



Instituto Superior de
Engenharia do Porto



PET TRACKER
User Manual

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The device

The Pet Tracker is a tracking and activity monitoring device. It uses a GPS module in combination with a GSM/GPRS module to accurately localize your pet and show where it is on a website with Google maps. The website is accessible with both mobiles and computers. The built-in triple axis accelerometer stores data about how active your dog has been during the day. Everything is controlled by an Arduino Pro Mini board and powered by a Li-Ion battery.

The dimensions for the Pet Tracker prototype are following: 76 mm x 76 mm x 40 mm.

The weight for the Pet Tracker prototype is exactly 197.88 g.

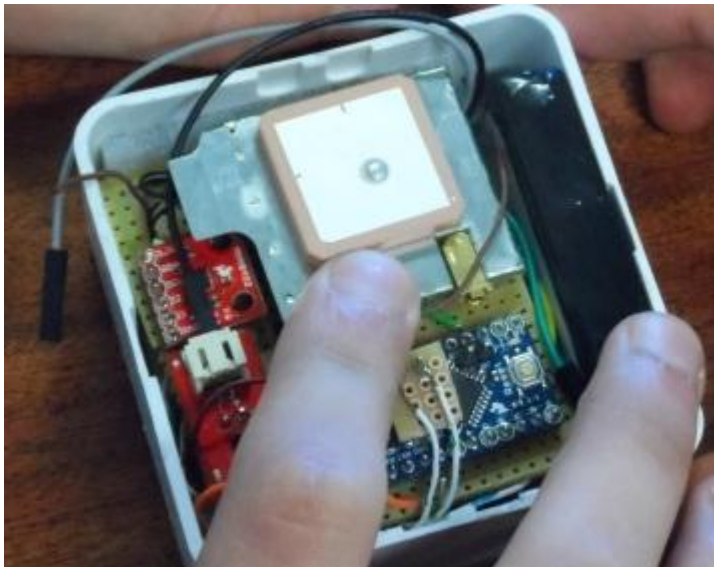


Figure 1. Prototype of the Pet Tracker

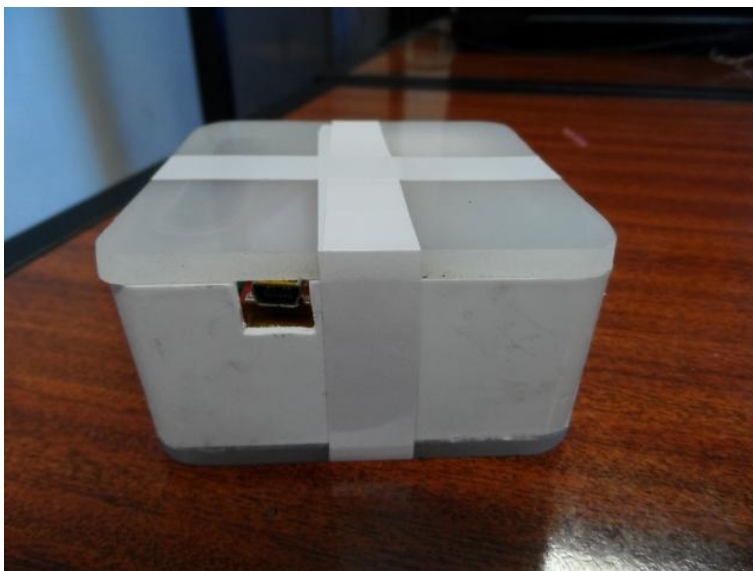


Figure 2. Prototype of the Pet Tracker

Usage

Considering the fact that we provide the client with a prototype, we created a very simple version of the product, even without buttons to “switch on” or “switch off” the Pet Tracker. The most relevant part of the device is connected with the battery – if it is charged, a device should work with no problems.

Parts/ modules

Table 1. List of materials

Product	Description
GPS	EM-408 with Antenna/MMCX
Arduino	Arduino Pro Mini 328 - 3.3V/8MHz
Battery	ENIX 3,7V 1840mAh
GPRS/GSM	ADH8066
GPRS/GSM Board	ADH8066 Breakout
Charger	LiPo Charger Basic - Mini-USB
Antenna(GSM)	GSMMQB - Mini Quad Band Antenna
Accelerometer	Triple Axis Accelerometer Breakout
Memory	I2C EEPROM - 1Mbit

Operating instructions

The device

After charging the battery, the device should work properly and you can start using it. The estimated time of charging the battery is 180 min.

The website

- I. Creating an account
 1. Click on the “register” sign.
 2. Enter product code, which can be found in the packaging.
 3. Fill in user information.
 4. Fill in pet information.
 5. After creating an account, log in and check if everything is okay.

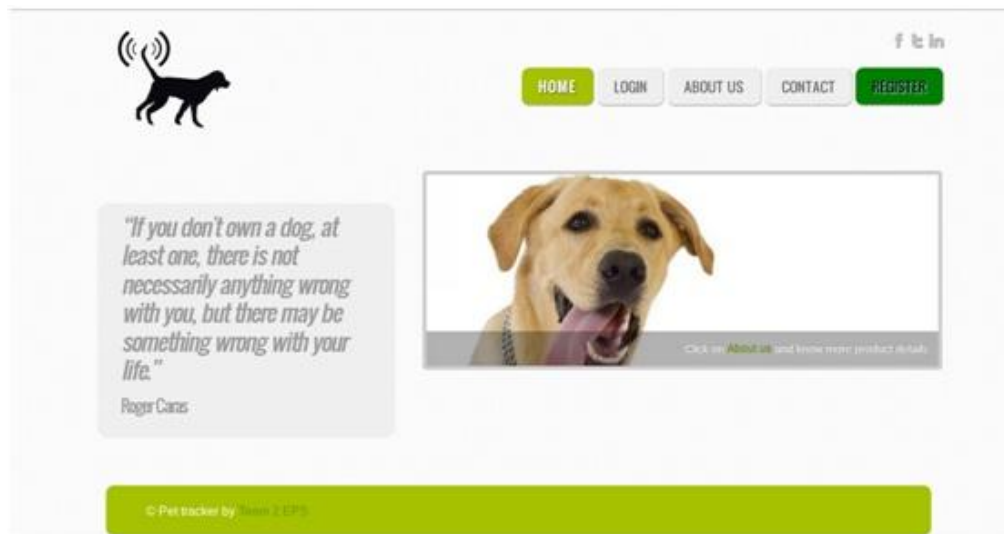


Figure 1 - Website (Home)



Figure 2 - Website (Registration)

II. Tracking and activity monitoring system

1. Click “login”.
2. Enter your user name and password.
3. There is a Google Map on the left side for tracking a pet.
4. There is a second tab on the right side, with all the information, such as velocity, number of kilometres (per day and per week) for pet’s activity monitoring.

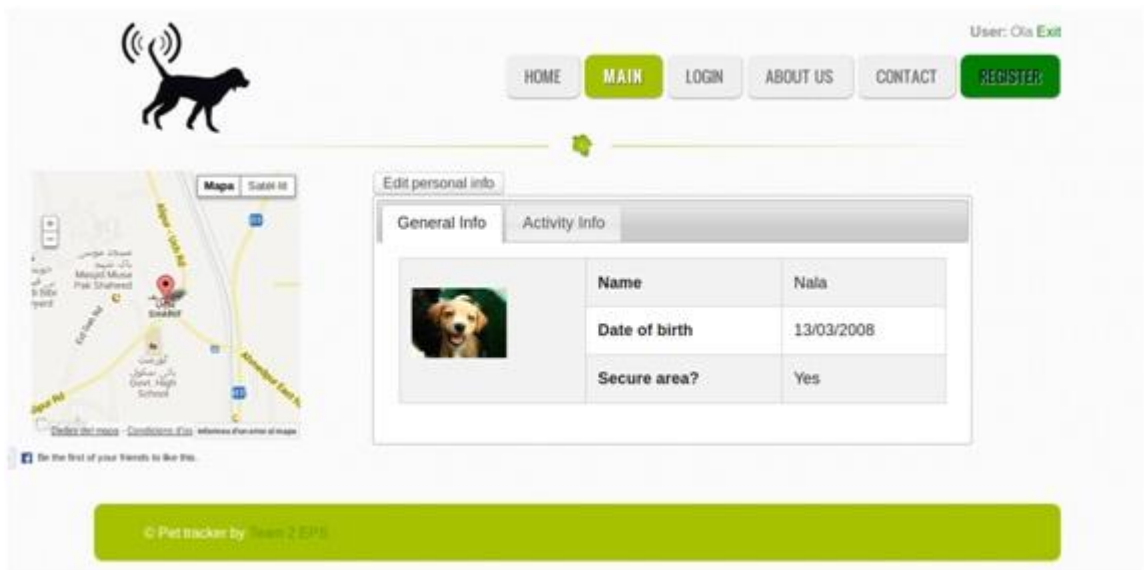


Figure 3 - Website (User's personal page)

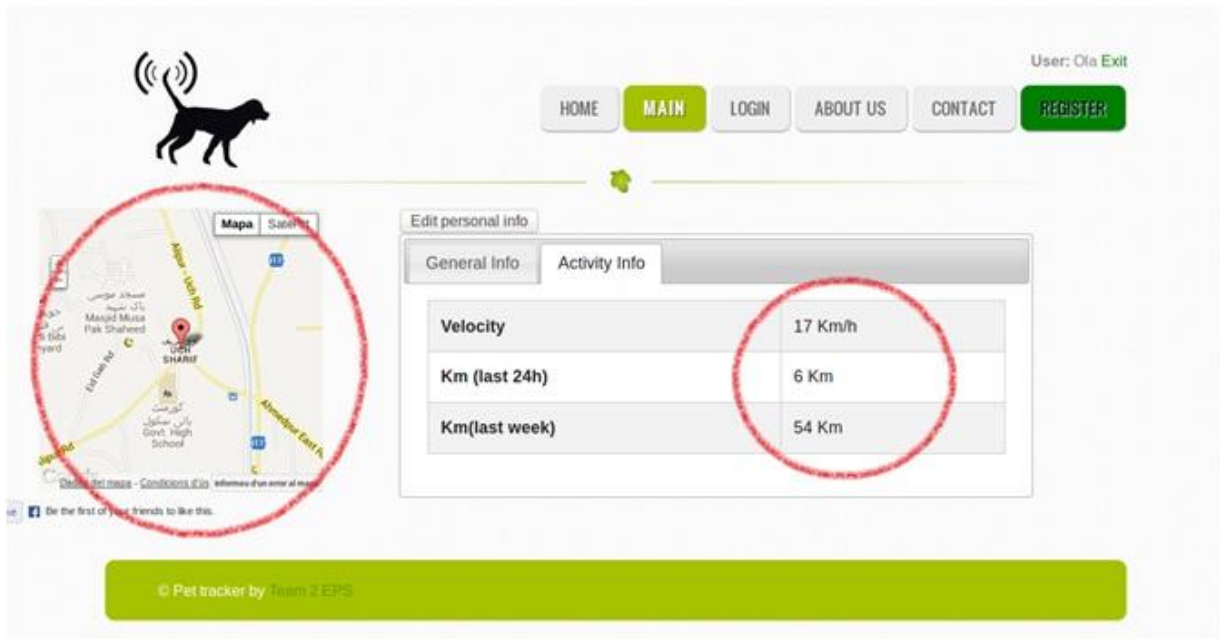


Figure 4 - Website (User's personal page)

III. Editing the user information

1. Click "login".
2. Enter your user name and password.
3. Click on "edit personal info".
4. Change data and click "send".



Figure 5 - Website (User's personal page)- editing personal info

User info

Name: Ola

Edit

Surname: Bor

Edit

email: ola@caracola.com

Edit

Address: wspaniaÅ?e Porto <3

Figure 6 - Website (User's personal page)- editing personal info

IV. Contact information

1. Click “contact”.
2. Click on chosen network.
3. An e-mail to our team is presented at the bottom.

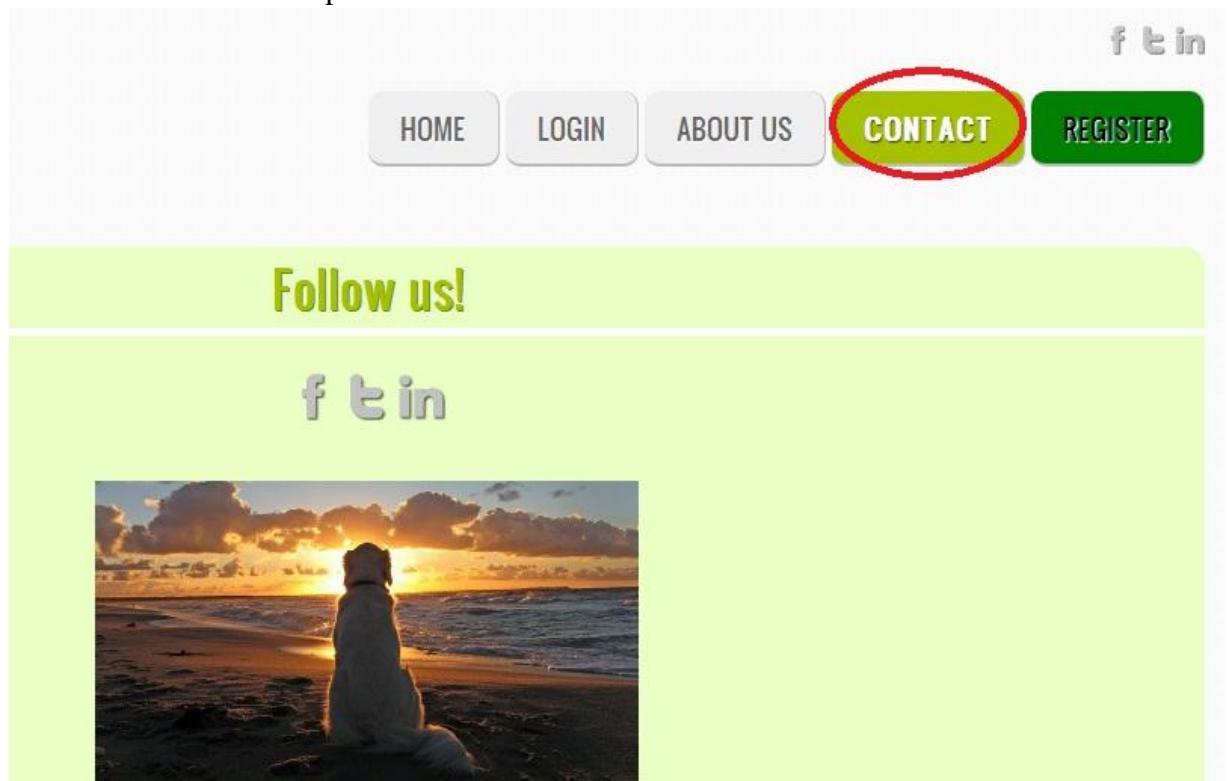


Figure 7 – Website (Contact)

V. Information about the product

1. Click on “about us”.
2. You may find every necessary information about our team as well as the functionality of the Pet Tracker.

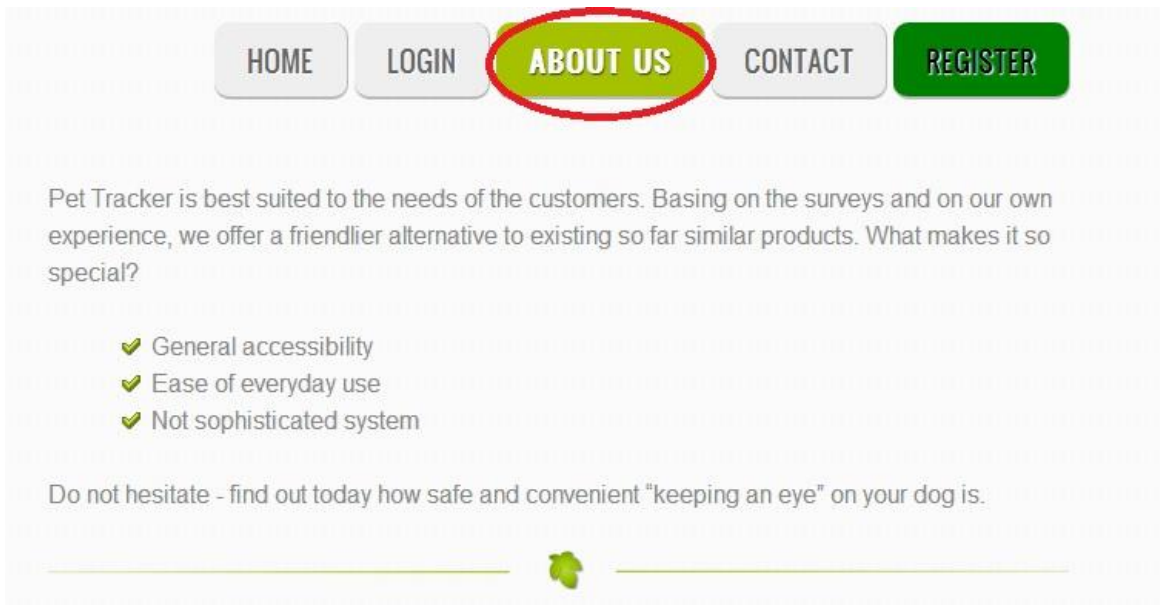


Figure 8 – Website (About us)

Troubleshooting

The device

If a device is not working, make sure that the battery is charged. If the problem appears more than once, please contact us. The e-mail is as following - info@pettracker.com.

The website

1. If the page is not loaded, wait for a minute and try to refresh it. If it does not work, contact the website administrator - info@pettracker.com
2. If you forget a password to log in, send an e-mail to the website administrator from the e-mail address link for the account and you will get a new one.
3. If a Google Map does not work, check your browser configuration and the Java Script functionality whether it is active or not. If it is still not working, please contact the website administrator.
4. If the activity monitoring does not work, please wait for a minute and try to refresh the website, because it may be a problem with a database. If it is still not working, please contact the website administrator.