DockerfileCopy

1 FROM mcr.microsoft.com/dotnet/aspnet:5.0 AS base

2 WORKDIR /app

3 EXPOSE 80

4

5 FROM mcr.microsoft.com/dotnet/sdk:5.0 AS build

6 WORKDIR /src

7 COPY src/Services/Catalog/Catalog.API/Catalog.API.csproj …

8 COPY src/BuildingBlocks/HealthChecks/src/Microsoft.AspNetCore.HealthChecks …

9 COPY src/BuildingBlocks/HealthChecks/src/Microsoft.Extensions.HealthChecks …

10 COPY src/BuildingBlocks/EventBus/IntegrationEventLogEF/ …

11 COPY src/BuildingBlocks/EventBus/EventBus/EventBus.csproj …

12 COPY src/BuildingBlocks/EventBus/EventBusRabbitMQ/EventBusRabbitMQ.csproj …

13 COPY src/BuildingBlocks/EventBus/EventBusServiceBus/EventBusServiceBus.csproj …

14 COPY src/BuildingBlocks/WebHostCustomization/WebHost.Customization …

15 COPY src/BuildingBlocks/HealthChecks/src/Microsoft.Extensions …

16 COPY src/BuildingBlocks/HealthChecks/src/Microsoft.Extensions …

17 RUN dotnet restore src/Services/Catalog/Catalog.API/Catalog.API.csproj

18 COPY . .

19 WORKDIR /src/src/Services/Catalog/Catalog.API

20 RUN dotnet build Catalog.API.csproj -c Release -o /app

21

22 FROM build AS publish

23 RUN dotnet publish Catalog.API.csproj -c Release -o /app

24

25 FROM base AS final

26 WORKDIR /app

27 COPY --from=publish /app .

28 ENTRYPOINT ["dotnet", "Catalog.API.dll"]

And these are the details, line by line:

* **Line #1:** Begin a stage with a "small" runtime-only base image, call it **base** for reference.
* **Line #2:** Create the **/app** directory in the image.
* **Line #3:** Expose port **80**.
* **Line #5:** Begin a new stage with the "large" image for building/publishing. Call it **build** for reference.
* **Line #6:** Create directory **/src** in the image.
* **Line #7:** Up to line 16, copy referenced **.csproj** project files to be able to restore packages later.
* **Line #17:** Restore packages for the **Catalog.API** project and the referenced projects.
* **Line #18:** Copy **all directory tree for the solution** (except the files/directories included in the **.dockerignore** file) to the **/src** directory in the image.
* **Line #19:** Change the current folder to the **Catalog.API** project.
* **Line #20:** Build the project (and other project dependencies) and output to the **/app** directory in the image.
* **Line #22:** Begin a new stage continuing from the build. Call it **publish** for reference.
* **Line #23:** Publish the project (and dependencies) and output to the **/app** directory in the image.
* **Line #25:** Begin a new stage continuing from **base** and call it **final**.
* **Line #26:** Change the current directory to **/app**.
* **Line #27:** Copy the **/app** directory from stage **publish** to the current directory.
* **Line #28:** Define the command to run when the container is started.