

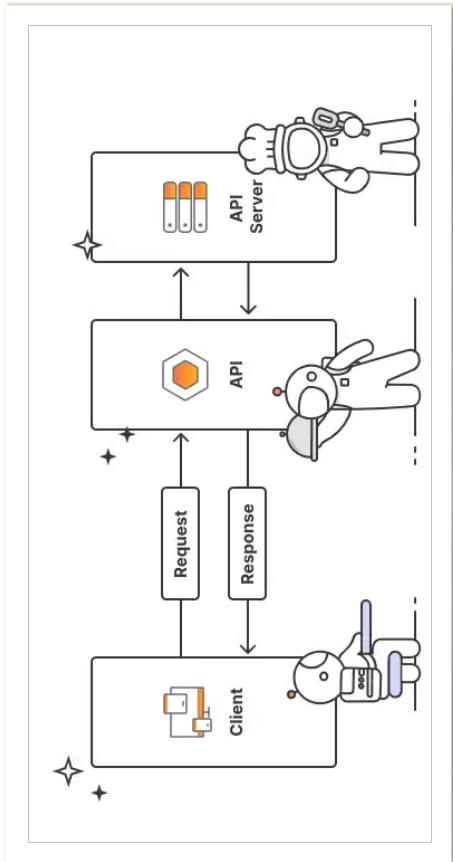
REST

Consumindo API's



REST - Consumindo APIs externas

Vamos localizar API's* públicas, de preferência sem autenticação.



* API = Application Programming Interface

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Listas

```
[  
    Estudante(nome: "Hermione", idade: 11),  
    Estudante(nome: "Harry", idade: 10),  
    Estudante(nome: "Rony", idade: 12)  
]
```



```
ForEach([, , ]) { aluno in  
    Text(aluno.nome)  
}
```



1ª Iteração - personagem =

2ª Iteração - personagem =

3ª Iteração - personagem =

Conceitos

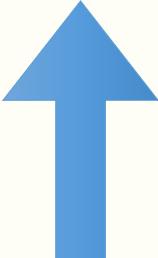
Autenticação
JSON
Endpoint
Objetos

```
[ { "id": "9e3f7ce4-b9a7-4244-b709-dae5c1f1d48",  
  "name": "Harry Potter",  
  "alternate_names": [  
    "The Boy Who Lived",  
    "The Chosen One",  
    "Undesirable No. 1",  
    "Potty"  
  ],  
  "species": "human",  
  "gender": "male",  
  "house": "Gryffindor",  
  "dateOfBirth": "131-07-1980",  
  "yearOfBirth": 1980,  
  "wizard": true,  
  "ancestry": "elf-blood",  
  "eyeColour": "green",  
  "hairColour": "black",  
  "wand": {  
    "wood": "holly",  
    "core": "phoenix tail feather",  
    "length": 11  
  },  
  "patronus": "stog",  
  "hogwartsStudent": true,  
  "hogwartsStaff": false,  
  "actor": "Daniel Radcliffe",  
  "alternate_actors": [],  
  "alive": true,  
  "image": "https://lk.imagekit.io/hpapi/harry*.jpg"  
},
```

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Agora...

```
[  
  {  
    "nome": "Hermione",  
    "idade": 11  
  },  
  {  
    "nome": "Harry",  
    "idade": 10  
  },  
  {  
    "nome": "Rony",  
    "idade": 12  
  }]  
]
```



```
[  
  Personagem(nome: "Hermione", idade: 11),  
  Personagem(nome: "Harry", idade: 10),  
  Personagem(nome: "Rony", idade: 12)  
]  
]  
  
→  
ForEach([]  
  { personagem in  
    Text(personagem.nome)  
  }  
)
```

E no Swift?

Conceitos:

Codable

Optional (?)

Objetos

ObservableObject

Published

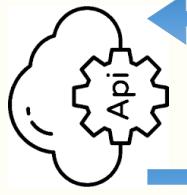
StateObject

```
struct HaPo: Codable, Identifiable {
    let id: String
    let name: String?
    let alternate_names: [String]?
    let species: String?
    let gender: String?
    let house: String?
    let dateOfBirth: String?
    let yearOfBirth: Int?
    let wizard: Bool?
    let ancestry: String?
    let eyeColour: String?
    let hairColour: String?
    let wand: Wand
    let patronus: String?
    let hogwartsStudent: Bool?
    let hogwartsStaff: Bool?
    let actor: String?
    let alternate_actors: [String]?
    let alive: Bool?
    let image: String?
}

struct Wand: Codable {
    let wood: String?
    let core: String?
    let length: Double?
}
```

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Como Funciona o JSON



Buscar / Enviar

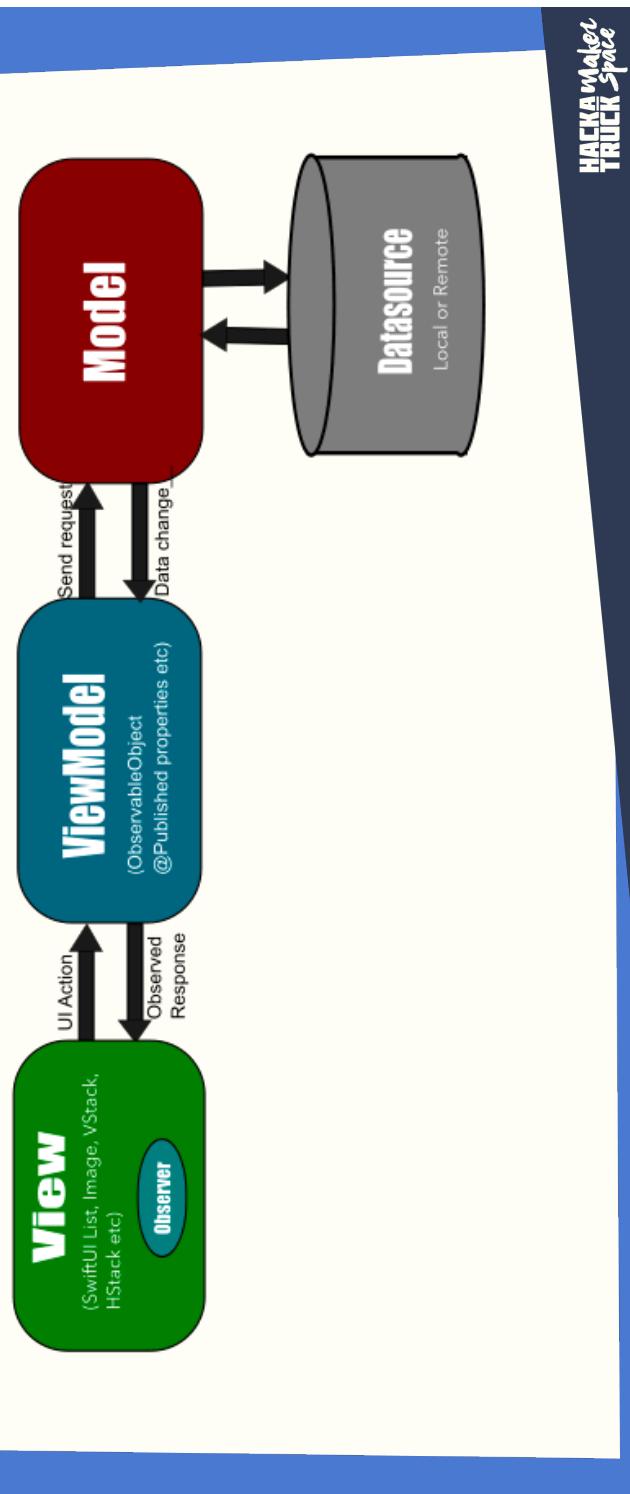
DECODIFICAR + ENCODIFICAR = Codable



Parcial + Total = TOTAL

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Swift - MVVM



API Utilizada no Exemplo - HP-API

<https://hp-api.onrender.com/api/characters/house/gryffindor>

Use these routes to request data on Harry Potter characters:

View

- all characters:
 - <https://hp-api.onrender.com/api/characters/>
- a specific character, based on their unique ID:
 - <https://hp-api.onrender.com/api/character/{id}>
- characters who are Hogwarts students during the book series:
 - <https://hp-api.onrender.com/api/characters/students>
- characters who are Hogwarts staff during the book series:
 - <https://hp-api.onrender.com/api/characters/staff>
- characters in a certain house, e.g. /gryffindor:
 - <https://hp-api.onrender.com/api/characters/house/>
- all spells:
 - <https://hp-api.onrender.com/api/spells>

```
[{"id": "9e377ce4-b9a7-d244-b709-dae5cf1f1d4a8",  
 "name": "Harry Potter",  
 "alternate_names": ["The Boy Who Lived",  
 "The Chosen One",  
 "Undesirable No. 1",  
 "Potty"],  
 "species": "Human",  
 "gender": "male",  
 "house": "Gryffindor",  
 "dateOfBirth": "31-07-1980",  
 "yearOfBirth": 1980,  
 "wizard": true,  
 "ancestry": "half-blood",  
 "eyeColour": "green",  
 "hairColour": "black",  
 "wand": {"  
 "wood": "Holly",  
 "core": "phoenix tail feather",  
 "length": 11  
 },  
 "patronus": "stag",  
 "hogwartsStudent": true,  
 "hogwartsStaff": false,  
 "actor": "Daniel Radcliffe",  
 "alternate_actors": [],  
 "alive": true,  
 "image": "https://i.k.setImage.it/harry.jpg"},  
 ]
```

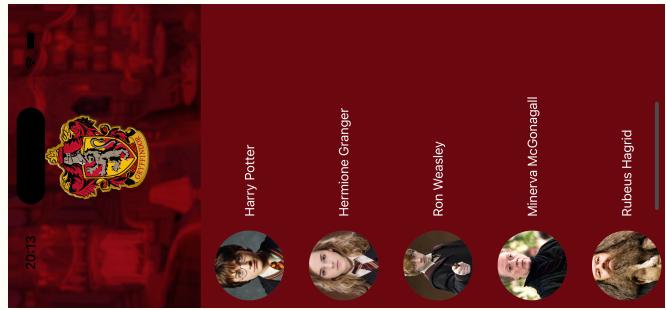
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Desafio

Mapear uma API pública e exibir os dados
em um App Swift!

Link para busca:

<https://github.com/public-apis/public-apis>



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