**DOCKER FILE IMPLEMENTATION**

1. Download the Docker Desktop for windows and Install it in your machine.
2. Login to Docker Hud website and sign up and use the same credentials to login Docker desktop

Graphical user interface, text, application, email

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1. After installing docker desktop. Please run the commands from the below link in powershell if any issue with Docker Desktop running.

<https://markpatton.cloud/2020/08/12/error-when-running-docker-on-windows-after-install-fixed/>

1. Verify the docker is running by typing "docker version" command in Command prompt.

Check the Below Screenshot. Given below.

Text

Description automatically generated

1. Install AWS CLI for windows on the same machine and verify the installation by using “AWS” command.
2. Download the Zip file that I shared in the email
3. Unzip the folder and place it in any location on the Machine where the docker desktop is running
4. Get the latest war file and place the war file in the folder where the “Dockerfile” is exist.

Graphical user interface, application

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1. Open a command prompt and go to the folder where our war, docker file and jboss folder exist.

E:\Docker Image Creation -----> Path Location.

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1. Run the below command to build the docker image

**docker-compose build**

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Once it done , it will show like below.

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Next, we have to check the running docker images.

A picture containing graphical user interface

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1. To up the application , run the below command

docker-compose up

A picture containing background pattern

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CTRL + C to force stopping …..

## **2. ECS Deployment**

# **ECR**

1. Login as an IAM user and create a repository in the Elastic Container Registry

Graphical user interface, application

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A screenshot of a computer

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Graphical user interface, text, application, email

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We have to Create a repository as AWS ECR.

Repo name as --> ecr-repo-test & Choose Create Repository.

Graphical user interface, text, application

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1. Select the repository and click on “View Push Commands” to see all the commands to push the docker image to the ECR repository.
2. Open the command prompt and configure the AWS credentials by using the below command, if not already configured.

**aws configure**

1. Pass the Access Key and Security Access of the IAM user in the command prompt

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1. Run the first push command from the ECR and execute the command in the command prompt. You will see login succeed message to proceed further.
2. Run the 3rd command and change the name of the image next to the “tag” to your application docker image with tag created in the first section.
3. Run the 4th command to push the image to the amazon ECR

A computer screen capture

Description automatically generated with low confidence

Pushing Process :

Text

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Pushing process done :

Text

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1. Verify the amazon ECR repository for the image pushed and copy the image url for the next steps.

Graphical user interface, application

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# **ECS**

1. Create a Cluster with EC2 type, select the right ec2 type depends on the requirements

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2.Create a Task Definition and Add container by using the copied image url

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A picture containing graphical user interface

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1. Create a Service under Task definition by selecting the cluster

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Description automatically generated

Choose action in the above image. And choose Create services.

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Graphical user interface, application

Description automatically generated

1. Open the ec2 instance and update the inbound rules for the security group to allow all the ports mentioned in docker file.

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Graphical user interface, text, application, email

Description automatically generated

1. Go to Cluster and verify the Task is in “Running” state.

Graphical user interface, text, application

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