





#### **Serverless computing**

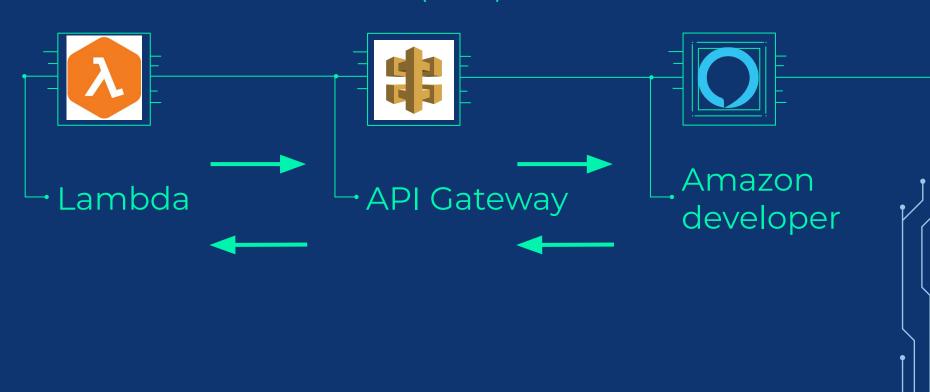
Serverless computing **consists in the use of an external infrastructure to develop and run applications**. The management and operation of these servers is delegated to a third party.

Physical server disadvantages:



- 1. **Keeping the server up** even when we are not serving out any requests.
- 2. **Maintenance** of the server and all its resources.
- 3. Applying **security updates** to the server.

# Amazon Web Services



# Tasks division



- Reading the requests several times
- Brainstorming to collect all ideas
- Development of the lambda
- Intents and the slot types.
- Developing of the alexa code.
- Testing





# Purpose of the project

Design, develop and test an alexa application that is able to:

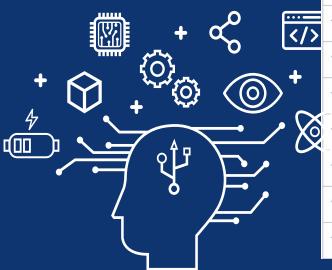
- Provide the overall length and duration in minutes of a trip knowing the source and the destination.
- Compare different journey duration in different hours of the days.
- Find a place in a city with only the type of the place and the source addresses.

#### Technology used:

- AMAZON WEB SERVICES (AWS)
  - o Lambda
  - Cloud Watch
  - Api Gateway
- Alexa developer console
- Postman
- datetime, json, requests



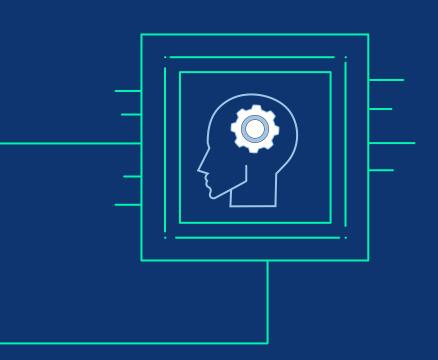
### **EXTRA STUFF**



```
Trova il {place} migliore a {city} nel giro di {radius} metri che sia al massimo {maxprice}
Trova il {place} migliore a {city} nel giro di {radius} metri che sia almeno {minprice}
Trova il {place} {rankby} a {city} che sia al massimo {maxprice}
Trova il {place} {rankby} a {city} che sia almeno {minprice}
Trova un {place} a {city} che sia al massimo {maxprice}
Trova un {place} a {city} che sia almeno {minprice}
Trova il {place} migliore a {city} nel giro di {radius} metri
Trova il {place} {rankby} a {city}
Trova un {place} a {city}
```

# Problems

Debugging alexa developer code



calcola percorso da fermo a ancona in auto

Scusa, ho un problema con ciò che mi hai richiesto. Perfavore riprova.

calcola percorso da fermo a ancona a piedi

```
"bounds": {
             "northeast": {
                 "lat": 43.1627585,
                 "lng": 14.1494207
             "southwest": {
                 "lat": 41.8997231,
                 "lng": 12.4964734
         "copyrights": "Map data @2022",
         "legs": [
                 "distance": {
                     "text": "304 km",
                     "value": 304096
                 "duration": {
20
                     "text": "3 ore 18 min",
                     "value": 11896
                 "duration in traffic": {
                     "text": "2 ore 47 min",
                     "value": 10022
                 "end address": "63900 Fermo FM, Italia",
28
                 "end location": {
                     "lat": 43.1587756,
30
                     "lng": 13.7200348
32
                 "start address": "Roma RM, Italia",
                 "start location": {
                     "lat": 41.90284949999999,
                     "lng": 12.4964734
```

Il percorso da fermo a ancona con durata minima prevede 63,9 km e 13 ore 12 min di viaggio a piedi.

```
"start": "fermo",
"end": "roma",
"choice": "durmin",
"mode": "walking",
"traffic": "best_guess",
"distance": "250 km",
"duration": "2 giorni 4 ore",
"departure": "1647073470"
```

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## Results



# THANKS FOR LISTENING AND ATTENTION

