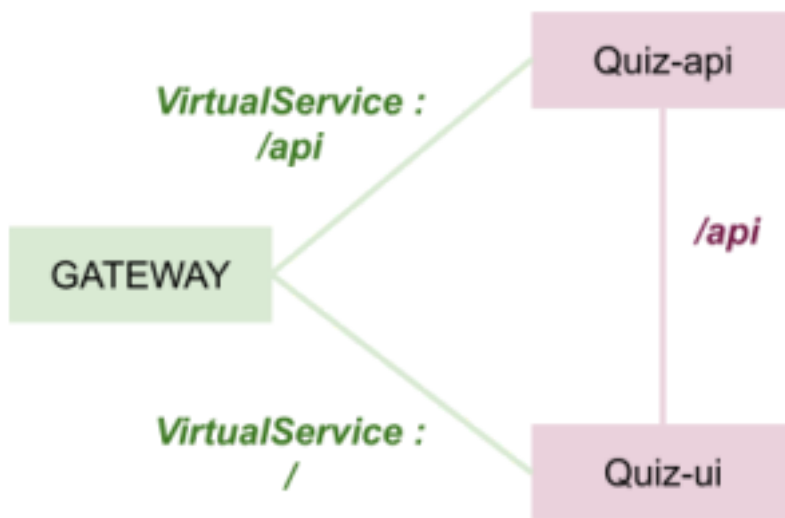


Projet virtualisation

Réalisé par Yohan Astier et Maryline Fernandes

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Architecture du projet



Travail réalisé

Docker

Création des images

Les images docker se trouvent chacune dans le dossier respectif de leur projet :

quiz-api : Dockerfile

quiz-ui : Dockerfile

Build des images

```
cd quiz-ui
docker build -t quiz-ui .

cd quiz-api
docker build -t quiz api .
```

Publication des images

```
docker tag [idImage] marfrnds/quiz-api:latest
docker push marfrnds/quiz-api:latest
```

```
docker tag [idImage] marfrnds/quiz-ui:latest
docker push marfrnds/quiz-ui:latest
```

Création des service Kubernetes

Configuration Kubernetes

La configuration Kubernetes a été réalisée sur 3 fichiers différents :

[quiz-ui.yml](#) : créer le service et le déploiement de quiz-ui

[quiz-api.yml](#) : créer le service et le déploiement de quiz-api

[istio-config.yml](#) : créer la gateway, le virtualservice quiz-api et le virtualservice quiz-ui

Déploiement

On peut déployer ces 3 configurations à l'aide du fichier suivant :

```
./deployment.sh
```

Test minikube

On teste les services avec :

```
minikube service --all
```

NAMESPACE	NAME	TARGET PORT	URL
default	quiz-api-service	5005	http://192.168.49.2:31280
NAMESPACE	NAME	TARGET PORT	URL
default	quiz-ui-service	http/80	http://192.168.49.2:30559
Starting tunnel for service kubernetes. Starting tunnel for service quiz-api-service. Starting tunnel for service quiz-ui-service.			
NAMESPACE	NAME	TARGET PORT	URL
default	kubernetes		http://127.0.0.1:59261
default	quiz-api-service		http://127.0.0.1:59263
default	quiz-ui-service		http://127.0.0.1:59265
Opening service default/kubernetes in default browser... Opening service default/quiz-api-service in default browser... Opening service default/quiz-ui-service in default browser... Because you are using a Docker driver on darwin, the terminal needs to be open to run it.			

Lancement de la gateway ingress

On lance la gateway avec le script suivant :

```
./ingress-forward.sh
```

Nettoyage du projet

Pour nettoyer tous les services et déploiements créer, lancer :

```
./clean.sh
```

Lancement rapide du projet

```
./deployment.sh
```

```
./ingress-forward.sh
```

Résultats attendus

Page d'accueil



Page de début du jeu

Prêt à jouer ?


Commencer

Jeu

1 / 10

2/10

L'éclair



Qui a causé la cicatrice en forme d'éclair à Harry Potter ?

VolDEMORT

Ron Weasley

Belatrix Lestrange

Ramus Lupin

Maryline Fernandes



Maryline FERNANDES

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Paths		Activities		Leaderboard		Badges	
Course	Lab	Quest	Quiz	Game	In progress	Finished	
Activity		Type	Date started	Date finished	Score	Passed	
Form Parsing with Document AI (Python)		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
BigQuery Machine Learning using Soccer Data		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
BigQuery Soccer Data Analytical Insight		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
BigQuery Soccer Data Analysis		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
BigQuery Soccer Data Ingestion		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
Configuring Networks via gcloud		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
Infrastructure as Code with Terraform		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
Installing Anthos Service Mesh on Google Kubernetes Engine		Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓	
Deploy, Scale, and Update Your Website on Google Kubernetes Engine		Lab	Feb 19, 2024	Feb 19, 2024	Assessment: 100%	✓	
A Tour of Google Cloud Hands-on Labs		Lab	Feb 8, 2024	Feb 8, 2024	Assessment: 100%	✓	

Yohan Astier

Getting Started with VPC Networking and Google Compute Engine	Lab	Mar 4, 2024	Mar 4, 2024	Assessment: 100%	✓
Google Cloud Fundamentals: Getting Started with Cloud Marketplace	Lab	Feb 28, 2024	Feb 28, 2024	Assessment: 100%	✓
Google Cloud Fundamentals: Core Infrastructure	Course	Feb 28, 2024	Mar 4, 2024		✓
Using BigQuery Omni with AWS	Lab	Feb 28, 2024	Feb 28, 2024	Assessment: 0%	
Installing Anthos Service Mesh on Google Kubernetes Engine	Lab	Feb 28, 2024	Feb 28, 2024	Assessment: 100%	✓
A Tour of Google Cloud Hands-on Labs	Lab	Feb 28, 2024	Feb 28, 2024	Assessment: 100%	✓
Deploy, Scale, and Update Your Website on Google Kubernetes Engine	Lab	Feb 19, 2024	Feb 19, 2024	Assessment: 100%	✓
Configuring Networks via gcloud	Lab	Feb 14, 2024	Feb 14, 2024	Assessment: 100%	✓
App Dev: Deploying the Application into Kubernetes Engine - Python	Lab	Feb 14, 2024	Feb 14, 2024	Assessment: 50%	
Introduction to Docker	Lab	Feb 14, 2024	Feb 14, 2024	Assessment: 0%	
Infrastructure as Code with Terraform	Lab	Feb 12, 2024	Feb 12, 2024	Assessment: 100%	✓
Configuring Networks via gcloud	Lab	Feb 12, 2024	Feb 12, 2024	Assessment: 100%	✓
A Tour of Google Cloud Hands-on Labs	Lab	Feb 8, 2024	Feb 8, 2024	Assessment: 100%	✓
Activity	Type	Date started	Date finished	Score	Passed
Google Cloud Fundamentals: Core Infrastructure	Course	Feb 28, 2024	Mar 4, 2024		✓