Robotic Rovers' Manuals (User and Developer)

Introduction

Javascript code is constantly increasing in web pages and I have faced projects where the amount of js code was amazingly big and it was such a mess that was impossible to understand and maintain.

Therefore the last few weeks I have been researching Javascript frameworks, javascript code organization, design patterns and testing. Mainly because I wanted to improve my javascript coding abilities and also because I had the curiosity to know a better world, a world where javascript is clean, easy to read and easy to maintain.
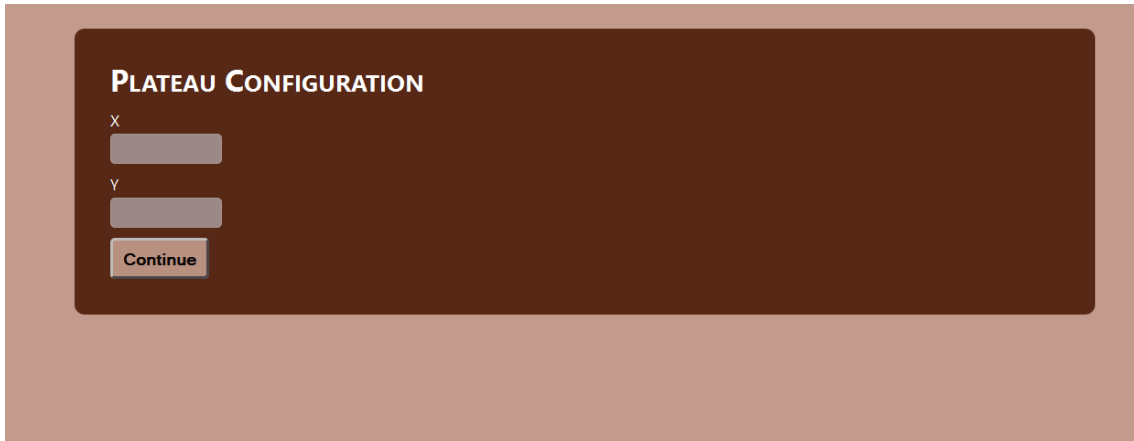
Robotic Rovers is my first approach in a real scenario of some of my studies; I didn't apply all of them because of time but I will be uploading new releases as soon as possible.

I will really appreciate any critics, I promise to read each of them, because I truly believe that they help me to improve as developer.

User Manual

The application is very easy to use because the attention was put behind scenes, in the code organization and testing.
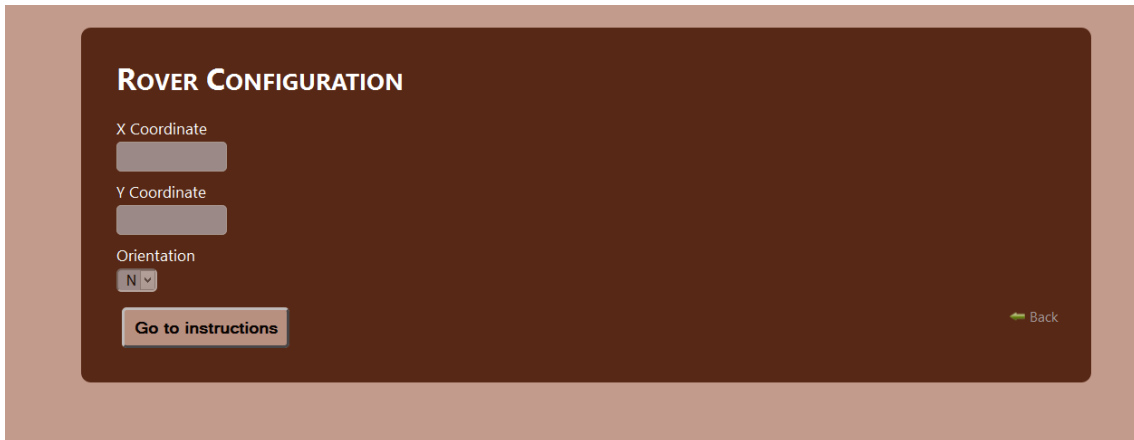
As a user the first page you are presented with is:

Here you can configure the Plateau where robots will explore. You can only input integer numbers here.

The next screen is:

In the Menu page you begin adding Rovers to explore the Plateau and all of them will be shown after the button "New Rover".

When clicking in the button "New Rover" you will see:

Here you provide the first location of the rover in the Plateau and also its orientation. At this point you can go to instructions view or go back to the menu.

If you click in "Go to Instructions" you will see:

Here is where you tell the rover how to move. It will only understand three commands:

1. "M": Move forward one position according to its current orientation.
2. "L": Spin 90 degrees to the left.
3. "R": Spin 90 degrees to the right.
4. Otherwise do nothing.

Finally after clicking "Stop Moving" you will go back to the menu page and you will see the final position of the rover:
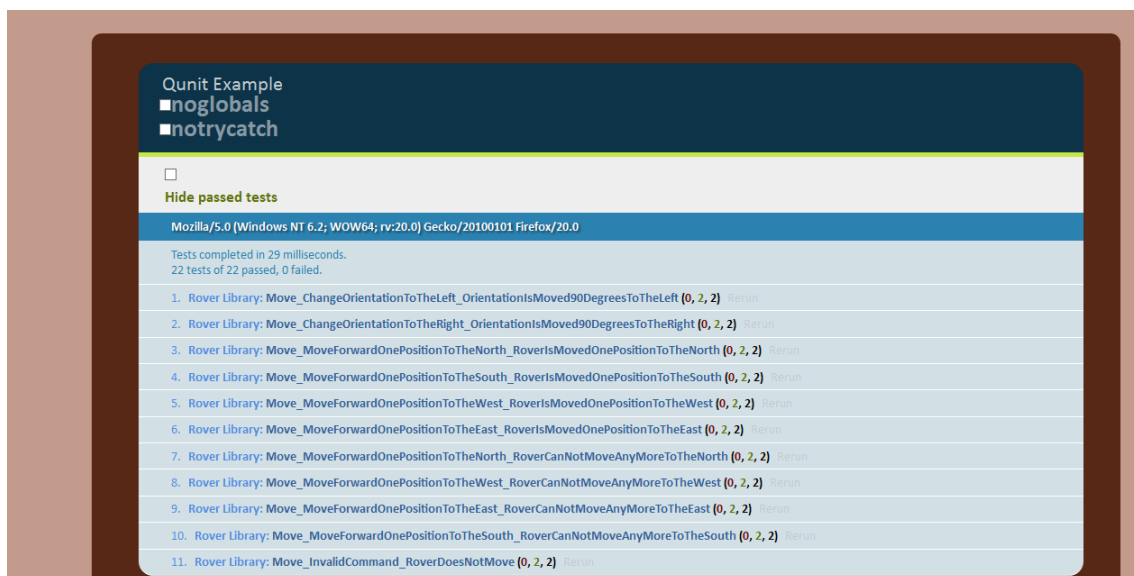
In the Menu you can add another Rover or click in the back link, modify the Plateau and create other rovers.

Technical Manual

One important page a technical user would like to see is the Test Page where the logic of the application was tested in isolation:

http://localhost:XXXX/TestScripts/RoverScript

The unit testing was done with **Qunit**.