

DESPLIEGUE DE UNA APLICACIÓN EN HEROKU

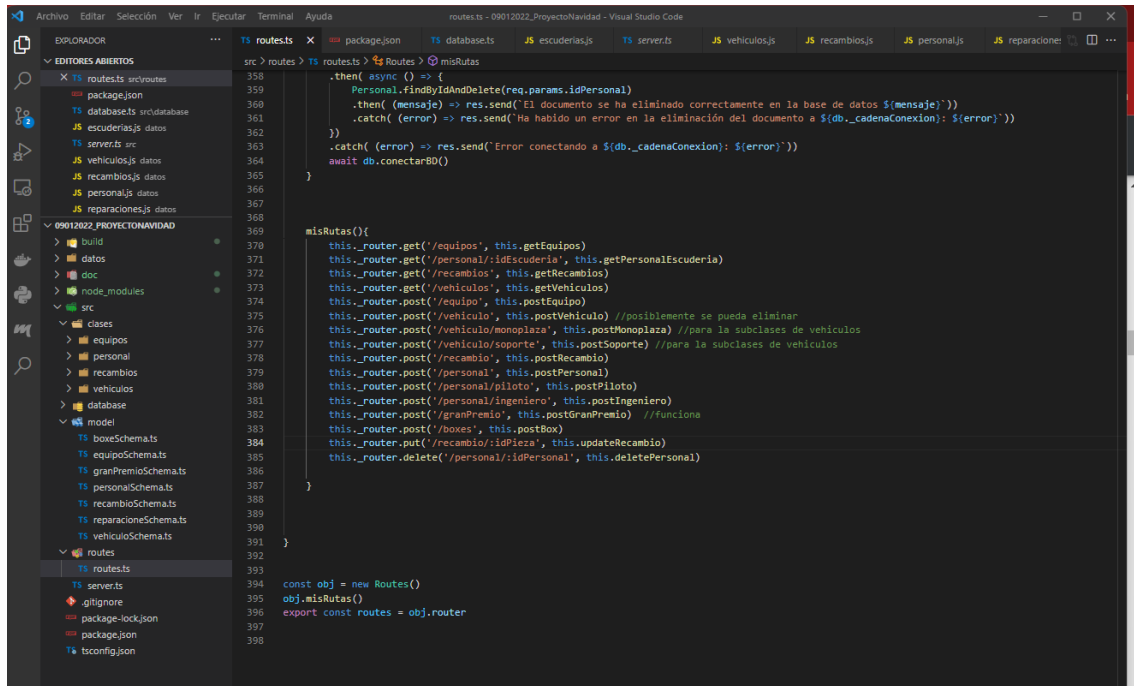


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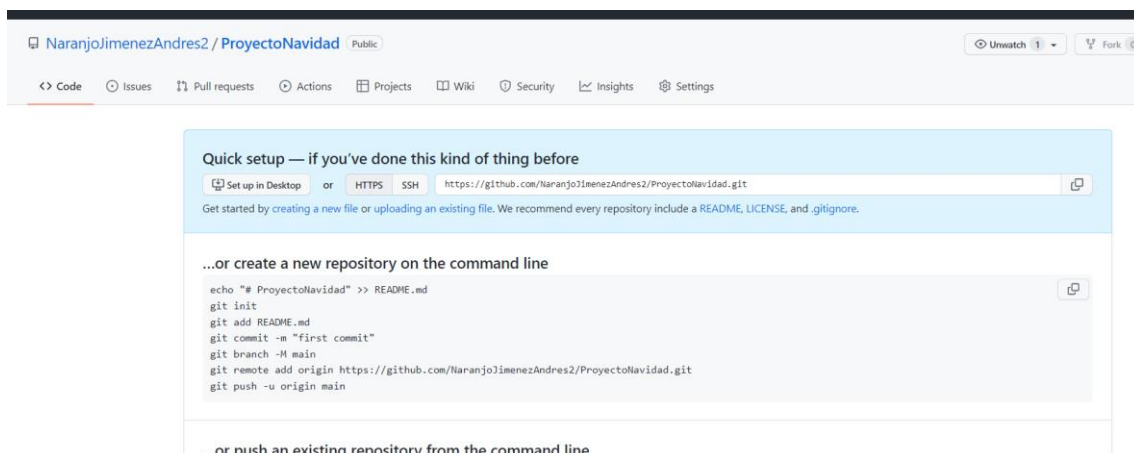
1. Desarrollo de una aplicación

Realizamos una aplicación desde nuestro equipo con las pertinentes pruebas en local, usando mongoDB y POSTMAN con localhost/port.



2. Subida a GitHub

Una vez que la aplicación este terminada, creamos un repositorio en GitHub. A continuación, procedemos a la subida mediante los comandos establecidos.



Si hemos usado una base de datos en local, debemos realizar un cambio a Mongo Atlas. Para mejorar la seguridad de la aplicación debemos de realizar ciertos cambios en los privilegios de acceso. Para ello, creamos un usuario con políticas de seguridad.

Password Authentication

Edit Password

Database User Privileges

For advanced role based access control, you can apply your own custom roles or add specific privileges to this user. You can combine these role types with a built-in role. A user will gain access to all actions within the roles assigned to them, not just the actions those roles share in common. **You must choose at least one role or privilege.** [Learn more about roles.](#)

Built-in Role

Select one [built-in role](#) for this user.

Custom Roles

Select your [pre-defined custom role\(s\)](#). Create a custom role in the [Custom Roles](#) [tab](#).

Specific Privileges

1 SELECTED

Select multiple privileges and what database and collection they are associated with. Leaving collection blank will grant this role for all collections in the database.

readWrite

@ formulaOne

Collection*

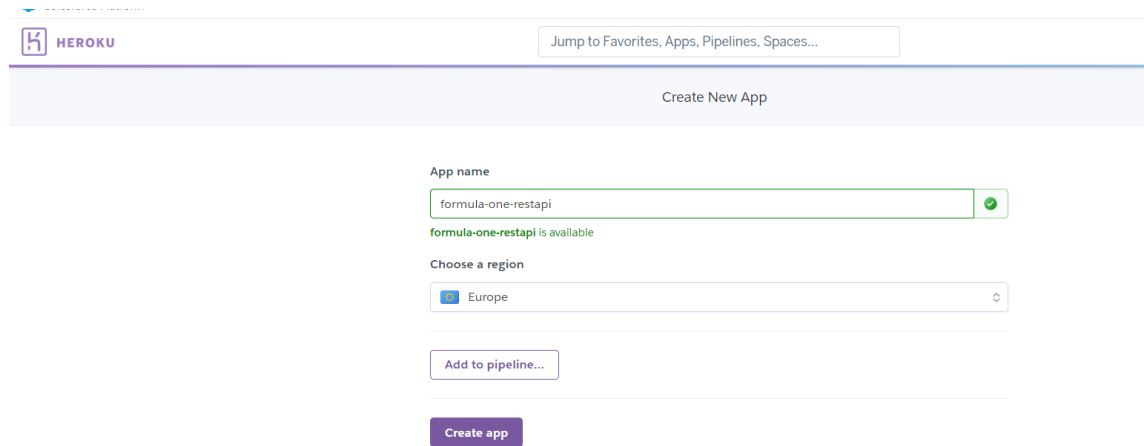
Add Specific Privilege

(Si ya se ha subido la aplicación a GitHub, para aplicar realizados en local, solo se debe ejecutar las sentencias `git add .` ; `git commit` ; `git -u push origin main`)

```
class DataBase {  
  
  public _cadenaConexion2: string = 'mongodb://localhost/formulaOne';  
  public _cadenaConexion:string= `mongodb+srv://user:0000@cluster0.oxux9.mongodb.net/formulaOne?retryWrites=true&w=majority`  
  constructor(){  
  
  }  
  
  set cadenaConexion(_cadenaConexion: string){  
    this._cadenaConexion = _cadenaConexion  
  }  
  
  conectarBD = async () => {  
    const promise = new Promise<string>({ async (resolve, reject) => {  
      await mongoose.connect(this._cadenaConexion, {  
      })  
      .then( () => resolve(`Conectado a ${this._cadenaConexion}`) )  
      .catch( (error) => reject(`Error conectando a ${this._cadenaConexion}: ${error}`) )  
    })  
    return promise  
  }  
}
```

3. Creación de la aplicación en Heroku

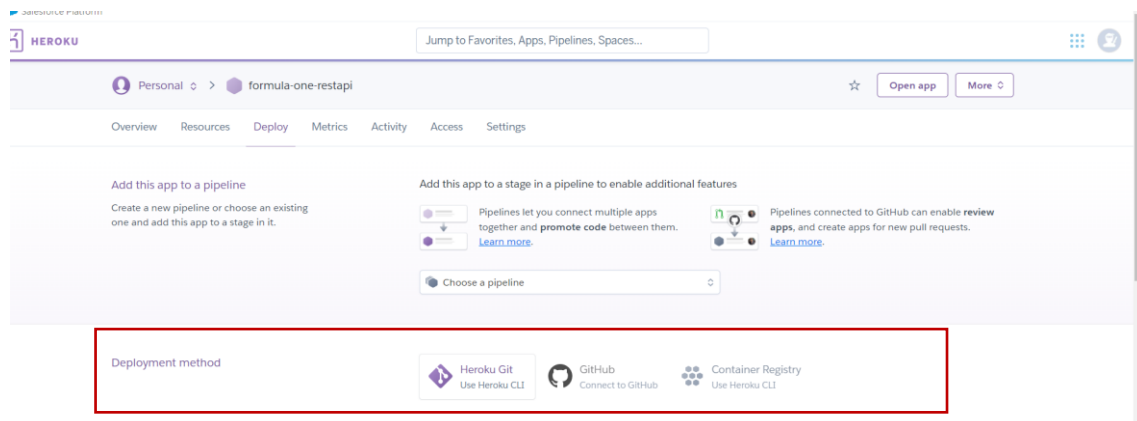
Una vez logados en Heroku, pinchamos en el botón New APP. Elegimos nombre y región de hosting.



The screenshot shows the Heroku 'Create New App' form. At the top, there's a navigation bar with the Heroku logo and a search bar. Below it, a 'Create New App' button is visible. The form itself has two main sections: 'App name' and 'Choose a region'. The 'App name' field contains 'formula-one-restapi' and has a green checkmark icon to its right, with a message below it stating 'formula-one-restapi is available'. The 'Choose a region' dropdown menu is set to 'Europe'. Below these fields, there are two buttons: 'Add to pipeline...' and 'Create app'.

4. Método de despliegue

Nuestra aplicación esta alojada en GitHub, por lo que debemos sincronizarla con Heroku para su posterior despliegue.




The screenshot shows the Heroku app page for 'formula-one-restapi'. The top navigation bar includes the Heroku logo, a search bar, and a user profile icon. Below the navigation bar, there's a header section with the app name 'formula-one-restapi' and buttons for 'Open app' and 'More'. The main content area has tabs for 'Overview', 'Resources', 'Deploy', 'Metrics', 'Activity', 'Access', and 'Settings'. The 'Deploy' tab is selected. Under the 'Deploy' tab, there's a section titled 'Add this app to a pipeline' with instructions and a 'Choose a pipeline' dropdown. Below this, there's a 'Deployment method' section with three options: 'Heroku Git' (Use Heroku CLI), 'GitHub' (Connect to GitHub), and 'Container Registry' (Use Heroku CLI). The 'GitHub' option is highlighted with a red box.

Connect to GitHub

Connect this app to GitHub to enable code diffs and deploys.









Search for a repository to connect to

 NaranjoJimenezAndres2

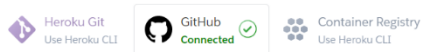
repo-name

Search

Missing a GitHub organization? [Ensure Heroku Dashboard has team access.](#)



 NaranjoJimenezAndres2/proyecto_typescript03	Connect
 NaranjoJimenezAndres2/proyecto_TypeScript_1ev	Connect
 NaranjoJimenezAndres2/readme-model	Connect
 NaranjoJimenezAndres2/08032021_Proyecto2MongoDB	Connect
 NaranjoJimenezAndres2/premier-league-asir	Connect
 NaranjoJimenezAndres2/ProyectoNavidad	Connect
 NaranjoJimenezAndres2/calculadoraJava	Connect
 NaranjoJimenezAndres2/Proyecto_RESTAPI_v1.0	Connect

Deployment method



App connected to GitHub

Code diffs, manual and auto deploys are available for this app.

Connected to  NaranjoJimenezAndres2/Proyecto_RESTAPI_v1.0 by  NaranjoJimenezAndres2 [Disconnect...](#)

[Releases in the activity feed](#) link to GitHub to view commit diffs

Un poco mas abajo en la página, nos aparece el despliegue manual, lo activamos.


Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more.](#)

Choose a branch to deploy

 main

Deploy Branch


Manual deploy

Deploy the current state of a branch to this app.

Deploy a GitHub branch

This will deploy the current state of the branch you specify below. [Learn more.](#)

Choose a branch to deploy

 main

Deploy Branch

Receive code from GitHub



Build main 558dd566



Release phase



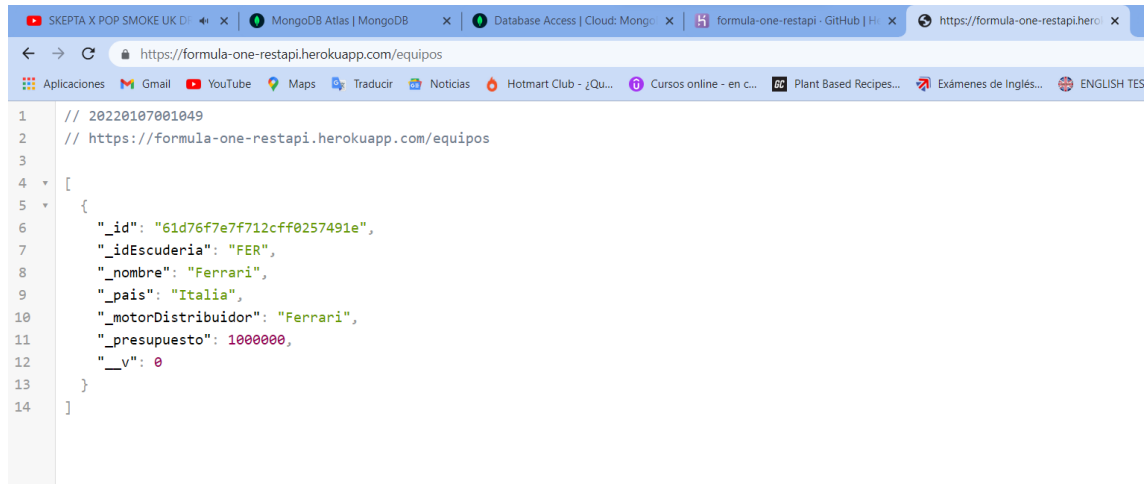
Deploy to Heroku



Your app was successfully deployed.



Pulsamos el botón de View para comprobar si de verdad se ha realizado el proceso satisfactoriamente.

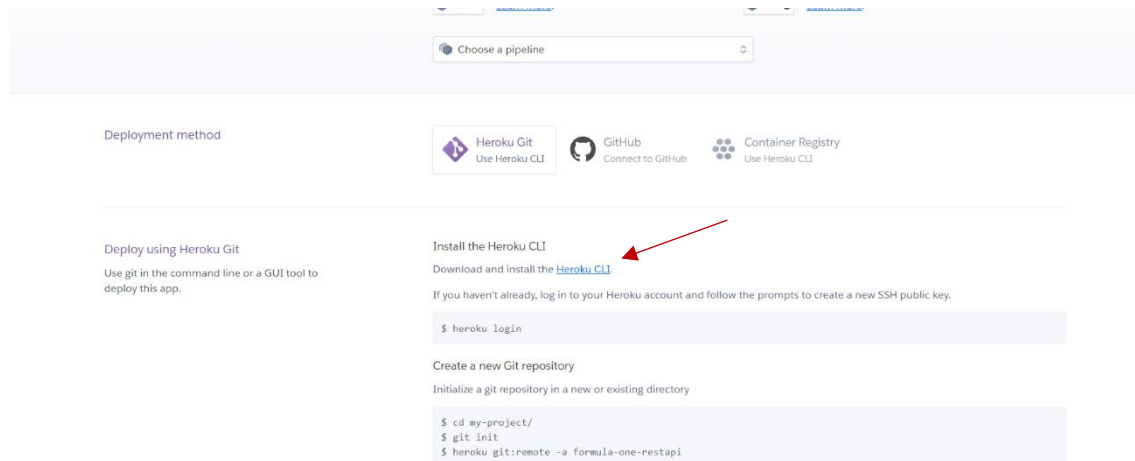


The screenshot shows a web browser window with the address bar displaying `https://formula-one-restapi.herokuapp.com/equipos`. The browser's developer tools are open, showing the response of a GET request to this endpoint. The response is a JSON array containing one object representing a team. The JSON is as follows:

```
1 // 20220107001049
2 // https://formula-one-restapi.herokuapp.com/equipos
3
4 [
5   {
6     "_id": "61d76f7e7f712cff0257491e",
7     "_idEscuderia": "FER",
8     "_nombre": "Ferrari",
9     "_pais": "Italia",
10    "_motorDistribuidor": "Ferrari",
11    "_presupuesto": 1000000,
12    "_v": 0
13  }
14 ]
```

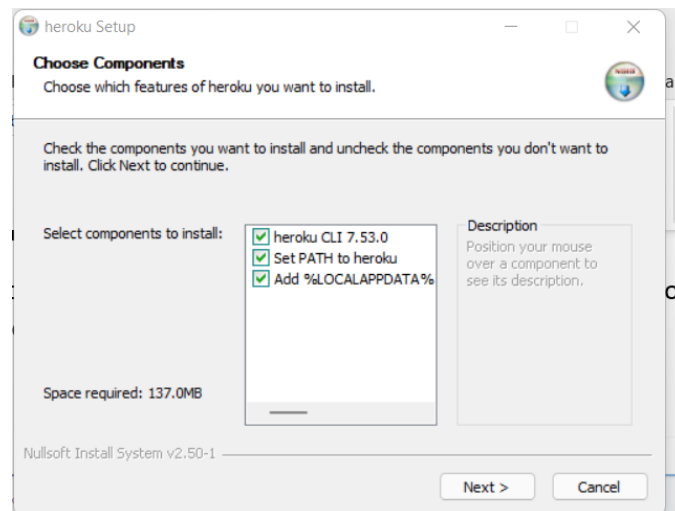
5. HerokuCLI

Para evitar futuros problemas, es aconsejable instalar Heroku CLI



The screenshot shows the Heroku CLI installation guide. At the top, there is a section titled "Choose a pipeline" with a dropdown menu. Below this, there is a section titled "Deployment method" with three options: "Heroku Git Use Heroku CLI", "GitHub Connect to GitHub", and "Container Registry Use Heroku CLI". The "Heroku Git" option is selected. Below this, there is a section titled "Deploy using Heroku Git" with the text "Use git in the command line or a GUI tool to deploy this app." To the right of this section, there is a section titled "Install the Heroku CLI" with the text "Download and install the [Heroku CLI](#)". A red arrow points to the "Heroku CLI" link. Below this, there is a section titled "If you haven't already, log in to your Heroku account and follow the prompts to create a new SSH public key." with a code block containing the command `$ heroku login`. Below this, there is a section titled "Create a new Git repository" with the text "Initialize a git repository in a new or existing directory" and a code block containing the commands `$ cd my-project/`, `$ git init`, and `$ heroku git:remote -a formula-one-restapi`.

Descargamos el ejecutable para WINx64 y seguimos el asistente de instalación.



La terminal quedara instalada y asociada a las variables de entorno del sistema operativo.

```
C:\> Símbolo del sistema
C:\Users\diama>heroku --help
» Warning: heroku update available from 7.53.0 to 7.59.2.
CLI to interact with Heroku

VERSION
  heroku/7.53.0 win32-x64 node-v12.21.0

USAGE
  $ heroku [COMMAND]

COMMANDS
  access      manage user access to apps
  addons      tools and services for developing, extending, and operating your app
  apps        manage apps on Heroku
  auth        check 2fa status
  authorizations OAuth authorizations
  autocomplete display autocomplete installation instructions
  buildpacks  scripts used to compile apps
  certs       a topic for the ssl plugin
  ci          run an application test suite on Heroku
  clients     OAuth clients on the platform
  config      environment variables of apps
  container   Use containers to build and deploy Heroku apps
  domains     custom domains for apps
  drains      forward logs to syslog or HTTPS
  features    add/remove app features
  git         manage local git repository for app
  help        display help for heroku
  keys        add/remove account ssh keys
  labs        add/remove experimental features
```