ACIT 3855 – Service Oriented Architectures – Winter 2024

Lesson 11 Pre-Reading

Please read the following for the Lesson 11 class:

- Load Balancing with NGINX - https://www.nginx.com/resources/glossary/load-balancing/

- Scaling with Docker Compose

    You can scale services using Docker Compose as follows:

```
docker-compose up --scale receiver=3
```

    Docker Compose will start the specified number of container instances for the scaled service. If the service depends on other services, Docker Compose will also create the necessary instances for those dependencies.

    Note that if you already have containers running for the service, Docker Compose will create additional instances to match the desired scale. It will not remove any existing containers unless explicitly instructed.

    Ref: https://medium.com/@maheshwar.ramkrushna/chap-12-scaling-services-with-docker-compose-a-practical-guide-f79b16513360

- Deployment Strategies - https://blog.container-solutions.com/kubernetes-deployment-strategies

In Lesson 11, we are going to attempt to use NGINX as a reverse proxy to have all our services running on the same domain. We will also attempt to scale up our Receiver service using NGINX as a software load balancer.