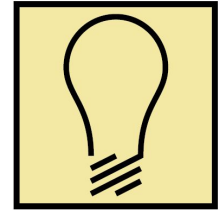


Mobile Application Course a.y. 2016/2017

TechnicApp Design documentation

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Strategy



Product Overview

TechnicApp is a service desk that allows you generate an IT support desk in a few minutes and in a very simple way, by offering services as repairing, maintenance, installation or warranty of a service already done in (Software and Hardware) and giving to the user the opportunity to see all the information related with the requested service.

Nowadays, it is possible to find a mobile device in any pocket all corners of the world and all the small, medium and big companies are preparing themselves for the future, TechnicApp is not the exception and they want to find the massive benefits right out the gate, offering to all users a better experience accessing through a mobile application and expanding the scope, in that sense the TechniciApp application will give an easier and faster way to use all services offering by the company.

This application will have as clients: final user and companies.

Competitors

There are some companies that offer the same service through a web application but they did not explore the field of mobile application.

The following links are servicedesk companies in Italy that use web application offering a similar service to TechnicApp:

- <http://www.fujitsu.com/it/>
- <http://www.bmcsoftware.it/>
- <https://www.manageengine.com/i>

With respect these, TechnicApp is more usable and interactive, as the user has the main services for a product in a simple and easy way.

User Research

- Create a Direct Marketing Channel: TechnicApp with the mobile application could provide to their customers all the information that they want – including status of their requested services, special sales and promotions – it is right at their fingertips. Through push notifications they will get even closer to a direct interaction, and can easily remind customers about their products and services whenever it makes sense.

- Stand Out From the Competition: if TechnicApp will have its own mobile application, they will get a big leap ahead of its competitors,
- User friendly: TechnicApp mobile application follows a design principle it means that the user will be related with the application because will be easy to learn, use and understand, because the biggest goal of the TechnicApp app is has an excellent navigation user.

Personas

We did the interview to people that normally use IT Help Desk services.

We did the following question.

1. What would you expect the application to offer you?
2. How is this application going to help you?
3. Do you prefer an APP what make you everything easier?
4. Why do you prefer TechnicApp instead go directly to service desk center?

Martha Caro – 25 years – accountant

1. want to get notifications of my service status, I would like to know how long will take my service to be done and to get basic information about the technical who was assigned my service.

2. This application is going to help me in the way that I will see in real time the state of my service.

3. Of course, because I am used to use mobile app and also because it will have a direct access through my phone.

4. One of the reason is because I am new in the city and I do not know any Help Service Center but in the app I can read the comments published by other users evaluating the service and I can trust more.



Lea Daubländer – 24 years – RE Economist

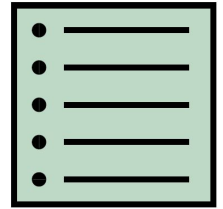
1. I would like that the application guarantee me the quality of the service and all the notifications related to the service.

2. It is going to help me to optimize time because I can handle everything through my mobile device like payment and also to have a direct contact with them.

3. Yes, because everything related to my help desk service will be ordered and also because it is easier to access to a MobApp than a website.

4. Because I can get the feedback of other users by reading the evaluated service section and also because they have a wide range of services.





Scope

Features

Simplicity for the user

All the content should be accessed in the simplest way possible. The application will have images that describes its functionalities.

Geolocation

This feature may be useful for technician to locate the service place when users generate a service.

Upload image

The users will be able to use images for describe the service. This feature helps to technician visualize the problem in any case.

Definition of the requirements, functional specification, data sources, scenarios

TechnicApp will contain different views among the application such as Register, Login, Recovery, Products, Services, Comments and Settings. Every view is related with a process that will be described in the next section (i.e. Structure). Let's describe the functional specifications for each view.

Register, login and recovery view

These views control the access to the application.

Functional specifications:

- The register view will ask for the data name, username, password, address, phone number, category, email in a form. The fields like name, username, password, category and email must be mandatories.
- Username and password fields should be alphanumeric.
- The length of the password field must not be more longer than 8 characters.
- The system should not permit register an user with the same username that other one existing.
- The login section should always be enabled unless the user logs off.
- The recovery section will ask for an username and email in a form.
- Register with facebook (optional function).

Products view

This view will show products filtered out by the system.

Functional specifications:

- This view will provide a search field in order to find a specific product.
- The products list will be filtered out according to the category selected on the register view.
- After select a product and with the objective of generate a service, the user should select a service type (i.e. repair, warranty, maintenance or install), upload an image (optional), select a payment method (i.e. cash or card) and activate the sending of location (optional) in a form.

Service view

This view will contain all services generated on products view.

Functional specifications:

- This view will provide a search field in order to find a specific service.
- The service view will receive notifications as soon as change the service status.
- The user will be able to remove a service as long as the service status be waiting for a technician. Otherwise it could not be possible.
- The user will be able to see the historical of each service.
- The user will be able to leave a comment into the services. The comments must not be more that 200 characters.

Comments view

This view will contain all comments left on service view.

Functional specifications:

- This view will list all comments of all users.
- The users will be able to delete their comment.

Setting view

This view will contain the configuration of the user.

Functional specifications:

- The user will be able to log off.
- The user will be able to add or change a photo. The photo must be .jpg or .png and it must not be more than 2 megabytes.
- The users will be able to change their passwords.
- The users will be able to change the category products.

Type of managed content

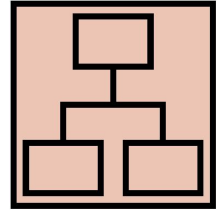
TechnicApp will be a client application which consumes the services provided by an external application through web services. The external application will use a database to collect data like products, services, comments and so on. Furthermore, the external app will contain the images showed in the application.

Scenarios

Using persona, we provide a possible use of our application by describing the following scenario:

- **Martha** wants to install a new software on her laptop and asks for this service. After the registration phase and login, she selects the requested software and generate the correspond service, adding the position of her home. The request is sent to the server that elaborate data and retrieve it to the company. It contacts the suitable technician for this job and send him to Martha. The history page is updated regarding on all these operation and in this phase, Martha cannot delete the service, as the technician is on move. He reaches Martha's home, install the software and receive the payment in cash, as Martha has specified when she has generated the service. Martha is very satisfy for the service and the technician and put a favourite comment on this service.
- **Lea** is a german girl who just arrive to L'Aquila and she has an electronic problem with her laptop related with the microphone, for her is really important because she has to do a weekly meeting with her research group for her thesis and she does not know any help desk center in the city at the moment and usually she just use services like this when at least she has listened someone who has used before, it is when appear TechnicApp, she read all the feedbacks that other clients left in the application for the services and she decides use the application for solve her hardware problem, she goes to comment section, she reads all the feedback, when she is sure, she requests the respective service, TechnicApp technical support team goes to her home to solve the problem in a very efficient way, that make her satisfy about the service, and she decides continue with the chain and left her feedback.

Structure



Navigation model

Register, login and recovery section

The register section will allow anonymous users to register themselves, in order to access the services provided by TechnicApp. The users should enter some details like name, username, password, category, address, phone number and email to complete the registration process.

Once users perform successfully register process, an message will be send to their email provided. After that, they will be able to access to the system in login section, using the username and password. It is mandatory that the user perform the register process to access to the application.

The users will be able to recover their password in recovery section. In this section, the application will ask for a username and it will send an email with the user password.

Products section

The products section will show a list of the products related with the user's category. Each product should contain a picture and brief description about it. The user will be able to select the product that require generate a service in any moment. After that, the user should complete a form in order generate service.

Service section

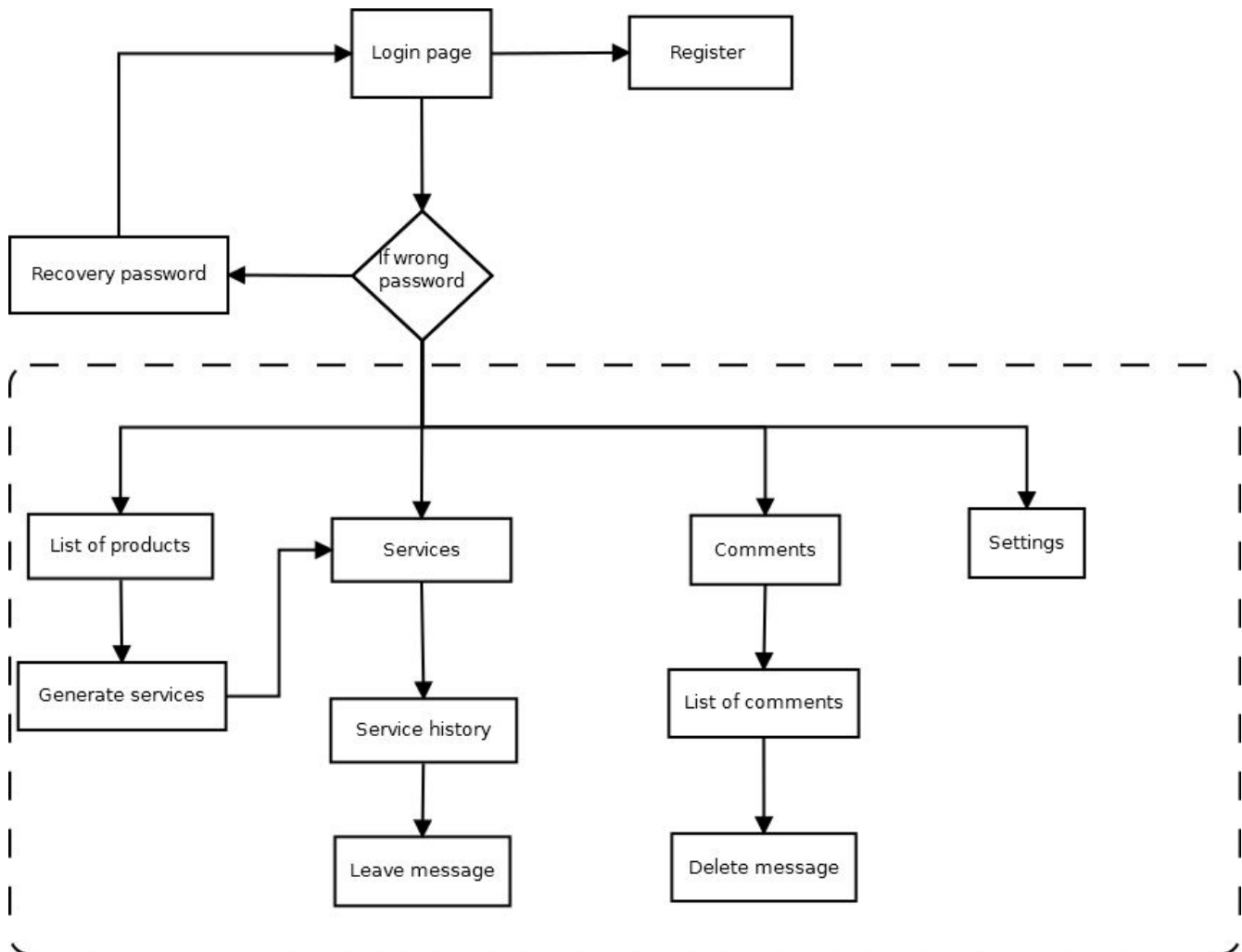
The service section will show a list of services generated by the user. Each service item should contain all specification related with the technician, payment method, arrival time, service status (i.e waiting, assigned, done or cancelled), and so. On the other hand, the user will be able to look the historical of each service and leave a comment.

Comments section

The comments section will contain a list of comments left for all users. The users will be able to remove their own comments.

Setting section

The setting section will contain a basic information about the user and about the TechnicApp like terms and conditions, private policies and so on. The users will be able to manage their information and change the products category.



Navigation flow TechnicAPP.

Main navigation flow

At beginning, the application shows the login view to the user: if he has already done the register procedure, he inserts the username and password and go ahead. Otherwise, he starts the register procedure in the corresponding view, when he can insert all personal data and the product category that he wants. If the user digits the wrong password, the application redirects him to recovery password view and it is recovered by user's email address.

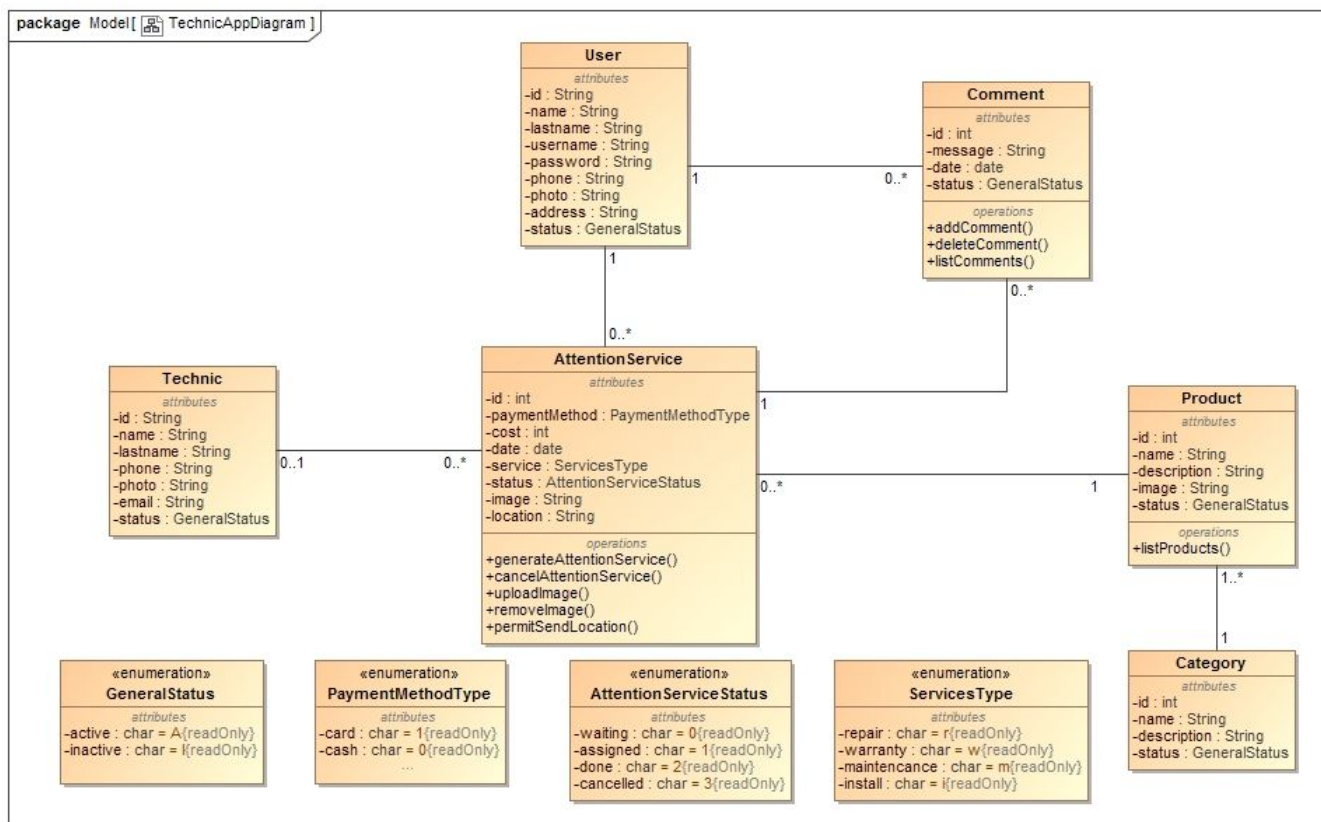
After the login, user reaches the lists of products, filtered by the category, and he can choose a service. So, user goes through generate services view in which he chooses the service among a predefined set (warranty, installation and so on). Moreover, he can add a photo, in order to help a technician or to better understand the trouble, and the location. Finally, he can

specify the payment method for the service. At this point, the service is generated and appear in the list of services. The user can see all the service history in the appropriate view and also delete it (if and only if the technician is not on move yet).

A user can also leave a comment on the service, in order to produce a feedback and delete it in another view. Finally, he can also modify his profile, by adding new photo, change the password or change product category.

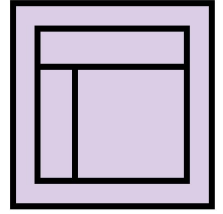
Data Model

In this section, we provide the class diagram of application.

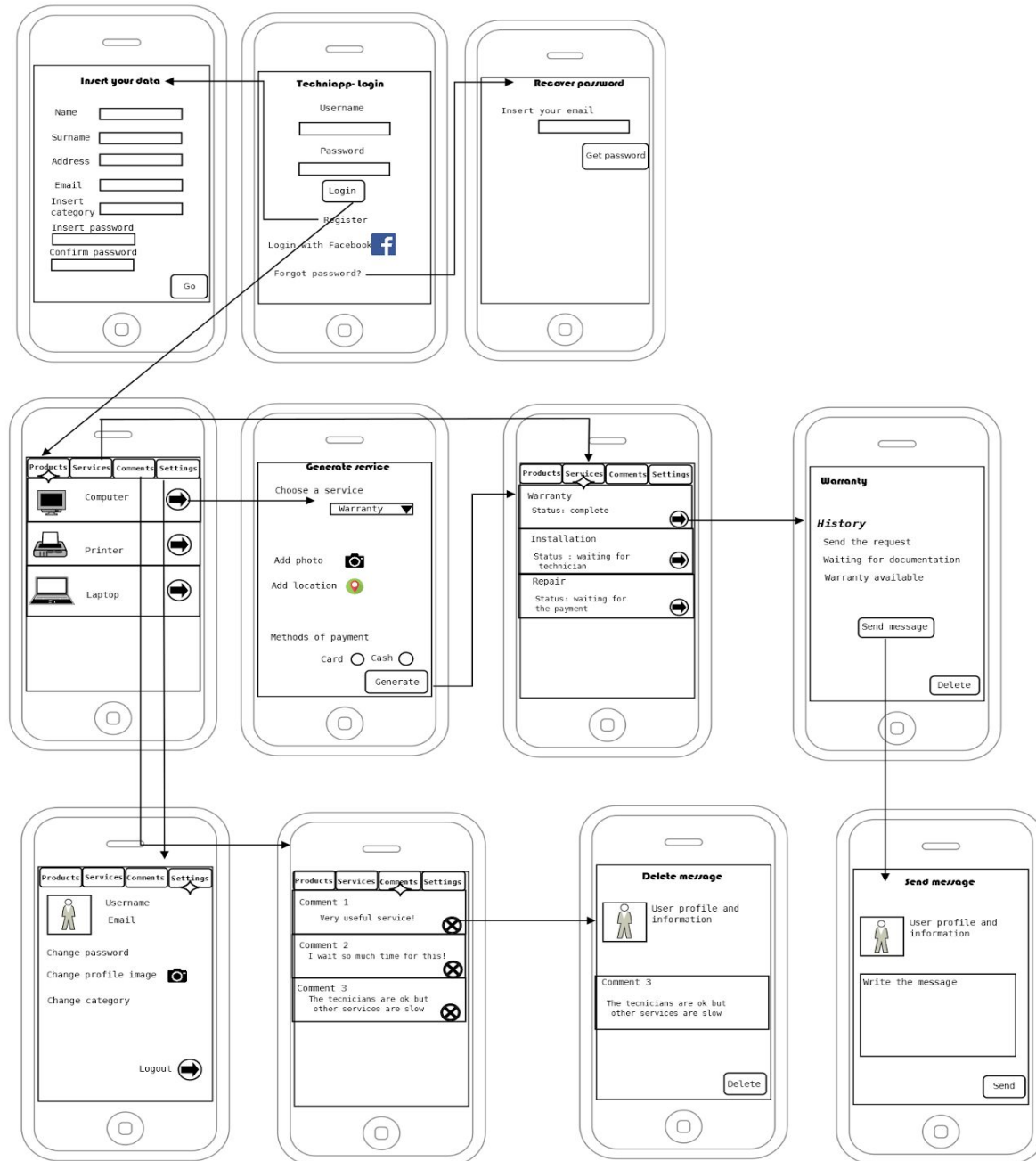


Data Model TechnicApp.

Skeleton



Here below we provide the Lo-fi wireframe for our application and the main design pattern used.



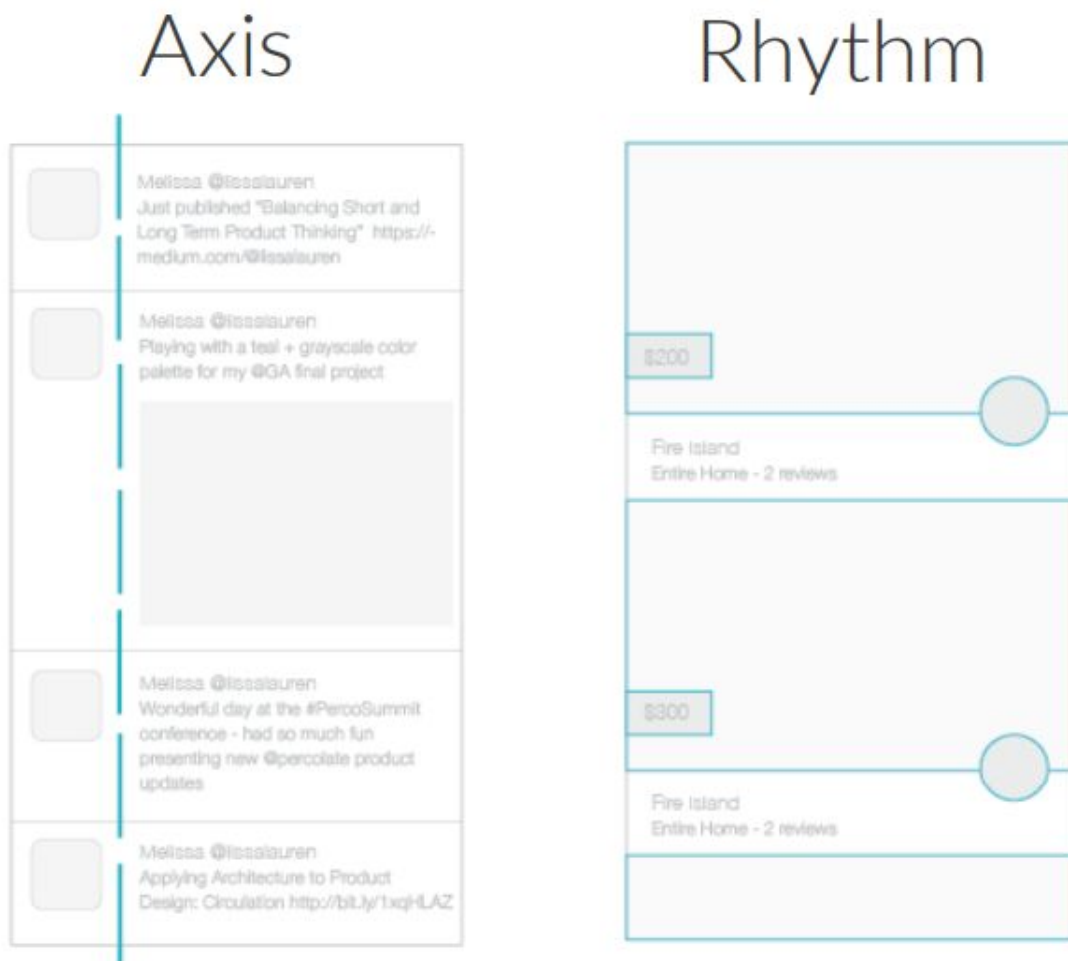
Lo-fi wireframe TechnicApp.

Patterns

The main design principle that we used in the application is Axis, in which all elements are disposed following a vertical orientation, and Rhythm in which form of pattern are repeated along the views like in the products view.

Moreover, we use several types of design patterns in our application, such as login views for authentication procedure and also registration, list view for products, comments and services lists and settings page for the setting section and maps to allow user to add position.

The following figure shows an example about the main design patterns that will be used among TecnicApp application.



Examples of design patterns used in TecnicApp.

Surface

Description

In this section is possible to see how is the the design appearance of TechnicApp, this is products section, in this view it can watch the different icons, the image of any product and also the tab of the other sections.

Font

'Helvetica Neue' Normal

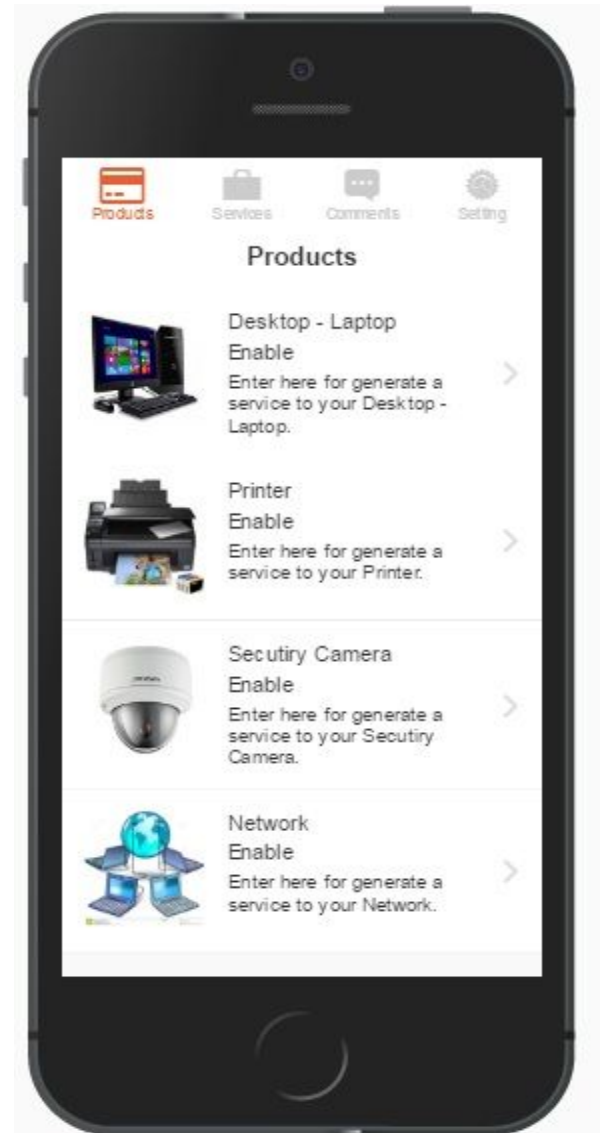
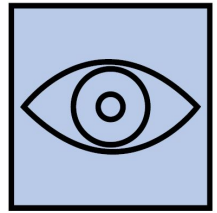
'Helvetica Neue' Italic

'Helvetica Neue' Bold

The font family that will be use is: **'Helvetica Neue', Helvetica, Arial, 'Lucida Grande', sans-serif**, It has slightly soft characters, that fit well in the clean interface that will be Implemented.

Color palette

It was taken withe for the background for two reasons: the first is the **power of defaults**¹ and the second is **readability**, gray for non-active icons and red for active icons.



#FFFFFF



¹ [https://en.wikipedia.org/wiki/Default_effect_\(psychology\)](https://en.wikipedia.org/wiki/Default_effect_(psychology)).