



TPI - DevOps

Grupo 3

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Funcionamiento del aplicativo web

Se trata de una aplicación basada en nodejs con express en typescript conectada a una base de datos MySQL a través de Knex y Objection donde estos últimos se encargan de realizar las migraciones y consultas a la base de datos.

La aplicación consiste en CRUD de mascotas. Un ejemplo del esquema es este:

```
{  
  
  "id": int,  
  "weight": string,  
  "name": string,  
  "gender": string,  
  "castrated": boolean,  
  "aggressiveness": int,  
  "age": int,  
  "photo": string,  
  "size": string,  
  "chip": boolean,  
  "note": string  
}
```

POST: POST /pets/ HTTP/1.1
Host: 35.224.173.14
Content-Type: application/json
Accept: application/json

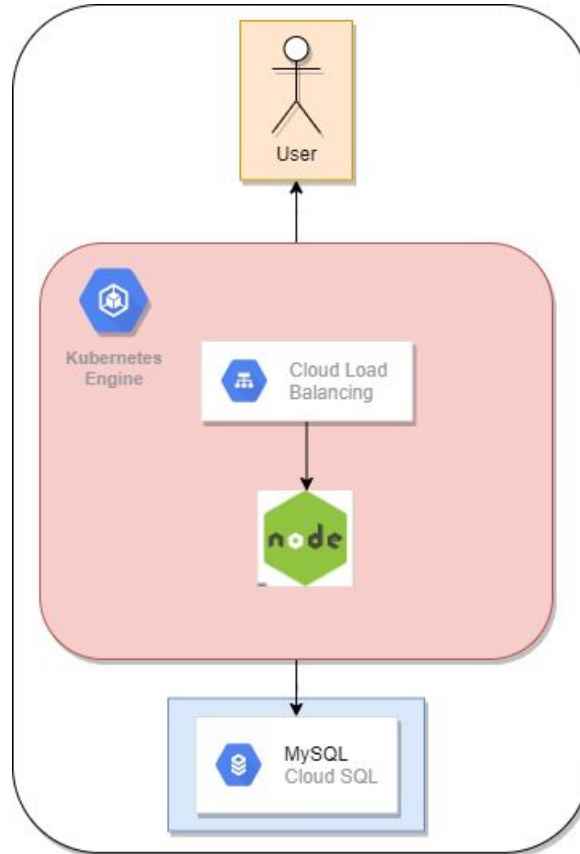
```
{"pet":  
  {  
    "weight": "3 Kg",  
    "name": "Gotita",  
    "gender": "female",  
    "castrated": true,  
    "aggressiveness": 5,  
    "edad": 15,  
    "photo": "Carlitos",  
    "size": "small",  
    "chip": false,  
    "note": "nothing"  
  }  
}
```

PUT: PUT /pets/3 HTTP/1.1
Host: 35.224.173.14
Content-Type: application/json
Accept: application/json

```
{"pet":  
  {  
    "weight": "8 Kg",  
    "name": "Vale",  
    "gender": "female",  
    "castrated": true,  
    "aggressiveness": 5,  
    "edad": 12,  
    "photo": "clean",  
    "size": "big",  
    "chip": false,  
    "note": "nothing"  
  }  
}
```

DELETE: DELETE /pets/3
HTTP/1.1
Host: 35.224.173.14
Content-Type: application/json
Accept: application/json

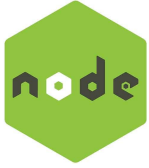
Arquitectura de servicios



https://drive.google.com/file/d/1NTXpIFUZgOtXH4yWJTv6L1_NGorMKY3k/view?usp=sharing

Tecnologías utilizadas

Lenguaje



Container Runtime



Orquestador de
contenedores



Google Kubernetes Engine

CI/CD



GitHub Actions

Repositorio de
artefectos



Container
Registry



GitHub

Control de versiones



GitHub



git

Motor de Base
de datos



Databases in CI/CD

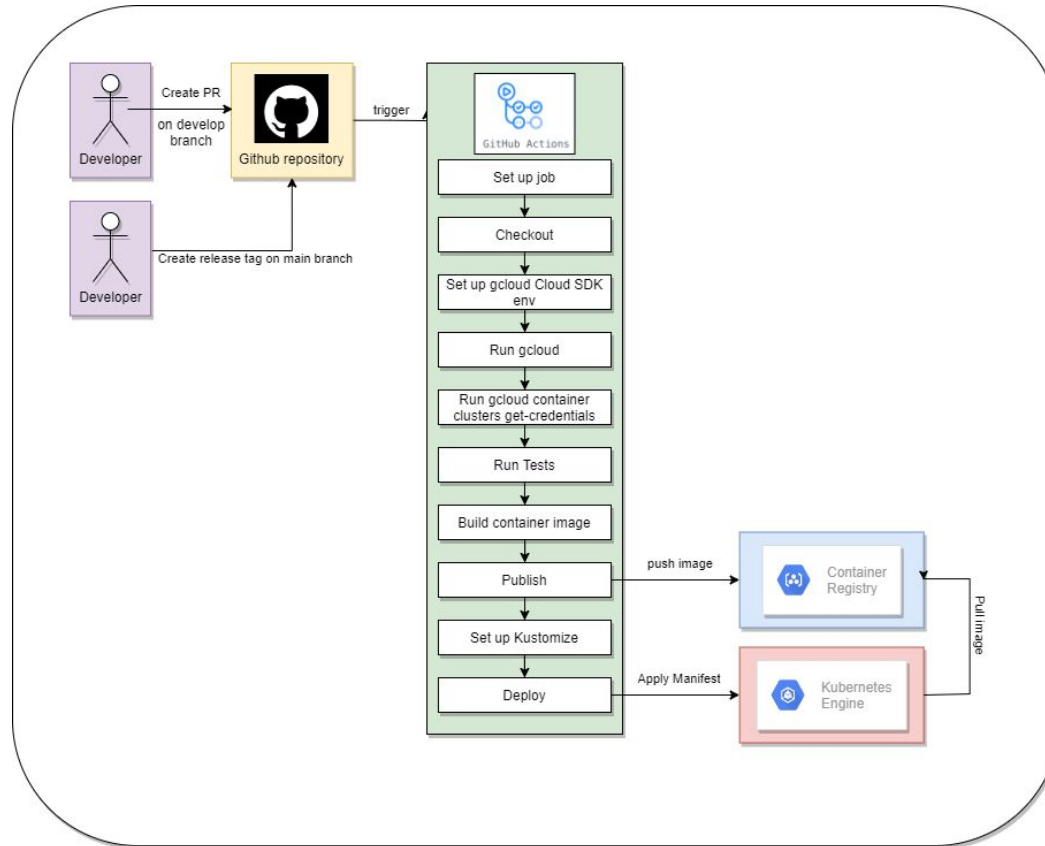


KNEX.JS



Objection.js

Pipeline CI/CD



https://drive.google.com/file/d/1NTXPiF_UZgOtXH4yWJTv6L1_NGorMKY3k/view?usp=sharing

DEMO



Desarrollo: <http://35.226.80.234:80/pets>

Producción: <http://35.224.173.14:80/pets>

Repo: <https://github.com/devops-frre/tpi-grupo-3>

URL BD: 35.193.116.249

dev: devops_dev

prod: devops