**Project details:**

We are working on a website about dog´s geolocation. There is a public Home where users can read what we offer and the advantages of using SateliCan. SateliCan is a system composed of a piece of hardware (a GPS with a LTE/4G Sim card) that the dog will carry and a private area on the website where dog´s owners can register and create a profile for the dog or dogs they have (each dog will have its own card).

**Requirements:**

1. The stack is **MERN** (MongoDB, Express, React js and Node). This is mandatory.
2. The front will be made with **react js** and related components (especially **Material UI**). A components library must be used. It is highly recommended to use **material-ui** but others can also be used.
3. The back will be a **Restful API** build with **Node js** supported on **ExpressJS** por the **HTTP server** generation and **Mongodb** for the data persistence in the database.
4. The must be at least **5 entities/collections** in the database.
5. The site will have a public home and a private area, managing the authentication with **JWT**. You can use <https://www.google.com/settings/security/lesssecureapps> to configure a Gmail account using the basic authentication with the nodemailer library.
6. For testing purposes, you can generate temporary email users with <https://temp-mail.org/es>.
7. The API must be Restful **and at least one CRUD** with at least one collection needs to be exposed.
8. For checking the back you need to use Postman.
9. The API must follow the **MVP** architecture pattern.
10. The website must be 100% **responsive** and exposed in at least **three breakpoints** (mobile, tablet and desktop). Please, use Grid, Flex and similar from material-ui.
11. We will use a **github** repository to update the work.
12. **Legal pages** included cookies policies and GDPR must be created and included on the footer. (This is almost finished).
13. The website must be available in **two languages** (Spanish and English). It is recommended to use <https://www.deepl.com/en/translator> but you can choose another one if you prefer it.
14. The website needs to be **multi-theming** (at least a light and a dark themes). You can use, for example, <https://codesandbox.io/s/material-ui-dark-mode-with-gatsby-and-usereducer-cr5ml>
15. Typography will be **Roboto** (it is already implemented).
16. There will be an **online store** to buy the GPS hardware. Some options about this are:
    * Reactjs + headless CMS: in this case the API would already be developed, and you will need to create the front that consumes that API. As headless an option is directus, although payment gateways will need to be implemented.
    * There are solutions already made, although they are not free. It might be the best option for this phase. Check commerce.js or something similar.
    * Take the traditional ones, like wordpress+woocommerce. It can be used in headless mode, so you could make a react on top as the front.

You can check this to decide: <https://medium.com/@MathDy24/a-developers-guide-to-headless-e-commerce-92be0e826189>

1. We would like to have a reduced version of the site as a mobile App (only Android for is ok).

Let me know if you can do with Ionic or if you can manage with any other mean.

1. The private area for registered users will have a **real time application** to track a gps signal, so there will be a map (Google Maps) where their dog´s location will be tracked and seen by the user (use socket.io). The gps will be a gps chip that the dog will carry. Can you think of a way of fetching or getting the location from a 4G gps?

A **Trello** canvas will be shared with all the tasks currently in process, done and the ones to start.

The above needs to be finished by Sunday, the 19th of September, although we need to see all your updates everyday (and check them and test).

You can honestly tell me what you can do from the list and how long it will take you. In case there is any point that you cannot do, it will be ok, just tell me which ones and I will do it on my own.

At the end of the next two days (Saturday and Sunday) we will need to have the following finished:

* **Public home** (Front): this is already done, just need you to finish the navigation bar.
* Include three **features** on the **navigation bar**: select Spanish or English (we can do it with two flags or propose an alternative), select the light or dark theme (with a material-ui switch, for example) and a button for login and register. These pages (login, register, remember password, change password, email validation and validated email) will be also provided.
* I will finish the footer including the legal pages about cookies and GDPR).
* **Private area** (for registered users): this needs to be designed. I will draw you an example of what I would like to see in this section.
* **Get a map** that shows the **GPS location in real time**, when the user clicks on a dog´s card.
* This means that at this point we are already consuming the **GPS geolocation API**.

At the end of Monday we will require you:

* To create the online shop (payment methods will be Paypal and Redsys or Stripe).

Tuesday and Wednesday will be for testing all you have developed.

Thursday will be great for the Ionic App.

The remaining days will be for testing the full website or finish any tiny detail.