

Table of Contents

Product Vision	1
User Interfaces	2
Project Architecture	
Introduction	6
Technological Architecture	7
Logical Architecture	8
Physical Architecture	9
Key design decisions	10

Product Vision

Ao Dispor is a social network that intends to help freelance professionals get more job opportunities and ease people looking for their services to find them without depending on companies/enterprises.

The goal of this project is to create employment opportunity for freelance professionals, and found by people who need their services. This saves both professionals and clients time. Clients can always check professionals information and choose the best.

It's hard to find a professional to solve that problem without having to rely on contacting an enterprise. Meanwhile there are a lot of professionals who could solve our situation for a lower price, the problem is the lack of contact information to reach those professionals.

With this problem in mind, this project will consist on a website and mobile app, where professionals may register and therefore be contacted by someone requiring their services. This is a project without lucrative purposes, which only intention is to help people get help from those unemployed professionals who work for no company and therefore have no ways of being contacted.

STATEMENT:

The founder of Ao Dispor www.aodispor.pt requires our help to improve the quality of the beforementioned website and the development of a mobile app that serves same purpose as the website. This website offers opportunity for freelance professionals to be easily found and contacted by people who need their services. This website has no lucrative purpose, unlike existing website, which has the same purpose, but demands people to pay in order to use their services.

STAKEHOLDERS AND NEEDS:

Our customer and founder of the website has only the intention of helping those professionals and clients to communicate with each other. He will work alongside the development team to verify if everything goes according to his desires.

The clients will have a much better time when looking for some professional to hire.

The professionals will have a lot of more employment and services due to the visibility the website offers them.

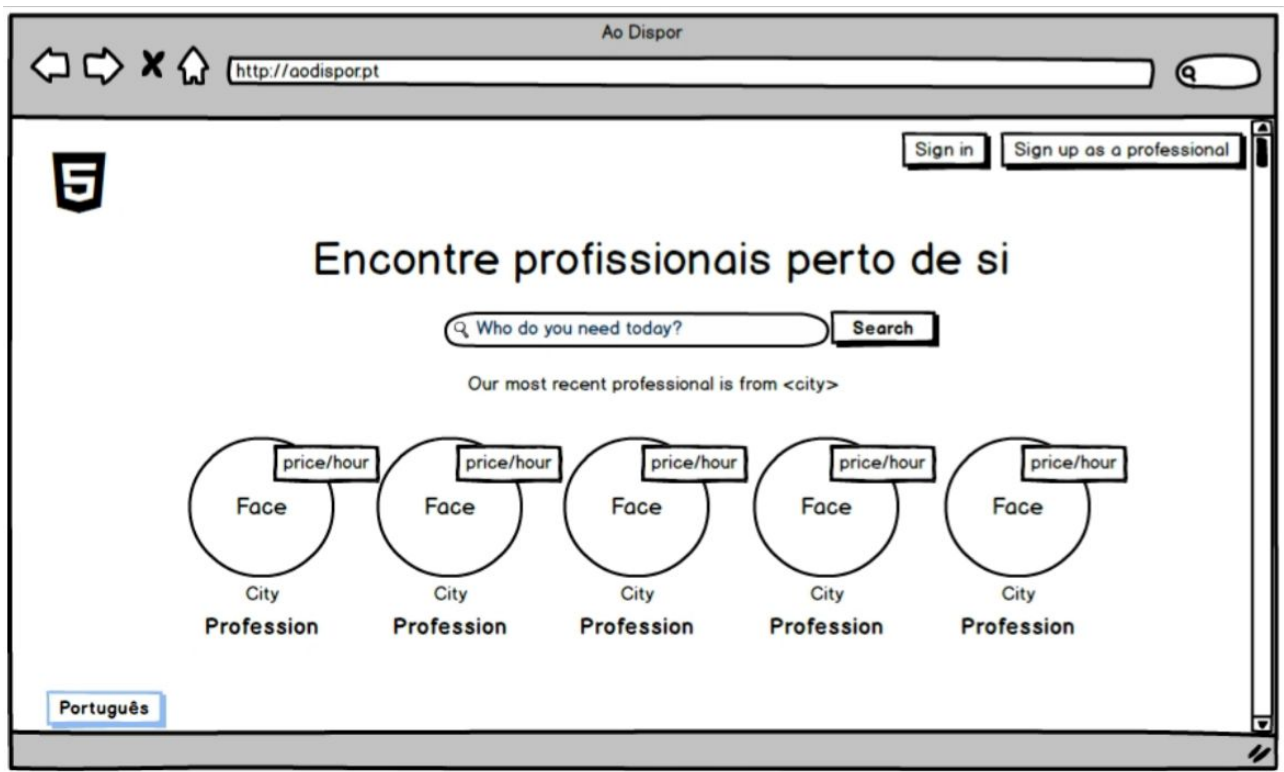
The development team will have to work in the website and develop a mobile app.

QUALITY REQUIREMENTS:

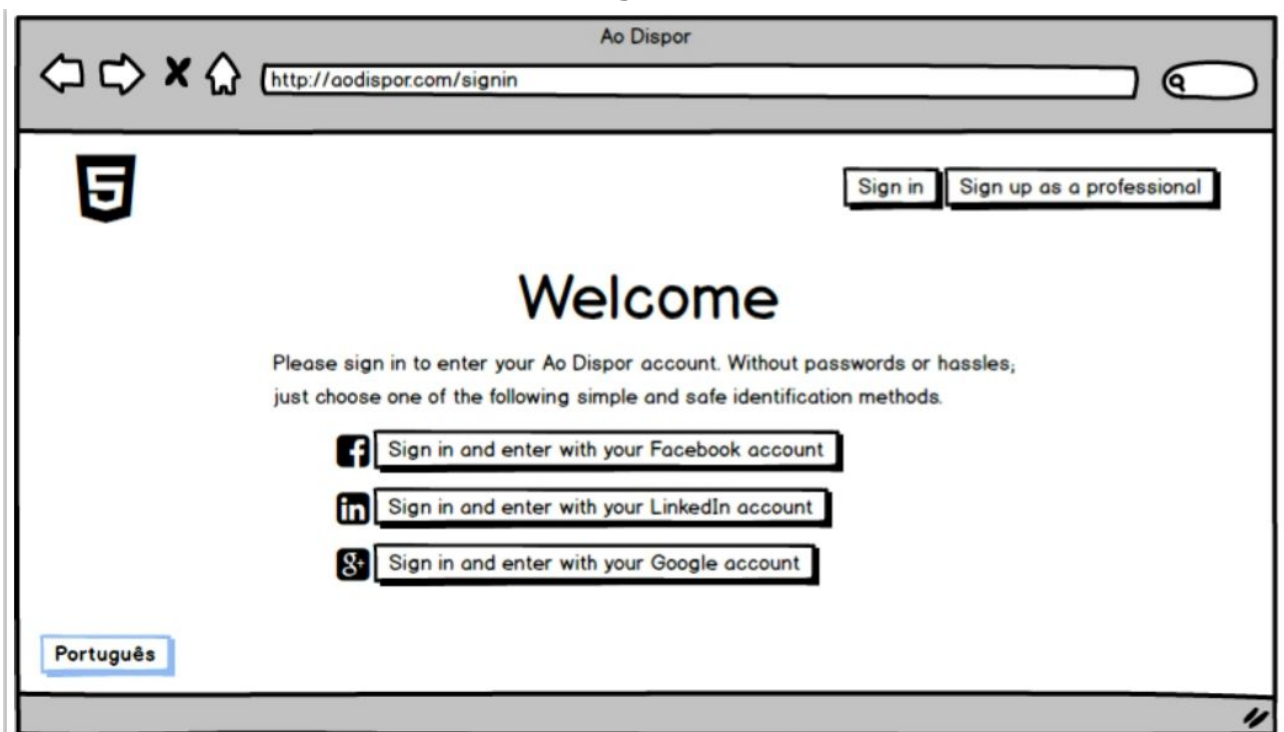
The site and mobile app must be really easy to use and understand, so that it may be usable by people with very low informatic associated knowledge.

User Interfaces

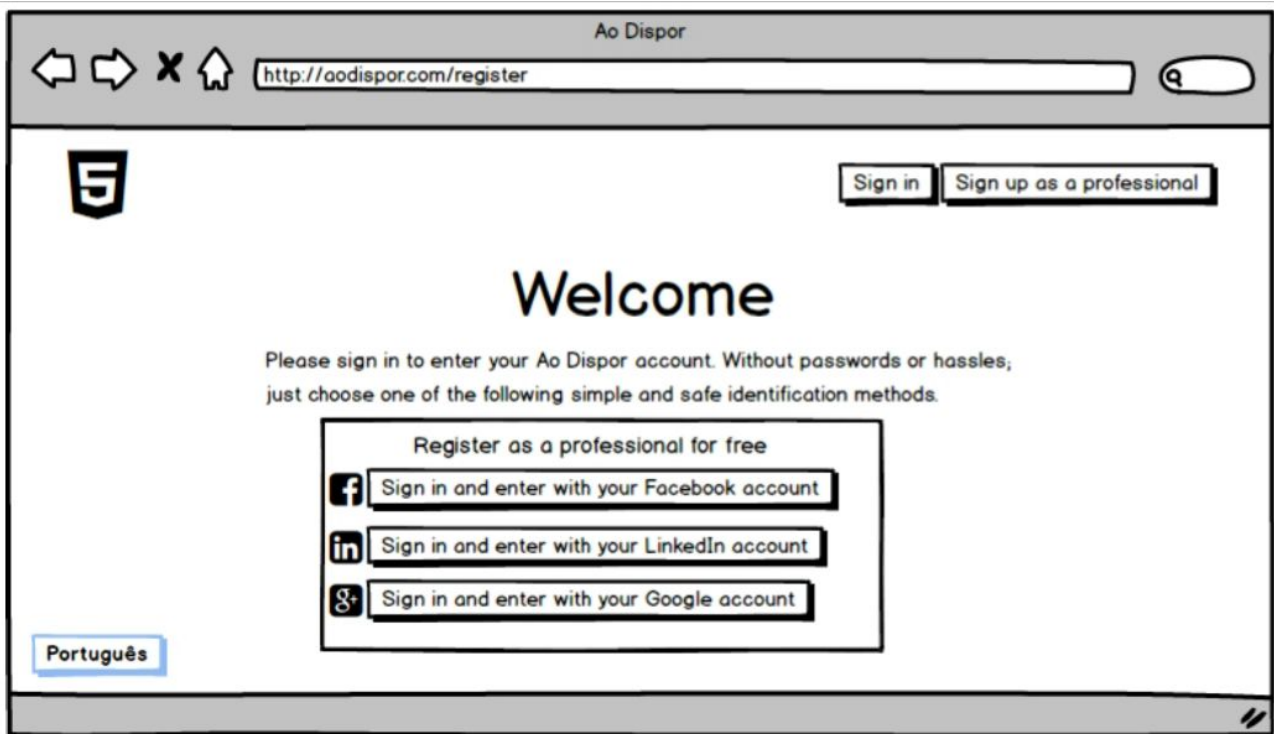
Homepage



Sign in




Sign up



Ao Dispor

http://aodispor.com/register






Sign in Sign up as a professional

Welcome

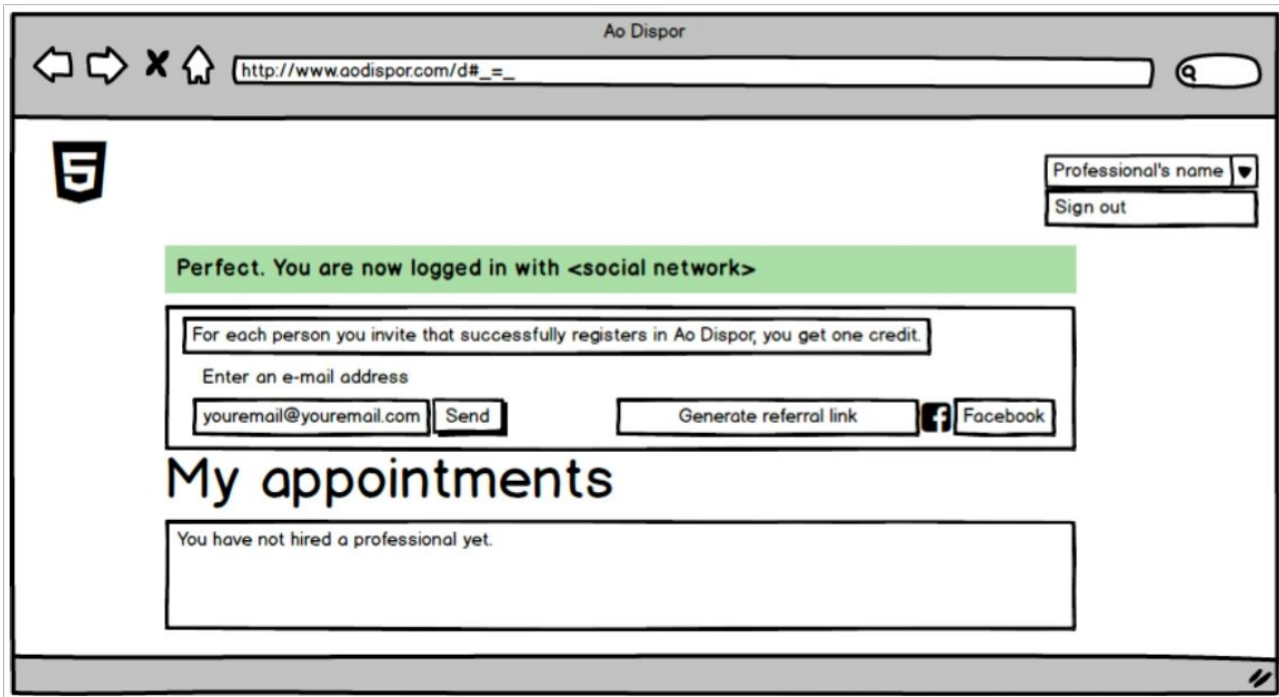
Please sign in to enter your Ao Dispor account. Without passwords or hassles, just choose one of the following simple and safe identification methods.

Register as a professional for free

-  Sign in and enter with your Facebook account
-  Sign in and enter with your LinkedIn account
-  Sign in and enter with your Google account


Português


Dashboard



Ao Dispor


http://www.aodispor.com/d#_=_



Professional's name 
Sign out

Perfect. You are now logged in with <social network>

For each person you invite that successfully registers in Ao Dispor, you get one credit.

Enter an e-mail address
youremail@youremail.com  Facebook

My appointments

You have not hired a professional yet.


Reservation

← → × ↗

Ao Dispor

http://www.aodispor.com/<professionalid>

Q



Login Name ▼

Professional's name

Job

Job Description

Face

price/hour

Chose a time slot

	Today	Tomorrow	Thursday, 22	Friday, 23	Saturday, 24
8:00					
9:00					
10:00					
11:00					
...					

Make an appointment

Click on the botton to start a new, non-binding, booking with this professional. You will have the opportunity to cancel the request at any time throughout the conversation.


Chat

← → × 🏠

Ao Dispor

http://www.aodispor.com/<professionalid>

🔍



Login Name ▼

Professional's name

Job

Job Description

Face

price/hour

Chat with the professional

Me: Hello.
Professional: Hi.
Professional: How may I help you?
Me: I need <something>.
Professional: Ok.


Search

← → × 🏠

Ao Dispor

http://aodisporpt

🔍



Sign in Sign up as a professional

Encontre profissionais perto de si

Q T

Search

Do you mean:
Taxi
Teacher
Telephone operator
Television repairer
Tower operator

price/hour

Face

City

Profession

price/hour

Face

City

Profession

price/hour

Face

City

Profession

price/hour

Face

City

Profession

price/hour

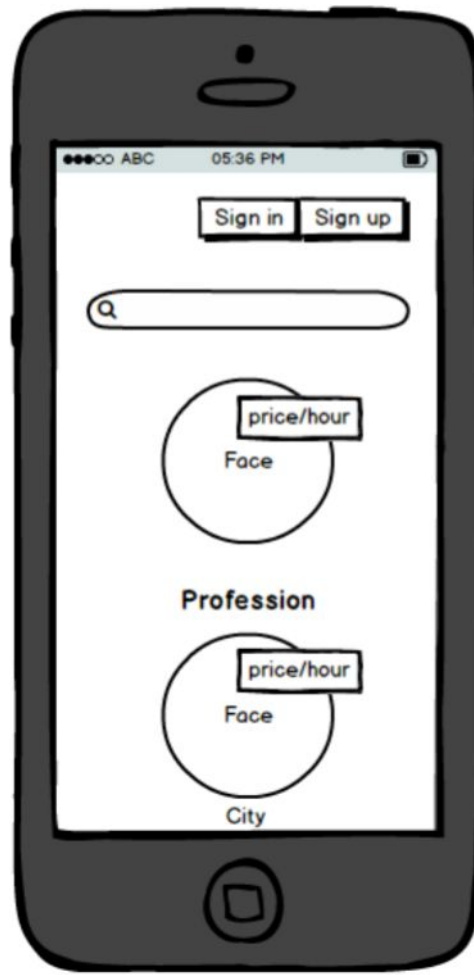
Face

City

Profession

Português

Mobile homepage



Project Architecture

Introduction

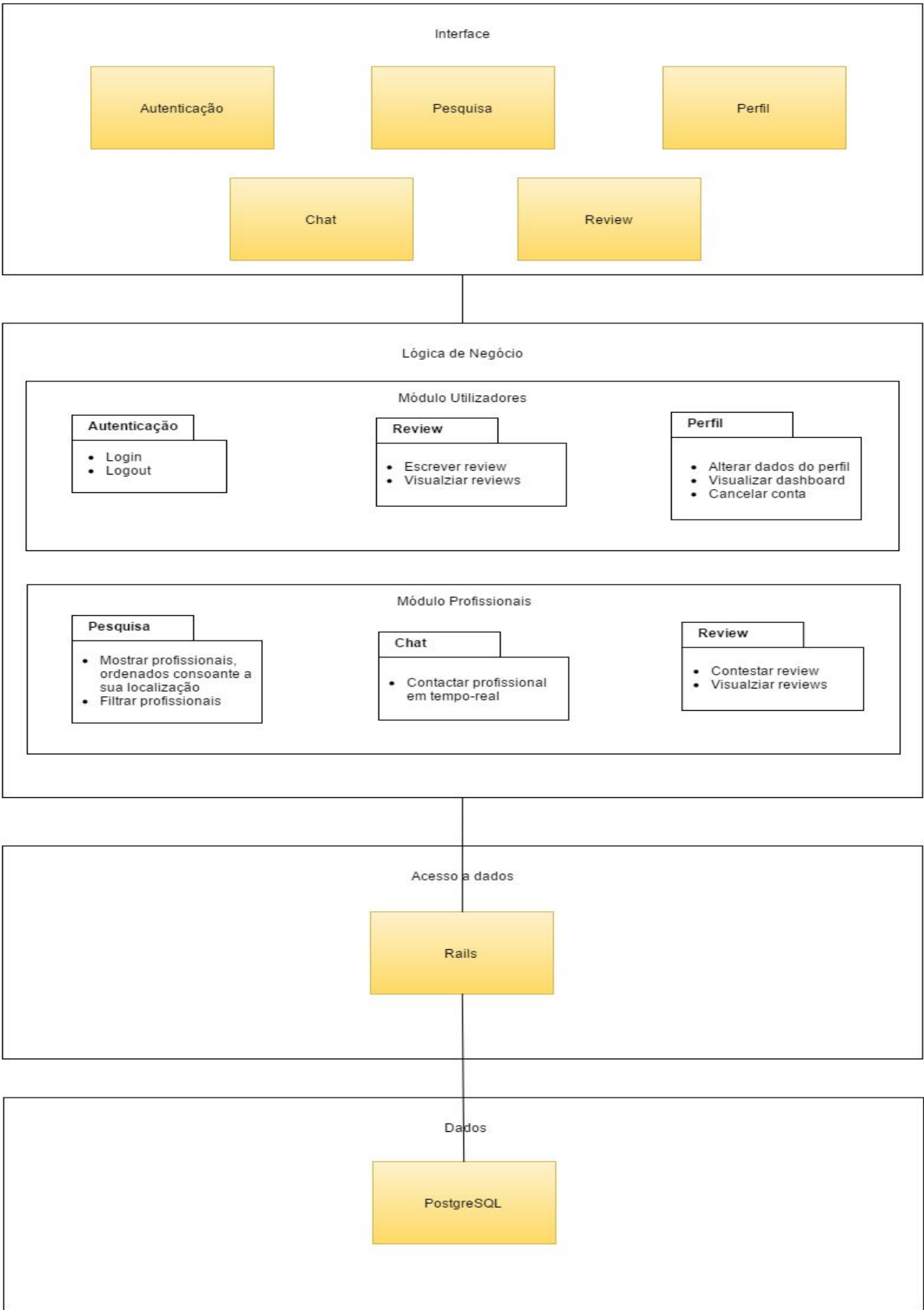
For this project we plan on creating a web platform and the related mobile client. This platform's aim is to facilitate the communication between those who need a task done and those who are willing to do it. Another main task is to keep the interaction on the platform as simple and intuitive as possible.

We have structured the report on the following way: Introduction, Technological Architecture, Logical Architecture, Physical Architecture and key design decisions. In the Introduction we describe the application to be developed. In the Technological Architecture we describe the technologies selected for this project. Next in the Logical Architecture we focus on the high-level logical structure of the software system. In the Physical Architecture we focus on the high-level physical structure of the software system. And last point is the key design decisions that contains the Software patterns (architectural patterns and design patterns) document proven solutions to recurring problems

Technological Architecture

Language	Ruby on Rails 4.2.4
Database	PostgreSQL
Chat Implementation	XMPP
Mobile application	Android
Javascript Framework	AngularJS

Logical Architecture



Key design decisions

Regarding authentication and authorization, Rails has a gem called 'devise' that does all the hard work for us. Rails uses a token parameter called `authenticity_token` that protects against CSRF attacks. For authorization we will use the 'gem' `cancancan` and `rolify`. `Rolify` allow us to add roles to users(admin, regularUsers), while `cancancan` allow us to define which users can access certain pages. Rails is a MVC framework so we'll opt to use Model-View-Controllers patterns.

In order to store objects persistently in the database we'll use PostgreSQL. The 'pg gem' is an interface to the PostgreSQL RDBMS. We'll take advantage of the Active Record to manage and represent the business data and logic. Active Record will be used as an ORM(Object Relational Mapping) Framework. ORM connects objects of a Rails Application to tables in a relational database system. The advantage is that we avoid to write long SQL queries, although it may suffer when it comes to performance.

In the frontend we'll use AngularJS. This technology provides us a way to accomplish really powerful things easily. For example, Angular supports two way data-binding that updates the DOM elements instantly. Normally, we would need to update the DOM elements and interpret the user intentions with events, which is difficult when the application grows. Angular also supports 'directives' that can be used to create custom HTML tags, which can be programmed to do actions the programmer wants.