Event Driven Applications?
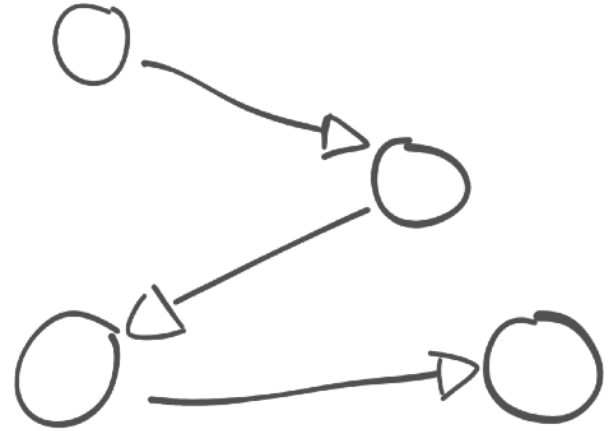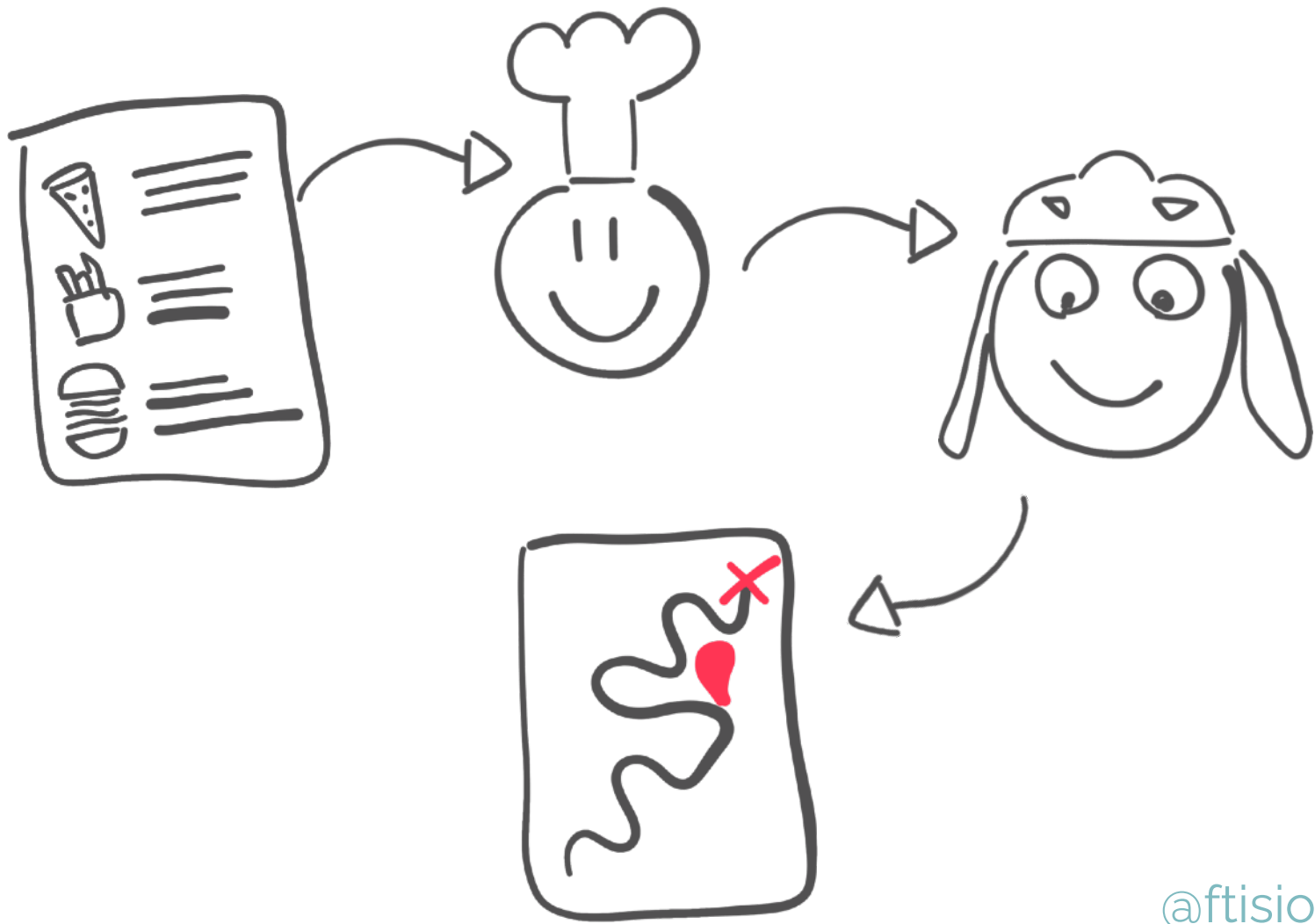
What is Flask?

```python
@app.route('/my-page', methods=['GET', 'POST'])
def index():

    if request.method == 'POST':
        <DO_SOMETHING>
    elif request.method == 'GET':
        <DO_SOMETHING_ELSE>
```
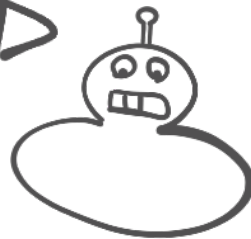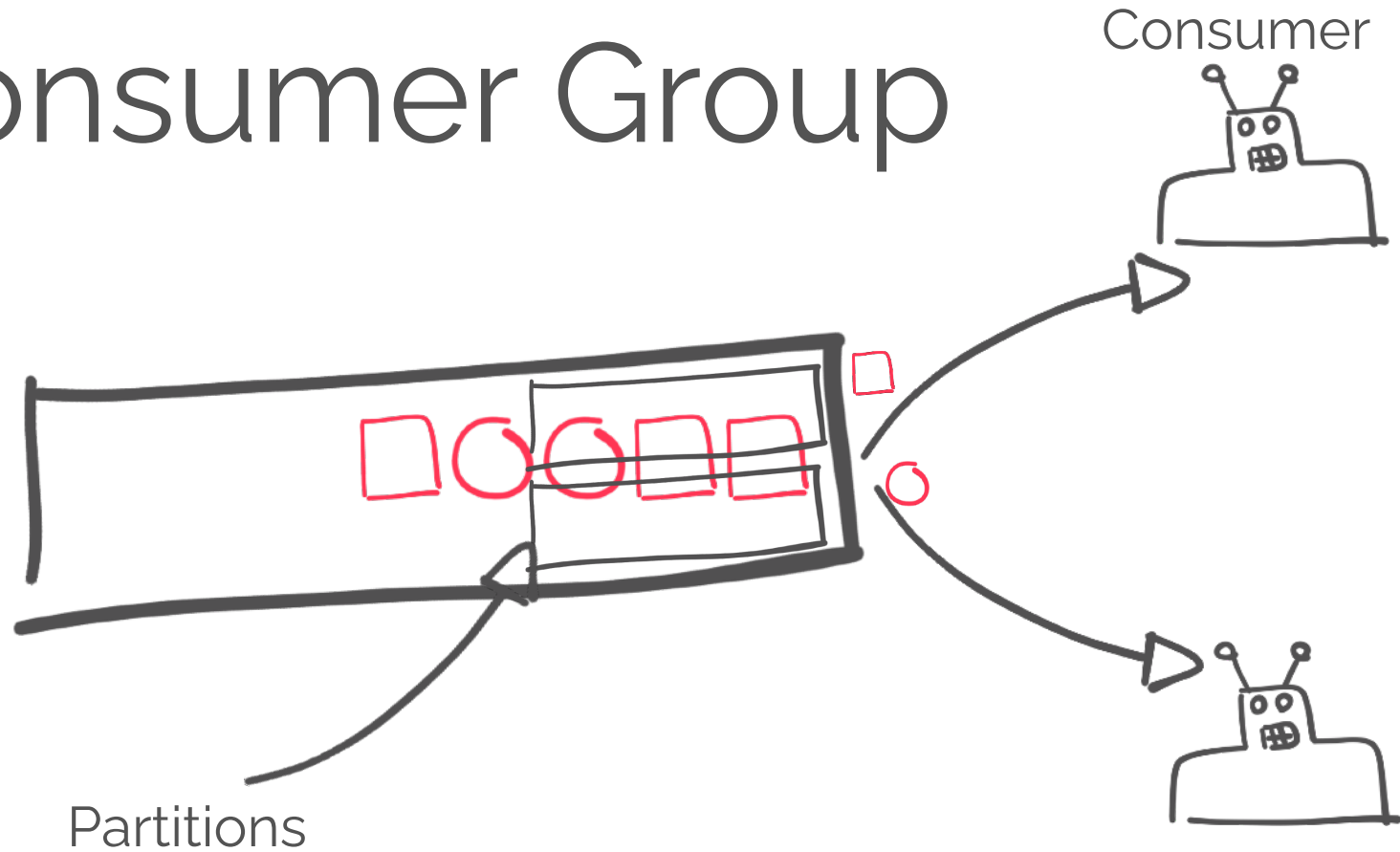
What is Apache Kafka?

Producer

Consumer

Producer #2

Consumer #2
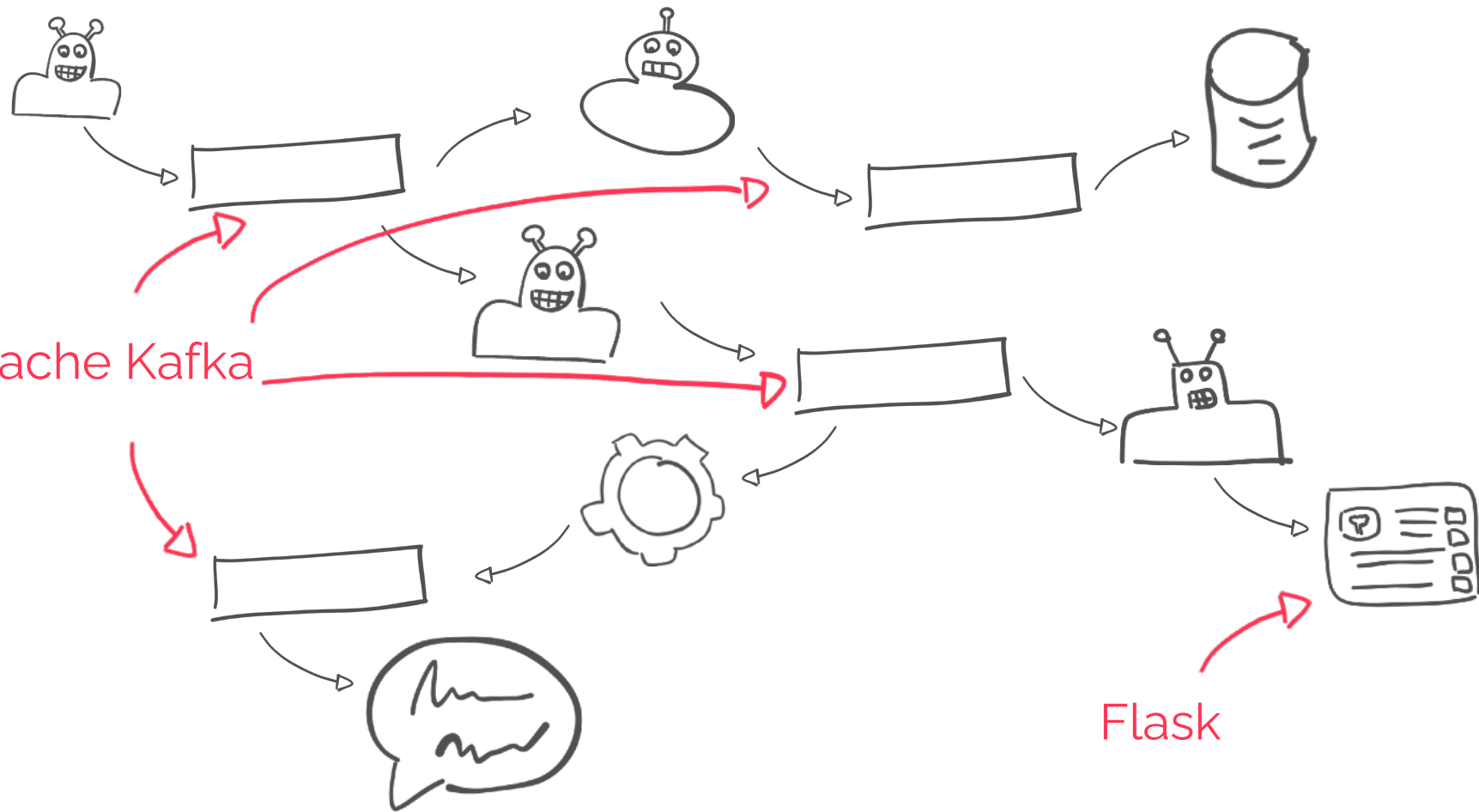
@ftisiot | @aiven_io

Consumer Group

Consumer

Partitions

Consumer #2

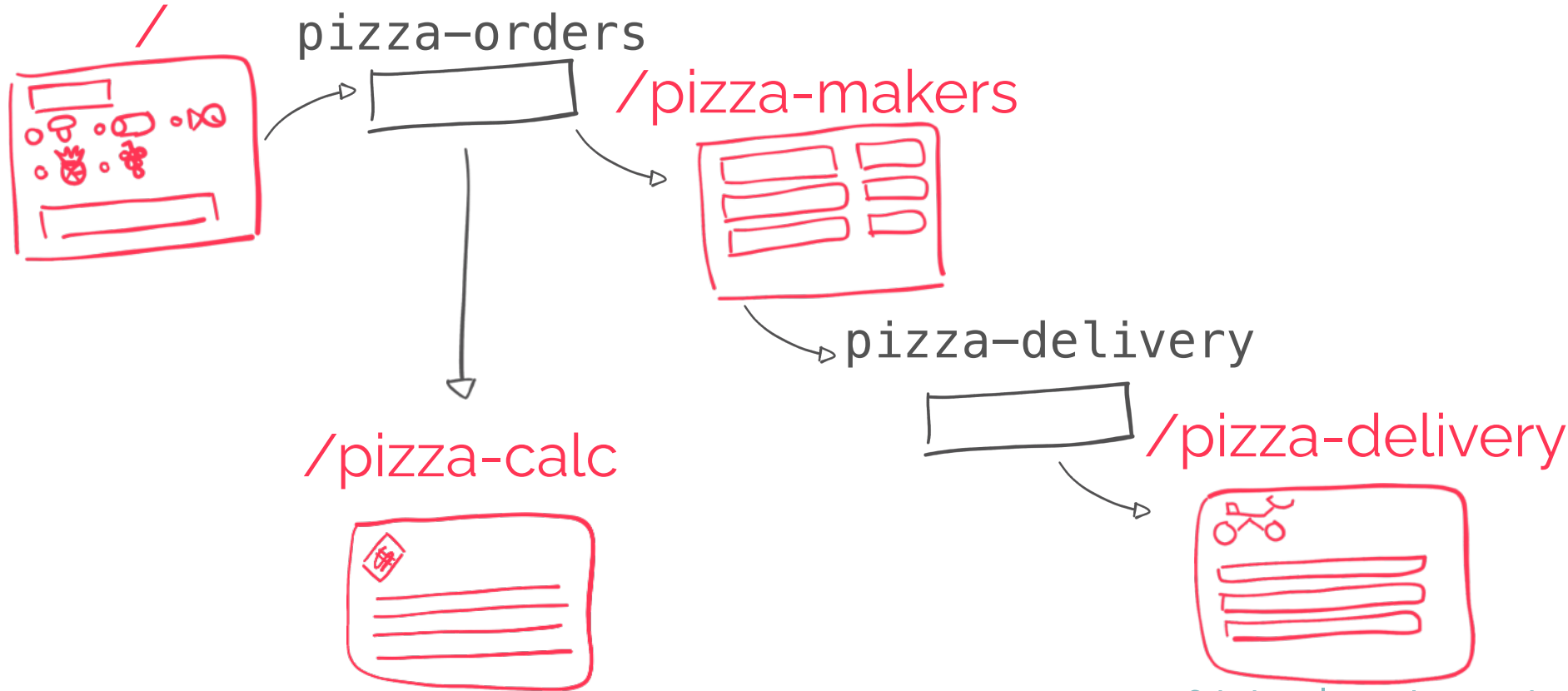# Why Flask and Apache Kafka?

Apache Kafka

Flask

@ftisiot | @aiven_io
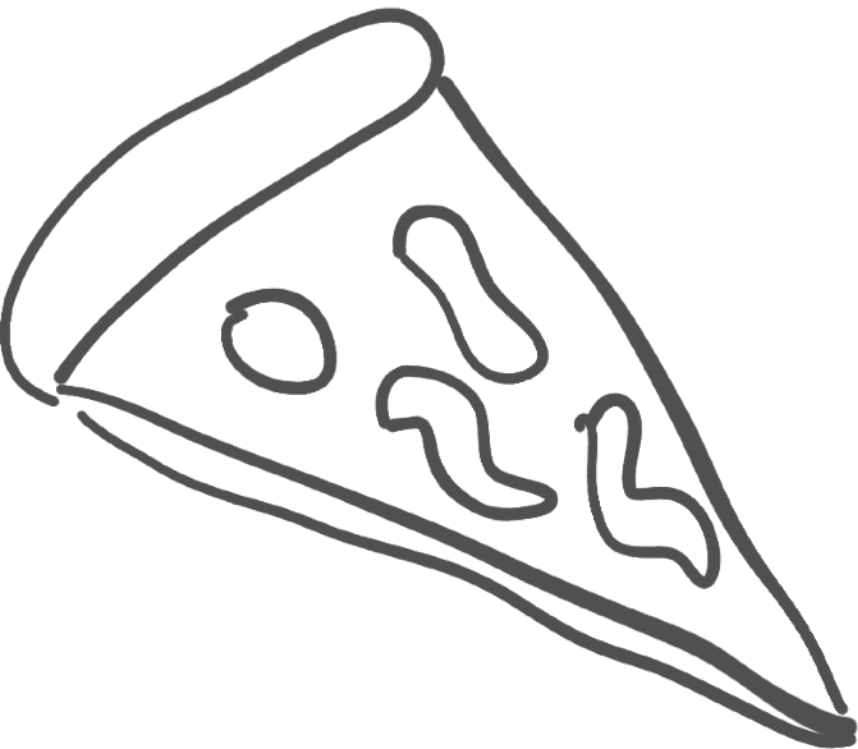
Francesco Pizza

http://<WEBSITE>/pizza/

/

pizza-orders

/pizza-makers

/pizza-calc

pizza-delivery

/pizza-delivery

@ftisiot | @aiven_io

console.aiven.io/project/dev-advocates/services

Apps ⭐ Bookmarks 📁 Imported 📁 Favourites 📁 Aiven

aiven
CONSOLE

PROJECT:
dev-advocates

Solutions Architecture

▤ Services

▤ Events

◎ Members

🌐 VPC

↻ Service Integrations

◎ Billing

⚙ Settings

$235
BILLING

Current services

Search services by name, plan, cloud and tags...

+ Create a new service

Service	Nodes	Plan	Cloud	Created
demo-flask-opensearch OpenSearch • Running	●●●	Business-4 1 CPU / 4 GB RAM / 240 GB storage - 3-node high availability set	Google Cloud: europe-west3 Europe, Germany	6 minutes
demo-flask-kafka Apache Kafka • Running	●●●	Business-4 1 CPU / 4 GB RAM / 600 GB storage - 3-node high availability set	Google Cloud: europe-west3 Europe, Germany	6 minutes
kafka-6a64b13 Apache Kafka • Running	●●●	Business-4 2 CPU / 4 GB RAM / 600 GB storage - 3-node high availability set	Amazon Web Services: eu-west-1 Europe, Ireland	1 hour

Integrate Apache Kafka

OpenSearch

pizza-orders

/pizza-makers

pizza-delivery

/pizza-calc

/pizza-delivery

@ftisiot | @aiven_io

Kafka Connect

Francesco Pizza 🍕

Select caller 🏛️:
- ⦿ 🦊 Fox
- ○ 🦄 Unicorn
- ○ 🦒 Giraffe

Select pizza 🍕:
- ⦿ 🫒 Olives
- ○ 🍄 Mushrooms
- ○ 🍆 Eggplant
- ○ 🧄 Garlic
- ○ 🧅 Onion
- ○ 🍍 Pineapple
- ○ 🍣 Sushi

Write Address:

Via Carcarlo Pravettoni 1, Genova

Submit Order

Pizza-Makers 💪

Timestamp	Caller	Pizza	Address	Pizza Made
1653470258	🦄 Unicorn	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470146	🦄 Unicorn	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470132	🦄 Unicorn	🍄 Mushrooms	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470127	🦊 Fox	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470097	🦒 Giraffe	🍆 Eggplant	Via Carcarlo Pravettoni 1, Genova	Pizza Done
	🍄	Via Carcarlo Pravettoni 1,	Pizza Done

127.0.0.1

Pizza-Delivery 🚀

Timestamp	Caller	Address
1653470127	🦊 Fox	Via Carcarlo Pravettoni 1, Genova
1653470258	🦄 Unicorn	Via Carcarlo Pravettoni 1, Genova
1653470211	🦒 Giraffe	Via Carcarlo Pravettoni 1, Genova
1653470142	🦒 Giraffe	Via Carcarlo Pravettoni 1, Genova
1653470132	🦄 Unicorn	Via Carcarlo Pravettoni 1, Genova
1653470146	🦄 Unicorn	Via Carcarlo Pravettoni 1, Genova

127.0.0.1

Pizza-Makers 💪

Timestamp	Caller	Pizza	Address	Pizza Made
1653470250	🦒 Giraffe	🍍 Pineapple	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470211	🦒 Giraffe	🍣 Sushi	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470142	🦒 Giraffe	🍆 Eggplant	Via Carcarlo Pravettoni 1, Genova	Pizza Done
1653470137	🦒 Giraffe	🧅 Onion	Via Carcarlo Pravettoni 1, Genova	Pizza Done

127.0.0.1

Pizza-Calculators 🧮

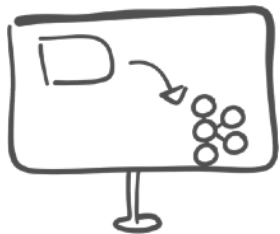| Timestamp	Caller	Pizza	Address
1653470258	🦄 Unicorn	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova
1653470250	🦒 Giraffe	🍍 Pineapple	Via Carcarlo Pravettoni 1, Genova
1653470211	🦒 Giraffe	🍣 Sushi	Via Carcarlo Pravettoni 1, Genova
1653470142	🦒 Giraffe	🍆 Eggplant	Via Carcarlo Pravettoni 1, Genova
1653470137	🦒 Giraffe	🧅 Onion	Via Carcarlo Pravettoni 1, Genova
1653470097	🦒 Giraffe	🍆 Eggplant	Via Carcarlo Pravettoni 1, Genova
1653470146	🦄 Unicorn	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova
1653470132	🦄 Unicorn	🍄 Mushrooms	Via Carcarlo Pravettoni 1, Genova
1653470127	🦊 Fox	🧄 Garlic	Via Carcarlo Pravettoni 1, Genova
		🍄 Mushrooms	Via Carcarlo Pravettoni 1, Genova

127.0.0.1

No

🦒 - 🦄 - 🦊

were harmed
in the preparation of
this talk

https://ftisiot.net/talks/flask-kafka

https://github.com/ftisiot/flask-apache-kafka-demo

https://aiven.io/