

FIT1 recruitment test

The subject of this test is to build an node.js/express REST API which **store at runtime** a list of numbers and allow some manipulations on it.

| !! Remember to commit your development locally, to remove the node_module folder and zip the project before sending the result

A swagger file and ui is provided in the project : you can display and use it by launching the application:

```
npm install # install the project
npm run serve # the swagger UI is browsable on http://localhost:3001
```

To launch the unit tests suites:

```
npm run test
```

It will executes all the tests files in the `__test__` folders not marked as `skip`

project main files tree :

```
|— index.js
|— jest.config.js
|— junit.xml
|— package.json
|— package-lock.json
|— README.md
|— routes.js
|— swaggerdoc.yaml
└__test__
  |— 1-numbers.test.js
  |— 2-operations.test_skip.js
  └ 3-mean.test_skip.js
```

The coddig test steps:

|⚠ Remember to setup the project by running the npm install cmd before starting the test

1. The Numbers routes

💡 All the Unit tests in the `__test__/1-numbers.test.js` **should pass** :

```
PASS __test__/numbers.test.js
[1] Test Numbers
  ✓ Get the number list (123 ms)
  ✓ Check that we pass a array (18 ms)
  ✓ Add numbers (3 ms)
  ✓ Cumulate numbers (4 ms)
  ✓ Post Numbers with strings (2 ms)
  ✓ Post Numbers with two strings (2 ms)
  ✓ Post Numbers with one string: string should no be added (3 ms)
  ✓ Remove string value from the list (3 ms)
  ✓ Remove values from the list (4 ms)
```

2. The Numbers/{operation} route

Rename the `__test__/2-operations.test_skip.js` to `__test__/2-operations.test.js`

💡 All Unit tests **should pass** :

```
PASS __test__/operations.test.js
[2] Operations
  ✓ Unrecognized operation (4 ms)
  ✓ Operations with string (2 ms)
  ✓ Divide (1 ms)
  ✓ Add value (2 ms)
  ✓ Subtract value (5 ms)
  ✓ Multiply value (2 ms)
```

3. The Mean value calculation

Rename the `__test__/3-mean.test_skip.js` to `__test__/3-mean.test.js`

💡 All Unit tests must pass

```
PASS __test__/mean.test.js
[3] Test mean value of the list
  ✓ Empty list has no mean value (8 ms)
  ✓ Mean value (9 ms)
```

We will pay equal attention to the quality and the readability of your code.
Feel free to leave comments to explain your choices Good luck