Applicazioni per dispositivi mobili course a.y. 2016/2017

My Dog Care Design documentation



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Strategy



Product Overview

With My Dog Care you can track the position of your dog and find near veterinaries. This could be useful if you are in a new city and you do not know where a veterinary is or simply during a walk if you want to know where is your dog. You can also use it to remember visits and vaccines, inserting some useful details like comments and memos. It can also show you a notification, so you do not forget them.

Competitors

OS	lcon	Name	Features
Android	for Android ^{Tes}	Dog Health	Health book; Vaccinations; Visits Scheduling; Search for veterinary
Android		MapMyDogWalk	MapMyDogWalk uses GPS to allow to track your walks, helping you to reach your athletic and health goals.
Android		PetCoach - Ask a vet for free	PetCoach is the leading source of free veterinary advice. Ask questions about your pet's health, nutrition, behavior, or any other topic, and obtain trusted answers for free from verified veterinarians and other pet experts.
IoS	Pet Minder	MyPetMinder	PetMinder is an easy to use app designed to make it simple to remember those important dates and events for your pet. When did I last apply flea medication, go to the vet, change food or even have a play date? Track your pet's health, exercise habits, allergies, or anything else you desire.
IoS/Android	5	Whistle 3 GPS / Tagg	Whistle 3 uses smart technology to track your pet's location and activity.

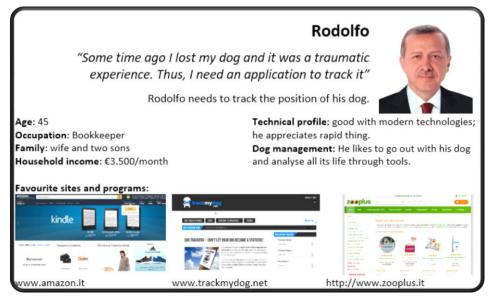
loS /Android	American Red Cross	Pet First Aid by American Red Cross	Take care of your furry family member. The American Red Cross Pet First Aid app puts veterinary advice for everyday emergencies in the palm of your hand. Get the app and be prepared to act when called upon. With videos, interactive quizzes and simple step-by-step advice it's never been easier to know Pet First Aid.
loS		Dog Park Finder Plus	The Dog Park Finder Plus displays local dog parks and search results in both map and list pages. Park details include user ratings, fenced and unfenced markers, on-leash rules, hours and days of operation and many other notes and features of the dog park.
IoS		Pet Diary	Pet Diary is the perfect app to store all your pets' memories and record your pet's vital information. A perfect companion to manage your pet's health and also record their silly, fun moments so you can share them with others all in one neat little package.
Android	Dog Park Buday	Dog Park Buddy	Dog Park Buddy builds community at your neighborhood dog park by connecting users and promoting fun, helpful, joyful interactions with dogs and their companions. This app makes it easy to coordinate your visits, view profiles of the active dogs at your local park, post and share daily photos, and send private messages and doggie-playdate invites to your new dog park buddies.
Android		Routinely	Routinely helps to achieve goals in developing good habits by providing daily reminders of activities and tasks. Are there things you'd like to get in the habit of doing every day or a few times a week but always forget? Routinely tracks each activity and allows a weekly schedule to be defined. The daily reminders and repetition will develop these activities into good habits and improve your life.

User Research

You have specific activities to sustain when you have a dog, both daily, such as outdoor walks, and periodically, such as vaccinations and visits. All these activities group what we want to describe with the concept of "care of the dog". The principal problem of these activities is that they tend to be delayed or even worse they tend to be forgotten. But not only, even in daily activities, such as various walks, there may be a need to check the progress of these ones. As an example, a person wants to be able to control the current position of own dog. For these reasons, our mobile application aims to provide the end user the possibility to manage the whole initial concept of "care of the dog", in complete and autonomous manner. In this way, for first the end user may simplify the visits/vaccination task that otherwise he/she should remember/manage in a more inconvenient manner. In addition, he/she can check in real-time mode the position of his/her dog and this is useful for example in the case of outdoor walks. This mobile application is also useful to find a veterinary around the person.

Personas

Rodolfo



Roberta

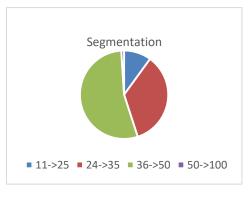


Frank

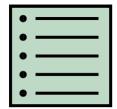


Pie chart of segmentation

The following pie graph represents the percentage of people that will use the application in approximation:



Scope



Features

These features are further described in the following scheme:

- Dog Searching
 - o Position visualization.
 - o Route visualization.
- Diary of visits
 - Insert of new event.
 - Modify an event.
 - Cancel an event.
 - Calendar visualization.
 - Alarm reminder.
- Veterinary Search
 - o Position of the nearest veterinaries.
- Profile managing
 - o User profile managing.
 - Dog profile managing.

Note that for a decisional choice, in our mobile application the user must already have an account and therefore to use this app, he/she must be logged in. Registration is expected on the first use. In this phase indeed, a user not only registers his/her data, but also his/her dog's data. The choice of mandatory login clearly follows by the nature of our mobile application, that in our mind is associated to the utilization of one dedicated device (dog collar) equipped with a SIM card (in order to get GPS coordinates) and therefore we will have a set of dedicated functionalities.

Scenarios

Rodolfo views his dog's position

Rodolfo's dog has just run away. So, Rodolfo opens the application and goes to the page that shows the position of his dog on a map. He can view finally his dog's position.

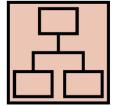
Roberta looks for a veterinary

Roberta goes to Sofia to work for two days. As usual she brings her dog with her. Unfortunately, it gets ill because of some food never tested before. Roberta does not know anything about Sofia, but she has already installed *My Dog Care*. Roberta opens the application and goes to the page that shows the veterinaries' position. The GPS of her mobile does not work and thus she inserts her position. The application shows the veterinaries next to her on the map. She chooses one of them and she calls him.

Frank manages a visit

Frank has just been by a veterinary that suggested him to try a therapy and to come back in one month. He opens the application and goes to the page of visits and vaccines. There he inserts the current visit and the therapy that the veterinary has just given. He also adds the next visit so that he will not forget it. Knowing that he will have an exam in that period, he wants to get a notification two days before the visit. He sets that preference and closes the application.

Structure



Navigation model

The following figure is the Navigation model. From the left, it represents the flows of *Dog* searching, *Veterinary search*, *Diary of visits*.

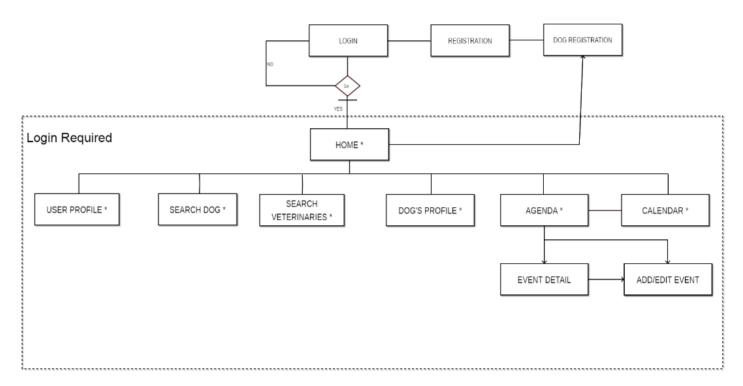


Figure 1 Navigation model of My Dog Care

- (1a) if log-in is performed
- * accessibility via menu

When a certain user opens the application, the first page will be the login page. As we can see from the navigation model, we have the remaining pages that require authentication in order to be accessed. Finally, once logged in, we have the customized homepage where we can manage our dogs (we have the list of associated dogs).

From here on, "page" to an authenticated page. We have an openable menu positioned on top-left of each page. Once clicked, it shows several functionalities:

- In the <u>User Profile</u>, a certain user simply has the possibility to modify his/her profile by means of a dedicated page containing his/her saved data.
- In the <u>Dog's Profile</u>, a certain user has the possibility to modify the profile of his/her already registered dogs (not all the information, indeed for example the dog collar id is not modifiable). This is done by means of a dedicated page containing the information of a certain dog.
- In our application, the user can see at any time where his/her dog is located. Clearly in our application we will use simulated positions because we don't have for the moment dog's collars. By contrast, users have them and thus they can get the position of their dog in the Search Dog page (because in the homepage they have already selected a dog).
- The user has another functionality available that allows him/her to search for veterinaries around him/her. In the <u>Search Veterinaries</u> page, a map with veterinary offices is shown. Next, by using the phone's keyboard, the user can get information or call a certain veterinary. Moreover, the <u>Calendar</u> page shows a simple calendar, where the user may navigate to see scheduled events. To get/modify/add events for a certain day, the user is redirected on a specific agenda view. The calendar page is inspired by Google Calendar app. Of course, in our case the calendar only shows visits and vaccines, if possible through icons, faster to be read.
- In the <u>Agenda</u> page the user can see the events (day, month, year) related his/her dogs in a list view. From this page, he/she can modify/add other events or he/she can see the event detail.
- When a user wants to modify an event, he/she is redirected in an ad-hoc page, containing a set of editable fields, the <u>Add/Edit Event</u> page.
- <u>Event Detail</u> page is the page that corresponds to a specific event. This page shows all the information about an event.

Data

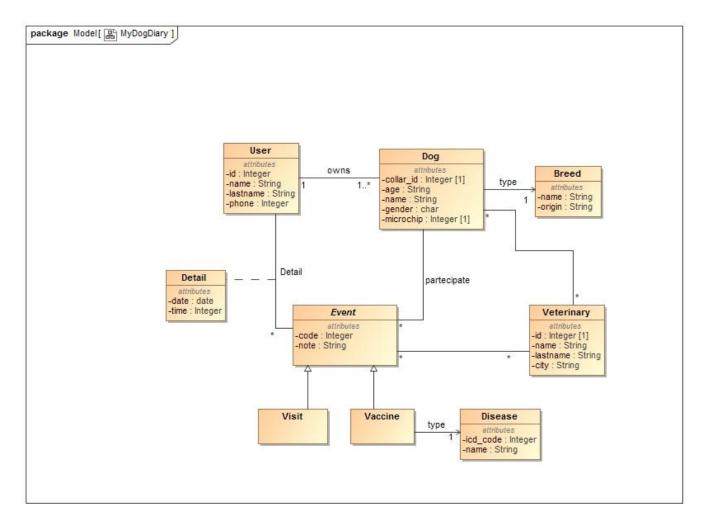


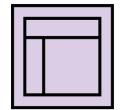
Figure 2: Diagram of classes

In our Data Model, we represent the *User*, namely the end-user of our mobile application. We need these types of data even to deal with sessions. Clearly, given the type of our application, a certain user could be associated with one or more dogs (at least one). Thus, in addition we need the entity *Dog* and this one is associated with a certain set of characterizing attributes (note that in a future final setting this mobile application must be associated with a dedicated device on the dog's collar that is able to localize a certain dog by using GPS signal and this is why we introduced the attribute *collar_id*). *Breed* entity indicates the breed of the dog and clearly it can be just one.

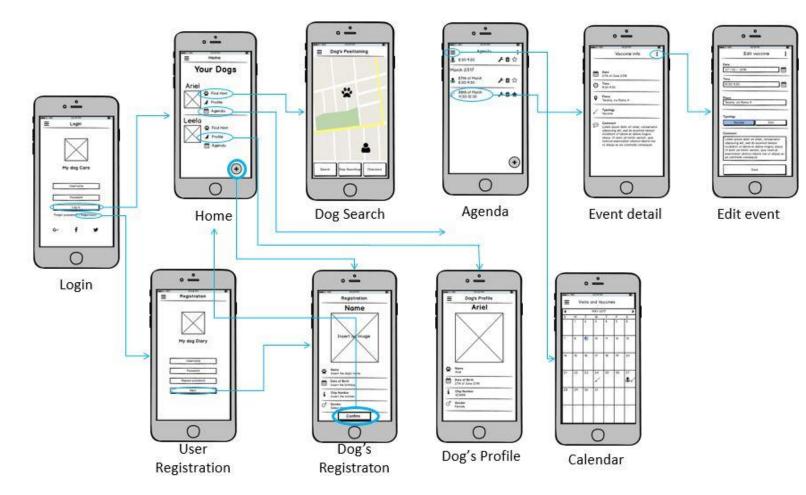
As already mentioned, in addition to the main ones, one of the characteristics of our mobile application is that every user can maintain a diary of visits/vaccinations. Thus, we want to represent this diary by a list of events that in our case can be either *Visit* or *Vaccine*. To explicit an *Event* related to a certain *User*, we associate these entities (our intent is to keep

track of all events for a certain user). For the same question, there is in the class diagram an association between *Veterinary* and *Event* entities. The aim is to know who is the veterinary responsible for a certain event. With these associations we can retrieve the history of the animal by navigate the class diagram (in terms of visits and vaccinations).

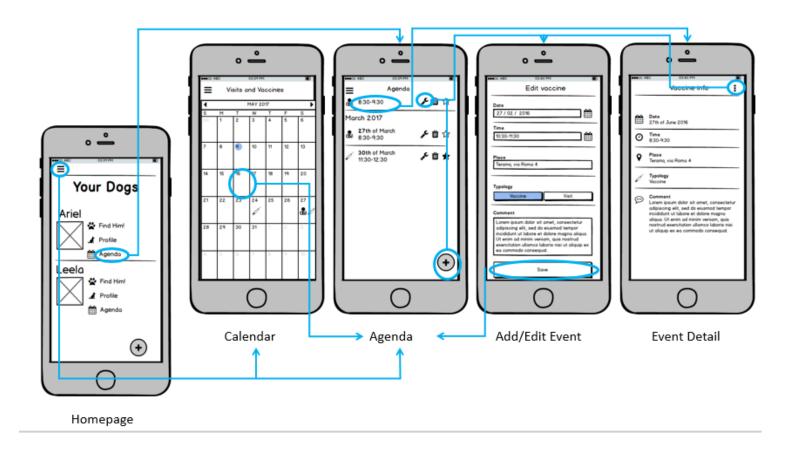
Skeleton



The following images represent the wireframes of the application. Notice we had to divide the wireframe into two because of the dimension of the images. The first one is the wireframe of all the features of the application except the ones related to the calendar (i.e., events shown in a calendar or in an agenda):



The following one is the wireframe of all the calendar-related features. As you can see, the Homepage is the same as the one above. From this page, the user can access new pages.



These are the wireframe. Below the reader can find a description of each page. It includes principle(s) and pattern(s).



Login Page

The login page is inspired by the one of Dropium app and it is a classical one: it only contains two input, *Username* and *Password*, and the *Log in* button.

It is possible to login via social network (Google+, Facebook and Twitter). The user could forget his password or need to register.

Principle: Axis(central), Symmetry (social icons)

Pattern: Sign in form

User Registration

The registration page is inspired by the one of login and it is a classical one: it only contains one more input, *Repeat password* and the *Go on* button.

Principle: Axis(central)
Pattern: Registration





Dog's Registration

The dog's registration is similar to the user's one. From this page, the user can register a new dog, specifying all the basic information like the name, the birthday etc. plus the breed. Is also possible to add a dog's picture.

Principle: Axis (left side)
Pattern: Registration

Homepage

This is the home of the application. The idea is similar to what is done on Facebook, a list with all the owned dogs showing their picture and the main services. From this page, the user can have a clear idea of all the features of the app and an easy access them. From this page is possible to reach the dog's profile either from the image and the button. It is also possible to add a new dog.

Principle: Rhythm

Pattern: List + Inline Actions





User's Profile

This page shows all the personal information of the

It is possible to modify any information the user desires.

Principle: Axis

Pattern: User Profile

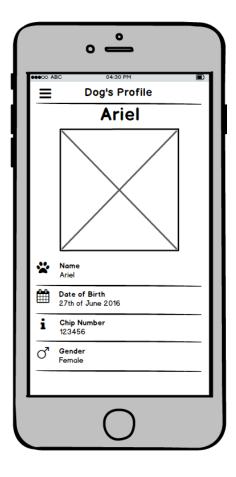
Dog's Profile

This page shows all the personal information of a user's dogs. It is possible to modify the fields and also to select and add a picture of the dog.

Principle: Hierarchy (difference between the font of the

titles and the user's text), Axis

Pattern: User Profile





Search Dog

Here is possible to see where is the position of the user, the position of the dog and also best route in order to get him back.

Principle: Infinite axis

Pattern: Maps, infinite area.

Veterinaries

This page shows all the nearest veterinaries, given the mobile's GPS coordinates. The user could be interested, in case of emergency, in finding a generic veterinary close to him.

Principle: Infinite axis

Pattern: Maps.





Calendar

The user could desire to have a common calendar in which it is possible to add an event in a specific day. A familiar representation of the calendar can help the user. Inside a frame of a day there are the same icons used in the agenda to remind the upcoming event.

Principle: Simmetry.

Pattern: Metaphor/Calendar

Agenda

The user could want to view all events added so far . The user can, as before, distinguish visits (physician icon) and vaccine (syringe icon).

The list follows a precise layout, because the Rhythm principle is used. Moreover, icons and text are aligned because of the Axis principle. The Inline Actions pattern is used in that users can add an event to favourites.

Principles: Rhythm, Axis Patterns: List, Inline Actions





Add/Edit Event

The user wants for sure to add or modify some events (vaccines or visits). This page allows it.

The Axis principle is used. In fact, inputs and labels are aligned. The Call to Action Buttons pattern is used in that users can easily recognize the *Save* button.

Principles:Axis
Pattern:Call to Action Buttons

Event Detail

This is the page that shows the detail of an event, in this case a vaccine. This page is inspired by Cinemaniac app.

The Axis principle is used in that all the elements are aligned. There is also Axis Reinforcement because icons (on the left) are separate from the content on the right. In fact, icons just help the user to understand the fields. Finally, the Rhythm principle is used in that list items have the same rhythm.

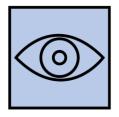
Principles: Axis, Axis reinforcement, Rhythm

Pattern: List



Surface

This is a coloured image of the *Homepage*.





Icon

Most of the icons are done like the one that we choose. It represents a dog and with a cross, which makes the user guess this app is for visits and vaccines. So, it can soon attract the user while scrolling apps in App Store.



Palette

We saw that most of the applications are based on blue. In particular, a good one seems to be the one of *Dog Locator* app.



Font

The font is *Arial Rounded* because this font is smoothed and thus it offers a much more contemporary sensation than other fonts, while maintaining an excellent readability also with small dimension.