Creando una REST API en menos de una hora con Oracle Database Actions

Miguel Sánchez VIllafán

Innovación con datos en la nube

Miguel Sánchez Villafán

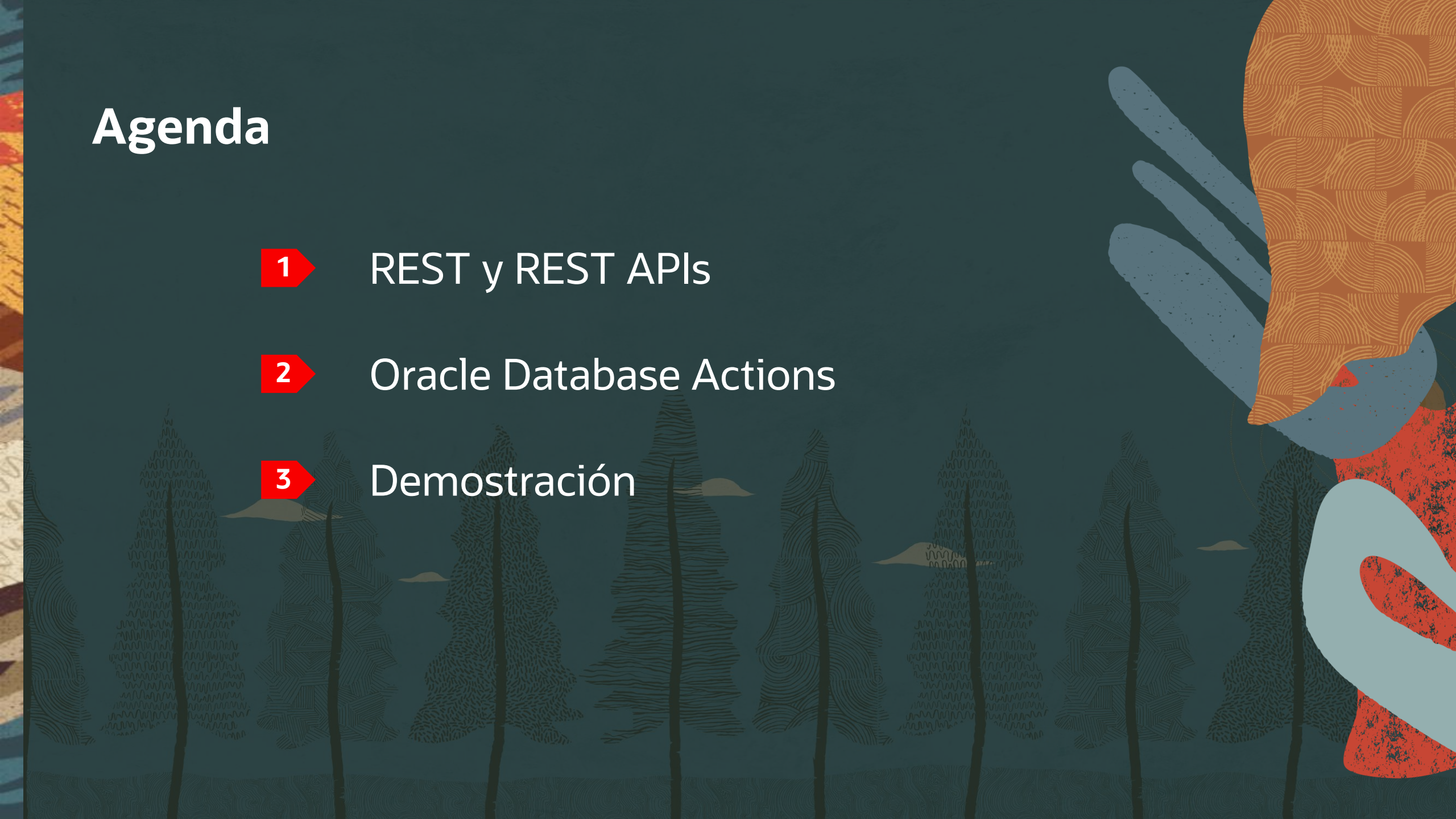
mig8447

Gerente Sénior de Desarrollo de Software
Oracle

- Desarrollador JavaScript/NodeJS
- Desarrollador SQL, PL/SQL
- Encargado del desarrollo de Oracle Database Actions

Agenda

1. REST y REST APIs
2. Oracle Database Actions
3. Demostración



REST y REST APIs
HTTP

```
GET https://www.oracle.com/index.html
GET / HTTP/1.1
...
Accept: */*
...
Host: oracle.com
Accept-Encoding: gzip, deflate, br
Connection: keep-alive
Referer: https://www.oracle.com/
Cookie: ...
```

```
HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8
Strict-Transport-Security: max-age=0
X-Powered-By: Next.js
ETag: "14e1c-sUCo8cfPTdhyQYlwBDzbxBeWr2o"
Vary: Accept-Encoding
...
Content-Length: 21624
Connection: keep-alive
...
Set-Cookie: ...
...

<!DOCTYPE html>
...
```

REST y REST APIs
Métodos HTTP

GET

Obtener un recurso

POST

Crear un recurso

PUT

Actualizar un recurso

DELETE

Eliminar un recurso

REST y REST APIs
Cabeceras HTTP

- Cabeceras de Petición
  Accept: Le dice al servidor el tipo de contenido que queremos
  Authorization: Le proporciona nuestras credenciales al servidor

- Cabeceras de Respuesta
  Content-Type: Nos dice el tipo de contenido que está enviando el servidor
  Content-Length: Nos dice la longitude de la respuesta

REST y REST APIs
Cuerpo HTTP

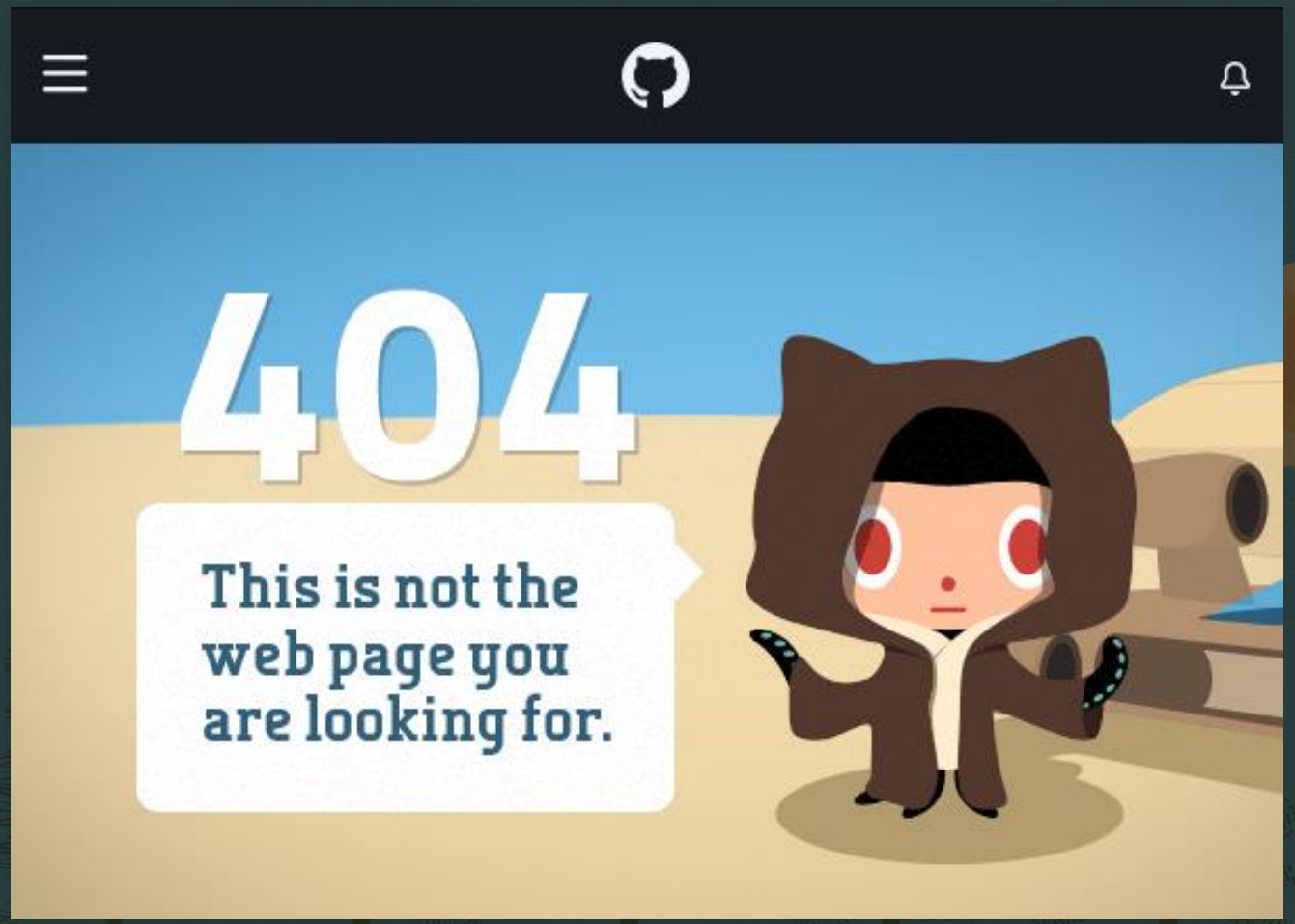
```
<!DOCTYPE html><html lang="en"><head><meta charSet="utf-
8"/><title>Oracle | Integrated Cloud Applications and Platform
Services</title><meta name="viewport" content="width=device-
width, initial-scale=1.0, maximum-scale=1.0"/><meta
name="facebook-domain-verification"
content="oije1oeqkuqvrqofg4yhfdyjsnsvgf"/><meta
name="app_version" content="1"/><meta name="build_version"
content="36"/><meta name="release_version" content="22"/><meta
name="title" content="Oracle | Integrated Cloud Applications and
Platform Services"/><meta name="description" content="Oracle
offers a comprehensive and fully integrated stack of cloud
applications and platform services."/><meta name="keywords"
content="enterprise, applications, software, database,
middleware, fusions, business, hardware, Oracle, AA01Test"/><meta
name="robots" content="index, follow"/><meta name="site"
content="CustomerStory"/><meta name="siteid" content="us"/><meta
name="countryid" content="US"/><!-- ... --></head><body><!-- ...
--></body></html>
```

```
{
  "items": [
    {
      "uri": {
        "$ref": ".../hr/employees/7369"
      },
      "rn": 1,
      "empno": 7369,
      "ename": "SMITH",
      "job": "CLERK",
      "hiredate": "1980-12-17T00:00:00Z",
      "mgr": 7902,
      "sal": 800,
      "comm": null,
      "deptno": 20
    }
  ],
  "first": {
    "$ref": ".../hr/employees/"
  },
  "next": {
    "$ref": ".../hr/employees/?page=1"
  }
}
```

REST y REST APIs
Códigos de estado HTTP

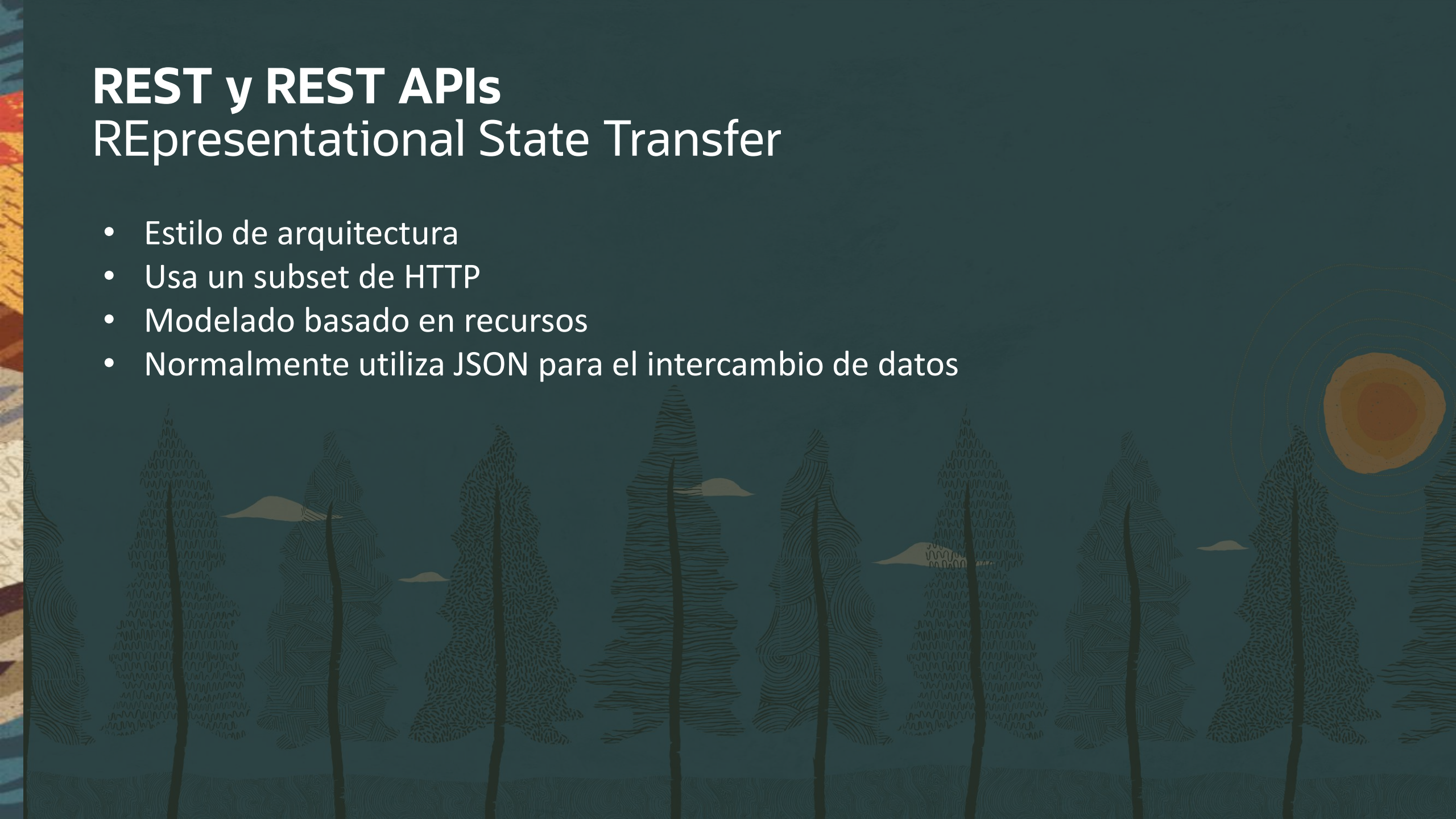
- 1xx: Informativo
- 2xx: Exitoso
- 3xx: Redirección
- 4xx: Error en el cliente
- 5xx: Error en el servidor

Ver https://devhints.io/http-status

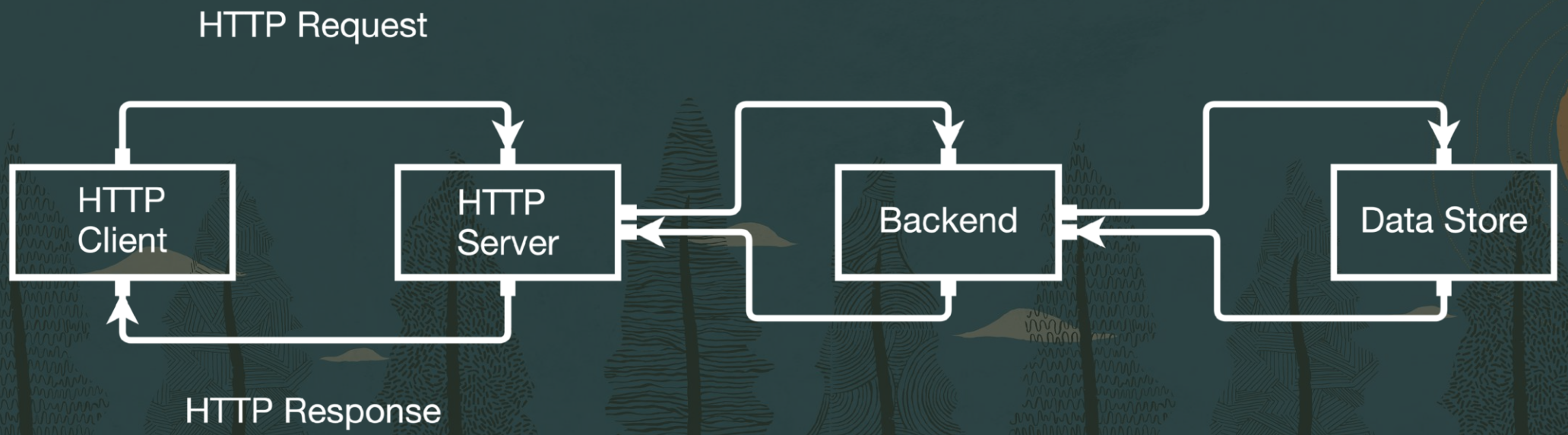


REST y REST APIs
REpresentational State Transfer

- Estilo de arquitectura
- Usa un subset de HTTP
- Modelado basado en recursos
- Normalmente utiliza JSON para el intercambio de datos



REST y REST APIs
REpresentational State Transfer



Oracle Database Actions

Demostración

¡Muchas Gracias!