Memo -01

Project Name : Challenger

Application name : Challenger

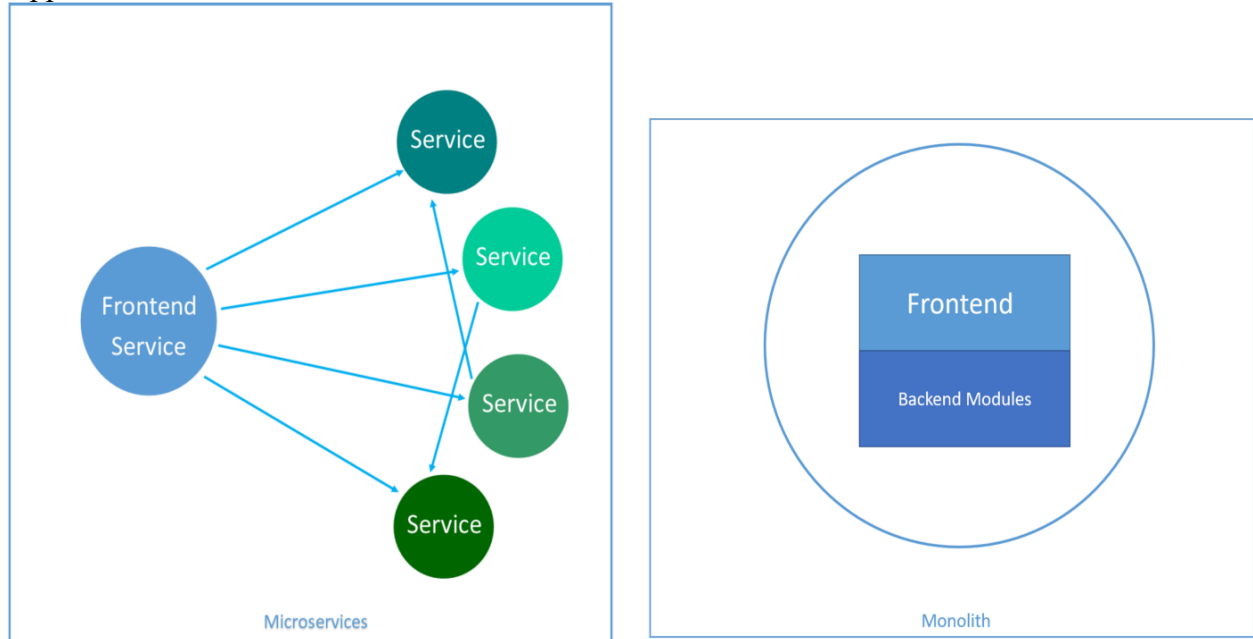**Due date:** Feb 20 – 2022 at 4PM CST

Requestor: Development team

   Lead: Adele Noumbo

Execution team: Devops
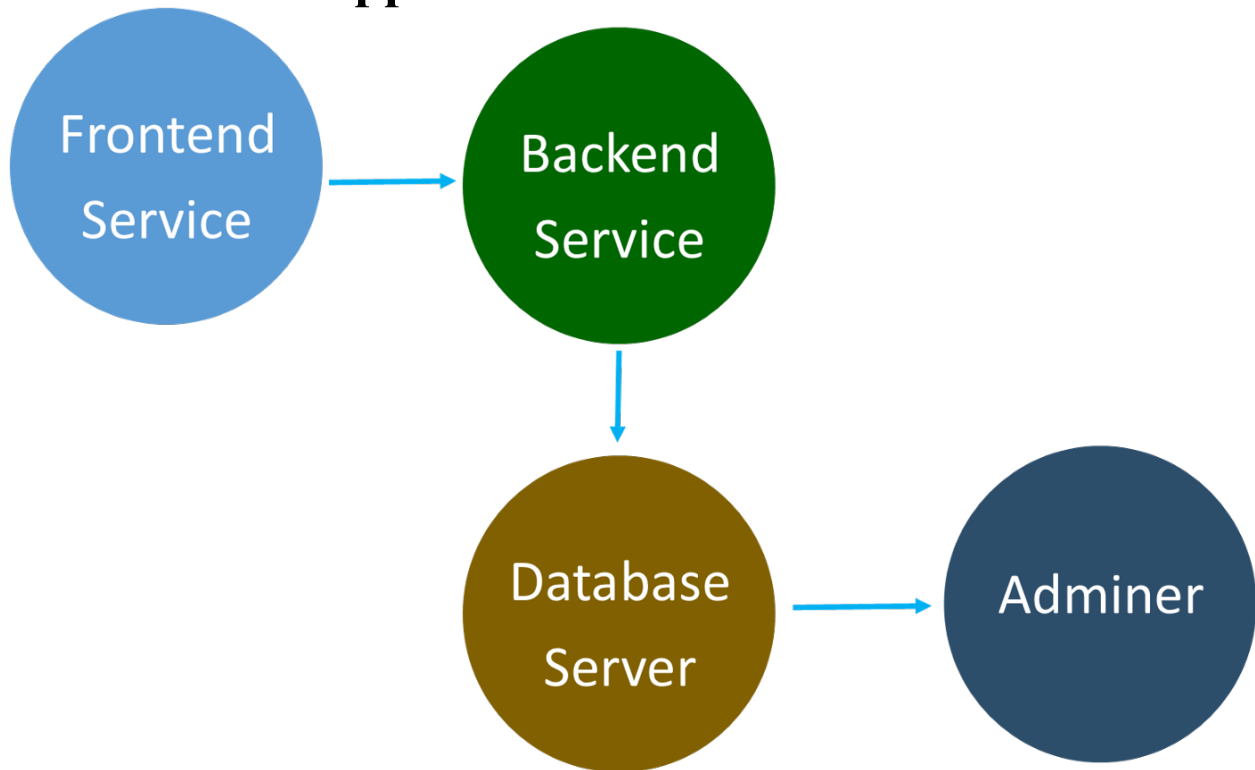
   Lead: Kelly Donkeng

Application structure

Application major parts

- **Frontend Service**
- **Backend Service**
- **PostreSQL Database Service**
- **Adminer Database Admin Service**

PS: Each of the above will be a separate docker containers

How does the application works

Frontend Service → Backend Service

Backend Service → Database Server

Database Server → Adminer

To get the code perform the following action (command)

git clone https://github.com/devopseasylearning/class-project-microser-service-docker-compose.git

cd class-project-microser-service-docker-compose

Description:

FRONTEND &backend ------------------- Dockerfile

a- The base image for the application should be   **python:3.6-slim**
b- The default directory is **/app**
c- The contend of frontend should be copy into /app directory inside the container
d- The application listen to port 5000 inside the container
e- The following command should be run inside the dockerfile

$ pip3 install -r requirements.txt

f- The application start with the following command

$ python3 app.py

##

DATABASE

This application best work with **postgres** with the following information

a- Username: **john**

b- Password: **example**

c- Database**: endgame**

d- Persist data on **dbvolume** directory

ADMINER

Base image: **adminer**

Expose on **8080**

Map port **9090**

Links to the database

Depend on database

BACKEND:

a- Should be link to the database

b- Should not start if the database is not in running state

c- Need the following environment variable set

- DB_user: **john**

- DB_PASS: **example**

- DB_HOST: **db**

FRONTEND:

a- Should be link to the backend

b- Depend on backend