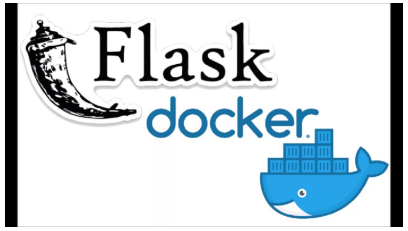
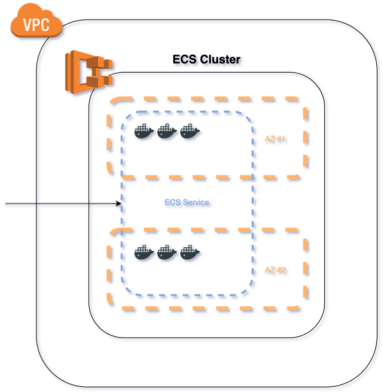




Amazon Redshift database stores training data

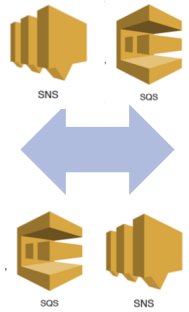
Model object stored in s3 bucket

Client

- Post the request for new data to flask api endpoint
- Receives the responds from flask server

Web Server

- Receives post request from client
- Publishes api request to sns topic which in turns sends the message to subscribed SQS queue
- Continually polls another sqs queue to get the output from model server and publishes the output to the client



Model Server

- Continually polls the sqs message queue to read new data for making prediction
- After making the prediction publishes the predicted output to another SNS topic which in turn pushes the message to the respective subscribed SQS queue
- Use aws ecs and docker containers to scale based on the number of messages

Model training server

- Periodically trains the new model on new data
- Uses docker on aws ec2 instances

deploy

Monitoring

trigger

invoke