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Parcial 3

Para ejecutar el despliegue , debe dar:

cd "learn-terraform-deploy-nginx-kubernetes"

terraform init

terraform apply

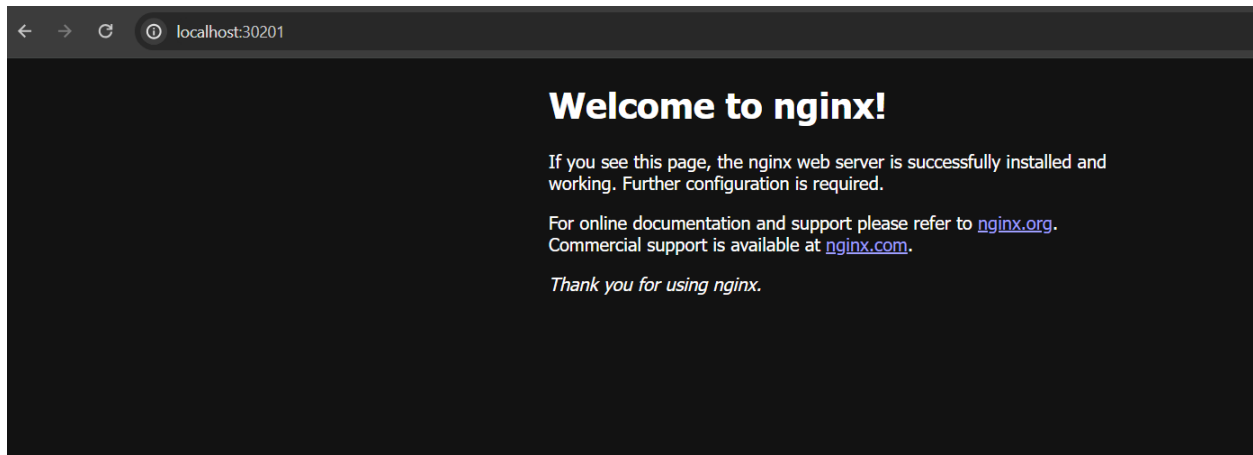
Toda la configuración del terraform esta en el archivo "\Examen\learn-terraform-deploy-nginx-kubernetes\kubernetes.tf"

- Frontend (NGINX + React/Angular/Vue - Hello World SPA)

Despliegue de NGINX:

```
resource "kubernetes_service" "nginx" {  
  metadata {  
    name = "nginx-example"  
  }  
  spec {  
    selector = {  
      App = kubernetes_deployment.nginx.spec.0.template.0.metadata[0].labels.App  
    }  
    port {  
      node_port = 30201  
      port      = 80  
      target_port = 80  
    }  
    type = "NodePort"  
  }  
}
```

Prueba de NGINX:



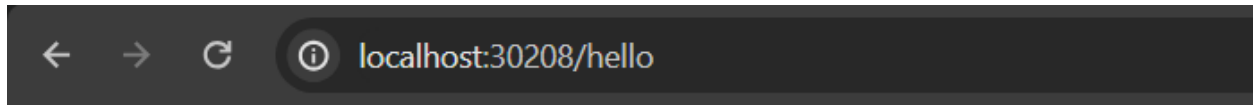
Codigo react hello world:

```
kubernetes.tf  terraform.tfstate  app.py  helloWorld.jsx X  Dockerfile  terraform.tfvars
helloWorld.jsx > ...
1  import React from 'react';
2  import ReactDOM from 'react-dom';
3
4  function App() {
5    return (
6      <div>
7        <h1>Hello, World!</h1>
8      </div>
9    );
10 }
11
12 ReactDOM.render(<App />, document.getElementById('root'));
13 |
```

Despliegue Api Hello World:

```
resource "kubernetes_service" "hola-mundo" {  
  metadata {  
    name = "hola-mundo"  
  }  
  spec {  
    selector = {  
      App = kubernetes_deployment.hola-mundo.spec.0.template.0.metadata[0].labels.App  
    }  
    port {  
      node_port = 30208  
      port      = 3030  
      target_port = 3030  
    }  
    type = "NodePort"  
  }  
}
```

Prueba:



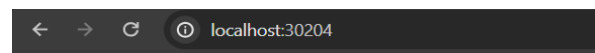
Hello, World!

- Backend (Apache/NGINX + Hello World API)

Despliegue de apache:

```
79  
80 resource "kubernetes_service" "apache" {  
81   metadata {  
82     name = "apache"  
83   }  
84   spec {  
85     selector = {  
86       App = kubernetes_deployment.apache.spec.0.template.0.metadata[0].labels.App  
87     }  
88     port {  
89       node_port  = 30204  
90       port       = 80  
91       target_port = 80  
92     }  
93   }  
94   type = "NodePort"  
95 }  
96 }
```

Prueba de apache corriendo:

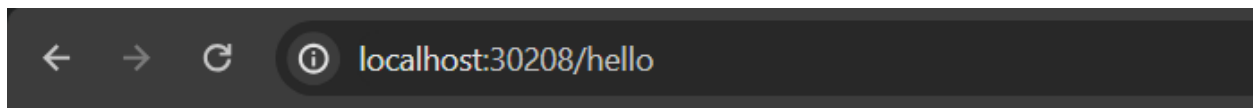


It works!

Despliegue Api Hello World:

```
resource "kubernetes_service" "hola-mundo" {  
  metadata {  
    name = "hola-mundo"  
  }  
  spec {  
    selector = {  
      App = kubernetes_deployment.hola-mundo.spec.0.template.0.metadata[0].labels.App  
    }  
    port {  
      node_port = 30208  
      port      = 3030  
      target_port = 3030  
    }  
    type = "NodePort"  
  }  
}
```

Prueba:



Hello, World!

- BDD (no relacional)

Mongo DB:

Aquí se habilito el servicio

```
116 resource "kubernetes_service" "mongodb" {  
117   metadata {  
118     name = "mongodb"  
119   }  
120   spec {  
121     selector = {  
122       App = kubernetes_deployment.mongodb.spec.0.template.0.metadata[0].labels.App  
123     }  
124     port {  
125       node_port = 30205  
126       port      = 27017  
127       target_port = 27017  
128     }  
129   }  
130   type = "NodePort"  
131 }  
132 }  
133 }
```

Haciendo uso de la base de datos :

