



## Deployment of Machine Learning Models

### Section 12.9 Notes - Upload to AWS ECR

#### Commands

- cd into the cloned course repo root directory then
- Ensure PIP\_EXTRA\_INDEX\_URL is set (Gemfury URL)
- Ensure AWS\_ACCOUNT\_ID is set (can be found in the AWS ECR URL)

#### Build image locally (Windows):

```
docker build --build-arg  
PIP_EXTRA_INDEX_URL=%PIP_EXTRA_INDEX_URL% -t  
YOUR_APP_NAME:latest .
```

#### Build image locally (OS X / Linux):

```
docker build --build-arg  
PIP_EXTRA_INDEX_URL=${PIP_EXTRA_INDEX_URL} -t  
YOUR_APP_NAME:latest .
```

#### Tag local docker image (Windows):

```
docker tag YOUR_APP_NAME:latest  
%AWS_ACCOUNT_ID%.dkr.ecr.us-east-1.amazonaws.com/YOUR_APP_NAME  
:latest
```

#### Tag local docker image (OS X / Linux):

```
docker tag YOUR_APP_NAME:latest  
${AWS_ACCOUNT_ID}.dkr.ecr.us-east-1.amazonaws.com/YOUR_APP_NAM  
E:latest
```

#### View Images and Tags:

```
docker images
```

#### Login to ECR:

```
aws ecr get-login --no-include-email --region us-east-1
```

Copy and paste the result of this command into the command prompt / terminal and run the command - you should see "login succeeded"



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### Push docker image to ECR (Windows)

`docker push`

```
%AWS_ACCOUNT_ID%.dkr.ecr.us-east-1.amazonaws.com/YOUR_APP_NAME  
:latest
```

`docker push`

```
${AWS_ACCOUNT_ID}.dkr.ecr.us-east-1.amazonaws.com/YOUR_APP_NAM  
E:latest
```

### Links

AWS ECR User Guide:

<https://docs.aws.amazon.com/AmazonECR/latest/userguide/what-is-ecr.html>

Create ECR entry with CLI:

<https://docs.aws.amazon.com/cli/latest/reference/ecr/create-repository.html>

More CLI commands:

[https://docs.aws.amazon.com/AmazonECR/latest/userguide/ECR\\_AWSCLI.html#AWSCLI\\_push\\_image](https://docs.aws.amazon.com/AmazonECR/latest/userguide/ECR_AWSCLI.html#AWSCLI_push_image)