Introduction

This test is designed to verify your computer programming skills.
For several years now, objects connected to the Internet have been multiplying in number, but tools to verify their operation and availability are still rare. The subject of this test is the development of an IOT module monitoring website.

Criteria considered

- Compliance with instructions.
- Quality of code (logic, organization, comments).
- Tools used.
- Ease of implementation.
- Design and any additions from you!

Preamble

- The purpose is not to actually connect modules, but simply to create a script that simulates them.
- The rendering should be testable on our offices, so don't hesitate to give us all the information we need to implement it.
- The desired programming technologies are HTML / CSS / PHP / Bootstrap / Javascript / Mysql. (Symfony and Laravel frameworks authorized, js libraries authorized but not Frameworks)

Subject

- Creation of a database listing modules, their details and operating history.
- Creation of a form for registering new modules.
- Creation of a page displaying the operating status of modules, such as current measured value, operating time, number of data items sent, operating status, and a graph showing the evolution of the measured value.
- On the interface, visual notifications in case a module has a malfunction.
- Creation of a script for automatic module status generation.
- Modules need to generate numerical data on the measurement they perform (temperature, speed, etc.) and store the history in a database. Modules can break down and then work again, randomly. History generation must continue while browsing your test's web interface.