

Mission Briefing - Rogue Rovers

Hack the Future – Javascript Challenge

The main computer core that controls 12 Mars Rovers has broken down. At the moment, we are completely in the dark about the whereabouts and sensory data of those Rovers. Fortunately, the communication infrastructure is still intact. Using the API of our comlink, we can restore the connection to the Rovers to get all the information we want. While the Rovers keep sending us information, vital decisions need to be made. The station commander has requested us, young space cadets, to supply him with facts. This information must be visualized so he can understand the situation the Rovers are in.

Message from the commander

As the Station Commander, I have created a Product Backlog containing the work to be done. Keep in mind to complete the most essential tasks first. Time is limited, and some information is more vital than the rest.

In the backlog, items that I consider important are designated with a lower number, so it's vital to Prioritize & Execute to accomplish this mission.

Good luck, space cadets!

GET AFTER IT!

Jocko Charles, Station Commander

8/12/2016 4:30 AM

Instructions

Use Javascript to connect to the API. Build a nice visual Dashboard with a frontend technology of choice (AngularJS, React, JQuery...). Focus on a good User Experience: The Commander must be able to make quick decisions based on the data in the dashboard.

API Operations

Channels

- `api/channel` is the direct gateway to our communications infrastructure. All channel IDs are listed here. Not all of them are in use!

Rovers

- `api/channel/[roverId]` returns the main data of a rover. Make sure to provide a correct `roverId`!

Sensors (be warned: not all sensors are functioning correctly on all Rovers!)

- `api/channel/[roverId]/t1` → temperature sensor (temperature in °C)
- `api/channel/[roverId]/w1` → water sensor (0 = no water or 100 = water)

Resources

- API: <https://roguerovers-api-develop.azurewebsites.net/swagger/ui/index.html>
- Visual assets: <https://roguerovers-api-develop.azurewebsites.net/documents/assets.zip>

- Backlog: <https://roguerovers-api-develop.azurewebsites.net/documents/backlog.xlsx>
- Manual: <https://roguerovers-api-develop.azurewebsites.net/documents/manual.pdf>
- Info: calling an API using JQuery: http://www.w3schools.com/jquery/ajax_get.asp