DEVOPS EASY LEARNING

Class review S5GROUP5 BrainCells (restaurant app/presentation)

The fritzapp

Name: emart

Deployment strategie: **Docker-compose**

APPLICATION PRESENTATION

Dragon-ball Z has contracted with EK TECH SOFTWARE SOLUTION to build and application which would allow customers buy some stuffs

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GOAL:

- Deploy The fritz application using docker-compose

INFO:

- Customer Name: **Dragon-ball Z**

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INFO:

The Application is made of 6 microservices as follow:

1. Nginx
2. Client
3. API
4. WebApi
5. Mongo_db
6. Mysql:db

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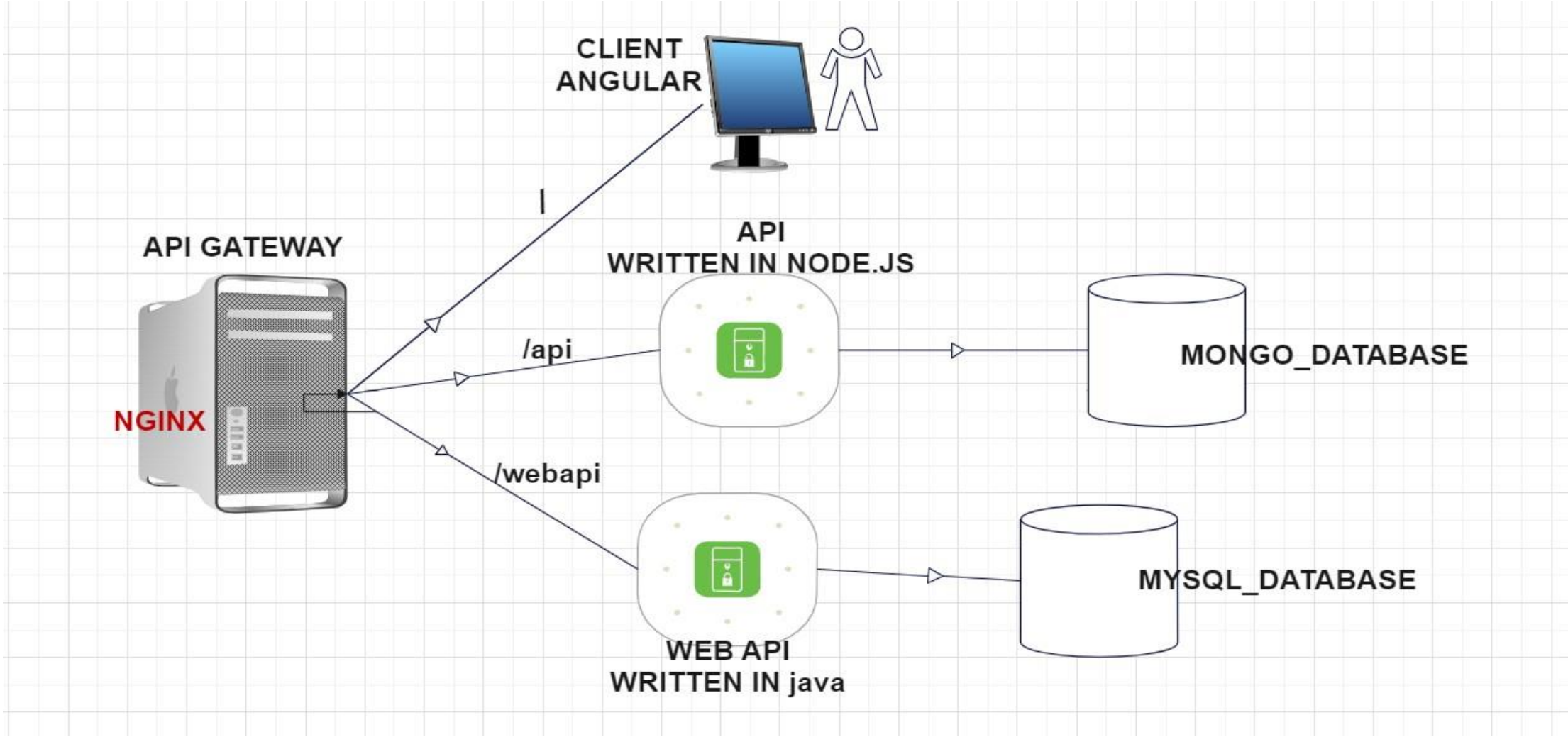
FLOW



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The Application is made of 6 microservices as follow:

NGINX, which is **the API gateway**, which is the front end from where all the request comes.
And all the communication between microservices happen through this API gateway.

This will be an nginx service which will listen for the request and route based on the headers, based on the URLs. So if the request comes on a route, that is if you're just accessing the URL, then it sends to the **Client microservice** which is written in **angular.** So this loads the front end pages of the website.

And for back end data it is going to contact the **API service,** which is written in **NodeJS** and the URL will be **API** and NodeJS application.

These APIs will need database.And here we are using **MongoDB, a NoSQL database**.
There is also one more integration of another service, **Web API**. And this is written in Java. it uses my SQL database, which is an SQL database and it's URLs So this is an ecommerce application which has multiple microservice.

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Requirement from Development team

1. Entire application code
2. All necessary instructions required to get the application working

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Instructions from Development team

Use the server provided by EK_TECH_SOFTWARE SOLUTION(That is server 1, 2, 3 and 4) Or you can still deployed on your own personal environment (AWS), but you need you used a t3.medium instance type which is not free. It's up to you.

- The code is available on company s3bucket

- Perform the following command to access it
  - Wget https://group5-braincells.s3.amazonaws.com/thefritzapp.zip

- Then cd inside thefritzapp directory
- All work are to be done inside this is directory5
- Then ls, the directory should have the Following content 5 directory (The client, node api, javaapi, nginx and kkartchart) and 4files (Dockerfile, Readme.md, jenkinsfile and package-lock.json)

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Instructions from Development team

- **NGINX:**
  - Expose ports 80
  - Images nginx:lastest
  - Command: [‘nginx-debug’, ‘g’, ‘daemon off;’]
  - Mount the following volume ./nginx/default.conf:/etc/nginx/conf.d

- **Client:**
  - Expose port 4200
  - This services uses an image that’s built from the dockerfile in the CLIENT DIRECTORY

- **Api**
  - Expose port 5000
  - This services uses an image that’s built from the dockerfile in the NODE API DIRECTORY

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Instructions from Development team

- **WebApi**
  - Expose port 9000
  - This services uses an image that's built from the dockerfile in the JAVAAPI DIRECTORY

- **Mongo database**
  - Image: mongo:4
  - Environment:
    - MONGO_INITDB_DATABASE=epoc

- **Mysql database**
  - Image: mysql:5.7
  - Environment:
    - MYSQL_ROOT_PASSWORD=emartdbpass
    - MYSQL_DATABASE=books

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Instructions from Development team

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  - Expose port 9000
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GOOD JOB

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