f14