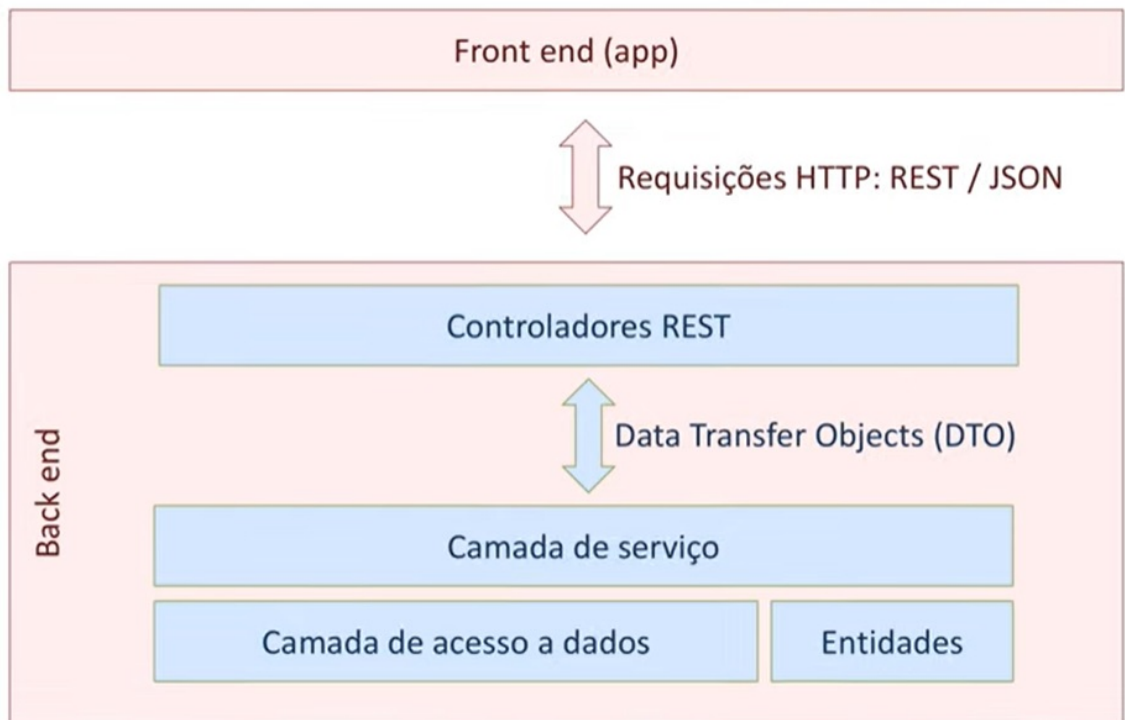
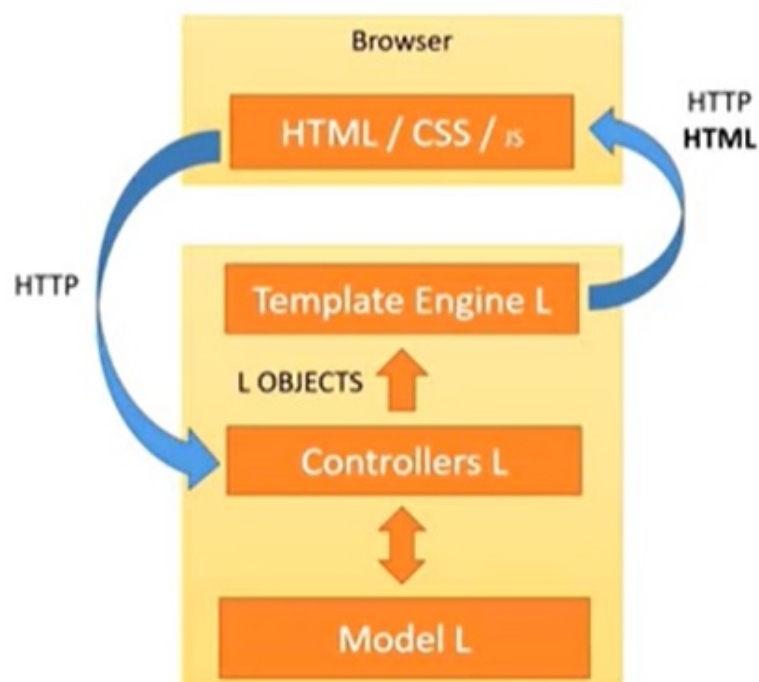


- Layered Architecture Example – REST (Representational State Transfer) Pattern



- MVC template engine example – The view of the system is built with your backend language with the Template Engine (Java, C# and PHP).

MVC Template Engine



- Web Services – SPA (Single Page Application) is most used. The view of the system is built with HTML, CSS and JS, separately from the backend.
- REST – Use JSON, HTML and XML as data format.
- SOAP – Use only XML as data format.

Web Services



- A route without REST controller

SEM REST:

`https://seudominio.com/clientesSalvar [POST]`

`https://seudominio.com/clientesDeletar [POST]`

`https://seudominio.com/clientesBuscar?nome=Ana [GET]`

- A route with REST controller
- POST – INSERT a new object
- DELETE – Delete a object
- GET – Retrieve a object
- PUT – Update a object

COM REST:

```
https://seudominio.com/clientes [POST] (NÃO idempotente)
  { "name" : "Joao" }
```

```
https://seudominio.com/clientes/5 [DELETE] (idempotente)
https://seudominio.com/clientes/5 [GET] (idempotente)
https://seudominio.com/clientes/5 [PUT] (idempotente)
  { "name" : "Joao" }
```

- A Example of CRUD

CRUD - Create Retrieve (todos paginado / por id) Update Delete