



# **Arquitectura de una aplicación**

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# Back-end

Consiste en...

- Servidor
- Aplicación
- Base de Datos

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# Developer Roadmap

*[github.com/kamranahmedse/developer-roadmap](https://github.com/kamranahmedse/developer-roadmap)*

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**Un back-end es un  
diseñador!**

# ¿Arquitectura?



The architecture of a software system is a metaphor, analogous to the architecture of a building. It functions as a blueprint for the system...



# ¿Arquitectura?



Software architecture is about making **fundamental structural** choices which are **costly to change** once implemented.



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# ¿Arquitectura?

- “Monolítica”
- “Distribuida”
- “Híbrida”
- Orientada a Servicios (SOA)

SOA

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# **Service Oriented Architecture**



- Es auto-contenida (self-contained)
- Es una caja negra para sus consumidores
- Representa una actividad de negocio con un fin específico

SOA

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# Web Services



SOAP



RESTful HTTP



GraphQL

SOAP



RESTful HTTP

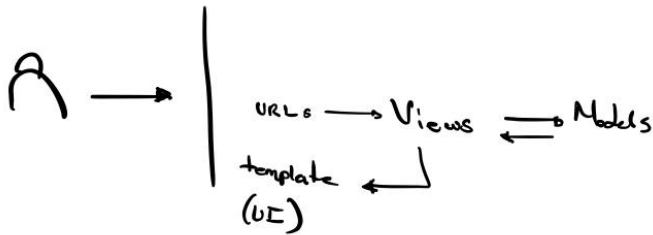


GraphQL



# Monolithic

- UI  $\longleftrightarrow$  
- La aplicación es responsable por múltiples tareas



HTML Forms

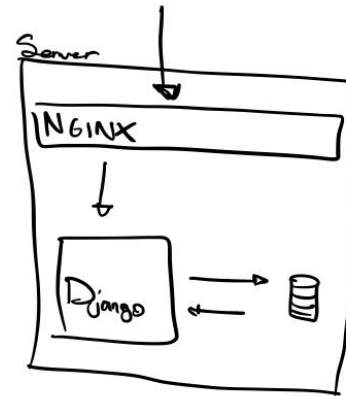
Not async!

`{% if condition %}`

`<HTML />`

`{% else %}`

`<HTML />`



☒ Static

☒ Database

☒ Media

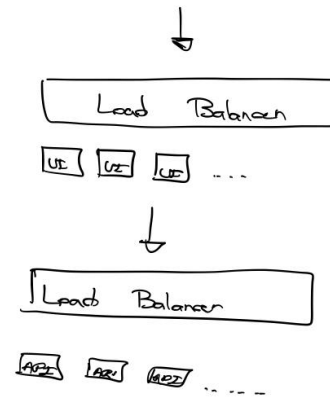
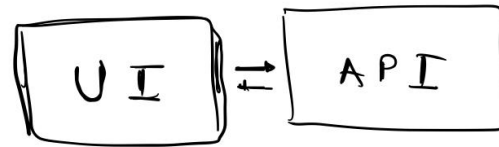
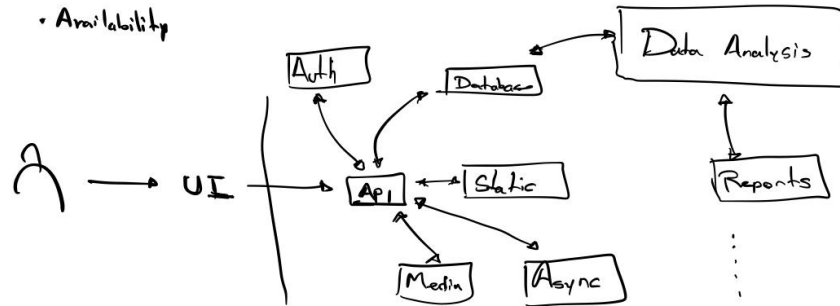
☒ Async tasks

☒ UI

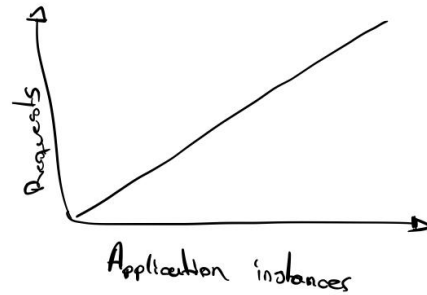
☒ Data access

# Distributed System Architecture

- Abstract
- Reliability
- Availability



Horizontal Scaling



Vertical Scaling

