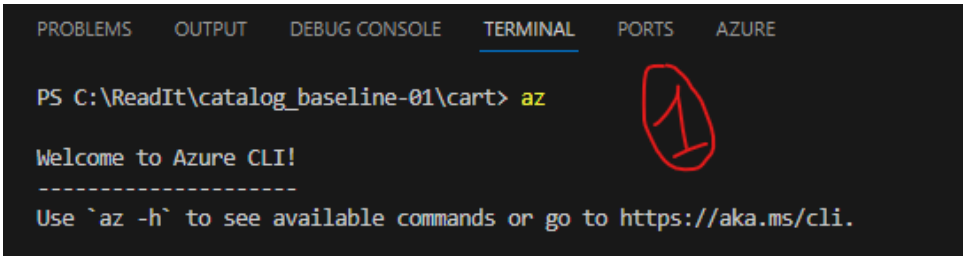
Azure section 14.01 - Container and AKS hands on by deploying the cart module.

We now need to deploy the application module of cart where the books which we will be selected will get added. We will do this by deploying the container.

So we will do this step by step:

Step 1:

- First we need to download the Azure CLI locally on the computer. We will be using this CLI for executing the command to deploy our docker image on AKS.
- For that first we need to go to the browser and install the Azure CLI from the official website. Once the downloading is completed we can come and check if the azure CLI is working or not by the command **az.**

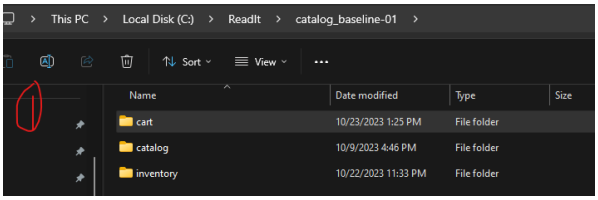


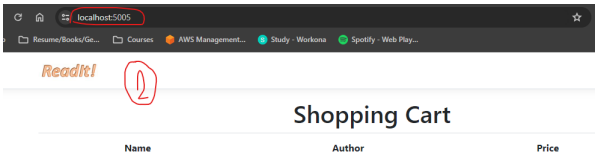
Step 2:

- We need to download and extract the file of the shopping cart from the git hub repository.
- Copy the extracted file to the same location where the catalog and inventory app is stored.

- Open the VS code from the **shopping cart folder and run it locally**. But we really need to run this code in AKS.

> We have to build the docker image and then publish it to the ACR.
> ACR stands for azure container registry. This is used to manage the images.
> So now we will proceed with required steps.

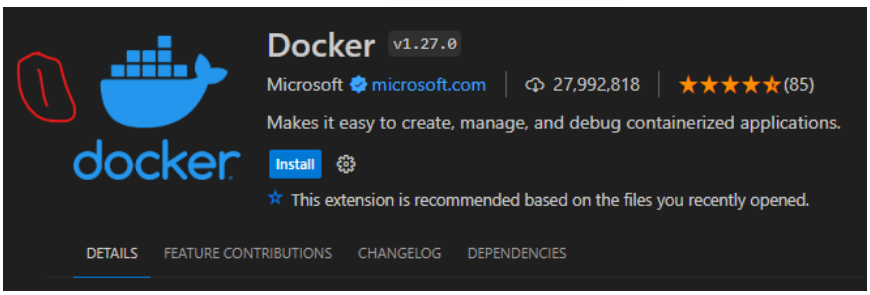




Step 3:

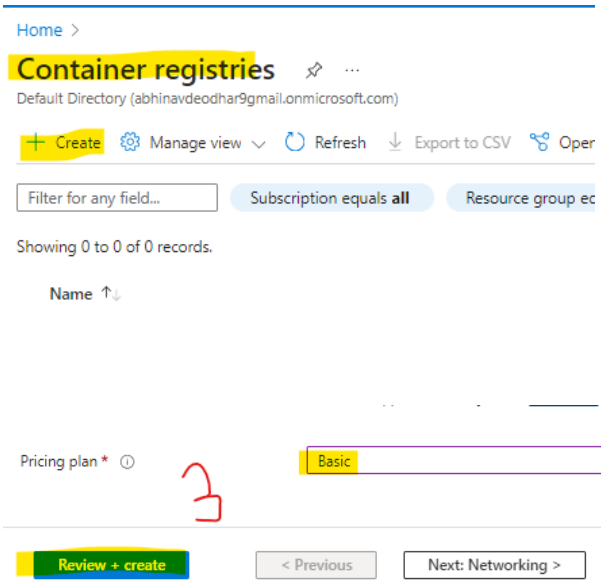
- Install the docker extension in the VS code.
- After the installation is complete there will be a change which will take place one is that there will be an extension of docker at the left of the screen.
- Under this extension we can see that we can manage the docker container and images and registries which is under the ACR service of the azure cloud.
- We are going to build the docker image in ACR.

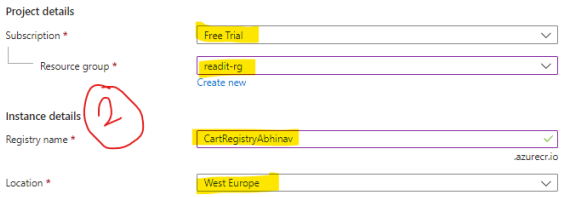
> This is the additional ability of the ACR that it not only stores the docker images but also it allows us to build those images which ultimately converts them to container.



Step 4:

1. Go to the azure portal and search for Registry. Click on Container registry.
2. Click on create option. Choose the resource group and the name of the registry must be unique across azure.
3. Choose the same location and set the SKU option to BASIC. Hit review and create.





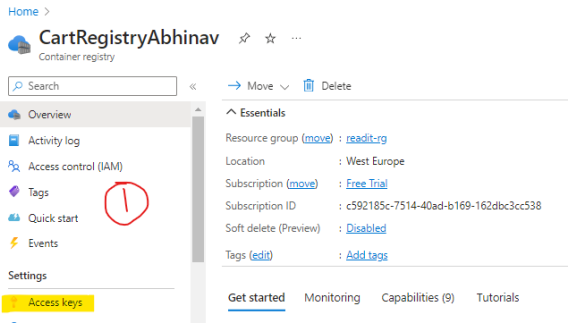
Step 5:

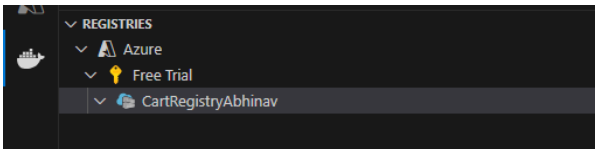
1. On the overview page go to the access key option. Under the access key choose enable admin users. This option helps the VS code to access the container register (ACR) and it also helps it to push the code into it.
2. Now go to the VS code and choose the docker extension and under register select the azure option.
3. Under that option choose our subscription and there we can see the option of the registry which we just created.

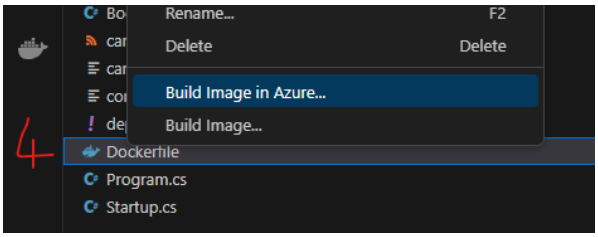
This option here is available because we have enable the admin access under the access key option.
Now we know that the VS code is familiar with the registry that we have created. And now we will first push or publish the code of the image to the ACR registry and then will ask this ACR to build it for us.

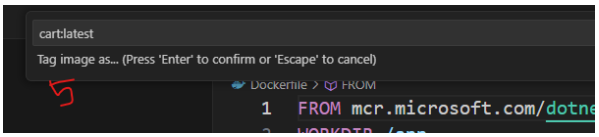
4. Now go back to the explorer and right click on the docker file and click on the option **build image in azure**. All the pop-ups of selection of subscription, name of the docker image, operating system of the docker image will be appear we need to select them accordingly. For operating system we need to choose the linux operating system.
5. If this gives an error then we need to first connect the azure to our mail id. for that open the terminal and type az login.
6. Again do the fourth step.

If we now go to the ACR and under the navigation menu go to the repository under that we can see our image which was just published.

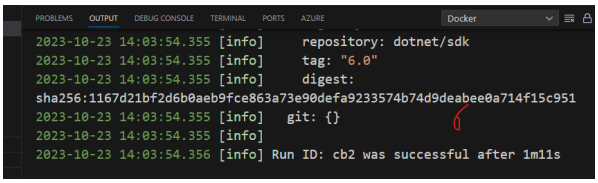


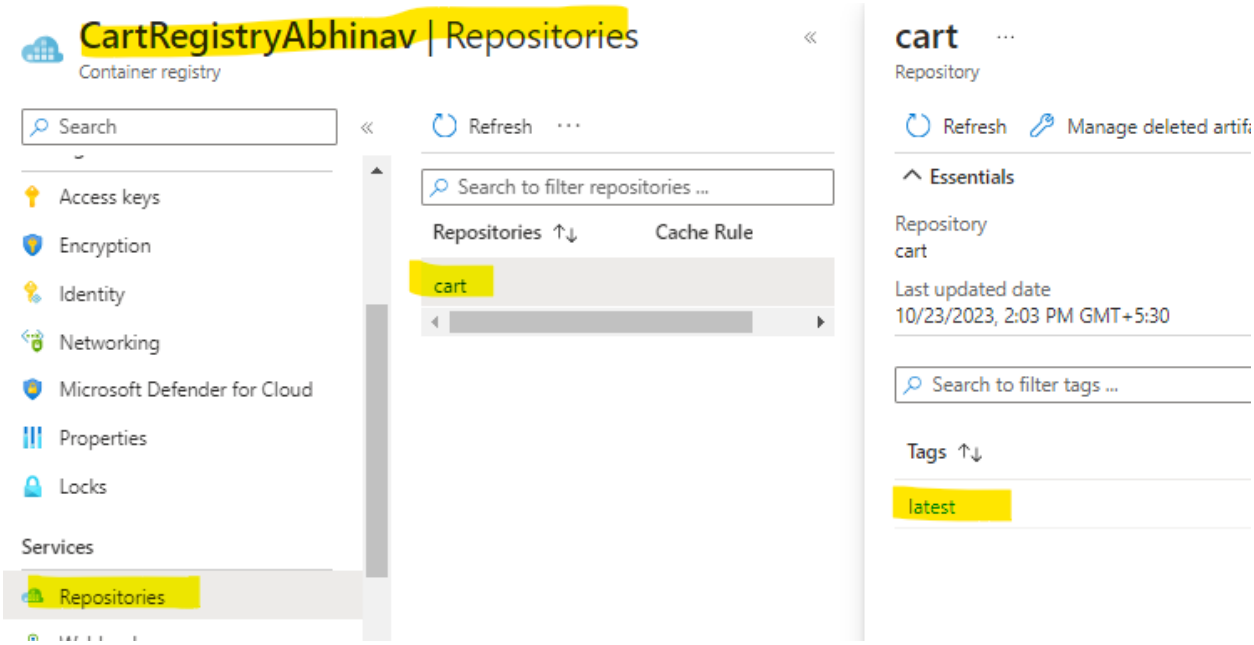






Name the container registry.





Here ends the part 1 of the hands on of deploying cart module.