

Problem to solve:

This amazing project is a fibonacci calculator, it should be able to calculate fibonacci numbers on the fly, so we can have the progression at any moment!

Have fun!

Acceptance Criteria:

- Demonstrate you have created a repository for this challenge
- Demonstrate you grant access to a tango interviewer
- Demonstrate you created instruction of "how to run the project"

Back end:

Acceptance criteria:

- Demonstrate express is used to build the api
- Demonstrate you are using Typescript
- Demonstrate we have an endpoint to return a fibonacci number
 - You should use a RESTFUL api
 - The endpoint should get the value to calculate in the url (parameter)
 - Example: a request to <http://localhost/api/fibonacci/0> should return 0
 - Example: a request to <http://localhost/api/fibonacci/1> should return 1
 - Example: a request to <http://localhost/api/fibonacci/2> should return 1
 - Example: a request to <http://localhost/api/fibonacci/3> should return 2
 - Example: a request to <http://localhost/api/fibonacci/4> should return 3
 - Example: a request to <http://localhost/api/fibonacci/5> should return 5
 - Example: a request to <http://localhost/api/fibonacci/6> should return 8

Front end:

Acceptance criteria:

- Demonstrate we can fetch fibonacci information from the Back end
- Demonstrate we can specify the fibonacci number we want
- Demonstrate we have a way to see the result from the api (take a look at our amazing mock up)

Rules:

- You can not use old code (or any code base in your machine)
- You can use any code bootstrap/generator (like create-react-app)
- The code should be created from scratch
- You can use internet in order to find documentation or to find fixes for bugs

Stack:

- Javascript (typescript)
- Node
- React js
- Context/Redux/Mobx (optional)

Extra points:

- Create unit tests
- Create integration tests
- Create end to end tests

Mockup:

Calculate Fibonacci!

Fibonacci Result: **8**