Time Manager Documentation

A work time management project

1. Design justifications

1.1. Web interface

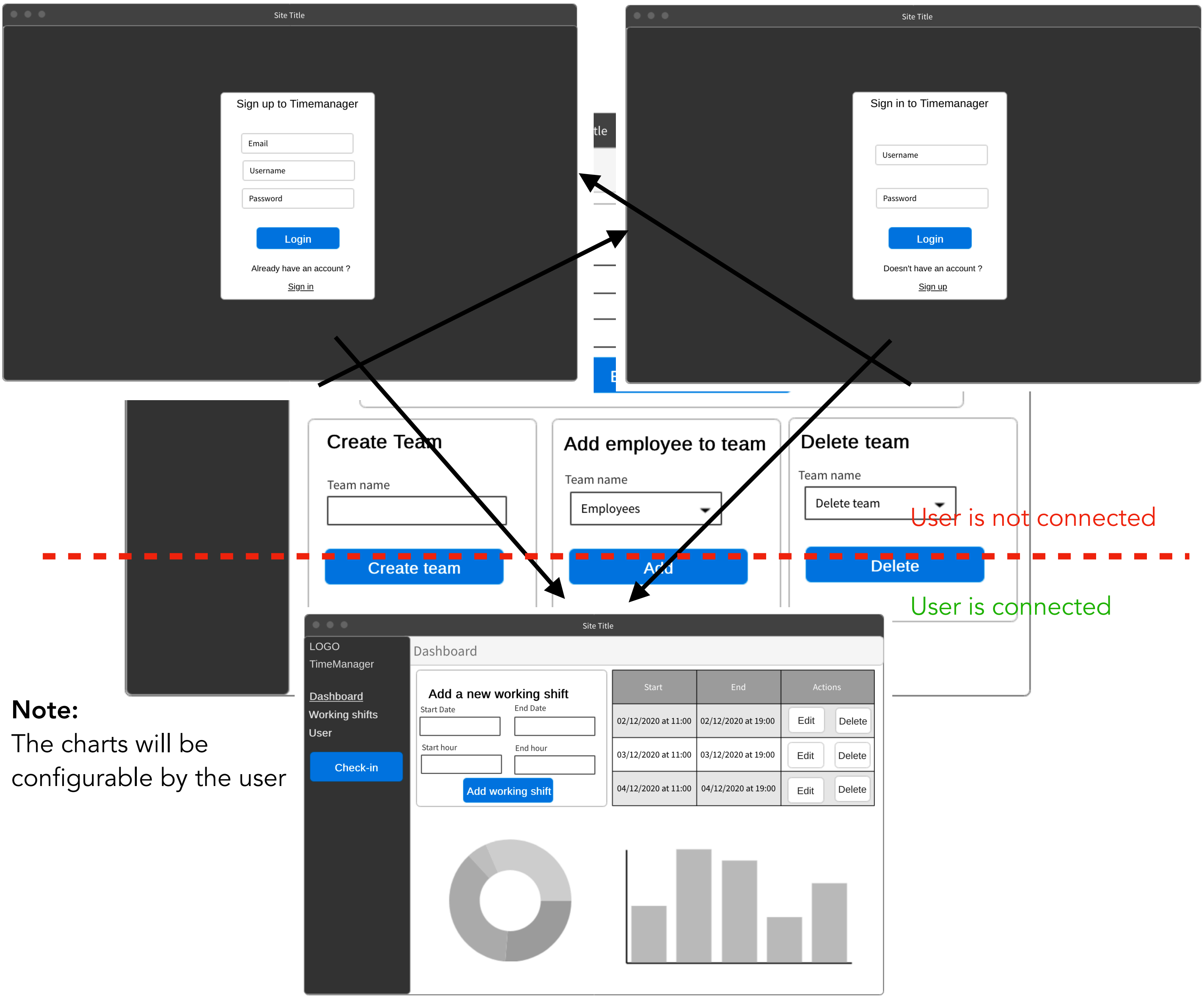
For this project we wanted to have an attractive but simple design. To do so we used a UI kit, this is a package of basic components that we use in our own components and pages. Thanks to that we can focus on the UX more than the UI.
The pages are divided in cards that contains the important data for the user. The purpose is to have an interface as simple as possible for the user.

1.2. Mobile application

The mobile application has the same UI/UX as the website because it’s only its responsive version.
The only change is navigation method. The sidebar has been removed in favour of a toolbar on the bottom of the screen. We chose a toolbar instead of a burger menu because it has been proved that burger menu is not intuitive for users, and on big screens it’s hard to reach it with your fingers.

2. Storyboard and mockups

2.1. Web interface : employee



Site Title

Sign up to Timemanager

Email

Username

Password

Login

Already have an account ?

Sign in

Site Title

Sign in to Timemanager

Username

Password

Login

Doesn't have an account ?

Sign up

Create Team

Team name

Create team

Add employee to team

Team name

Employees

Add

Delete team

Team name

Delete team

Delete

User is not connected

User is connected

Site Title

LOGO
TimeManager

Dashboard
Working shifts
User

Check-in

Dashboard

Add a new working shift

Start Date

End Date

Start hour

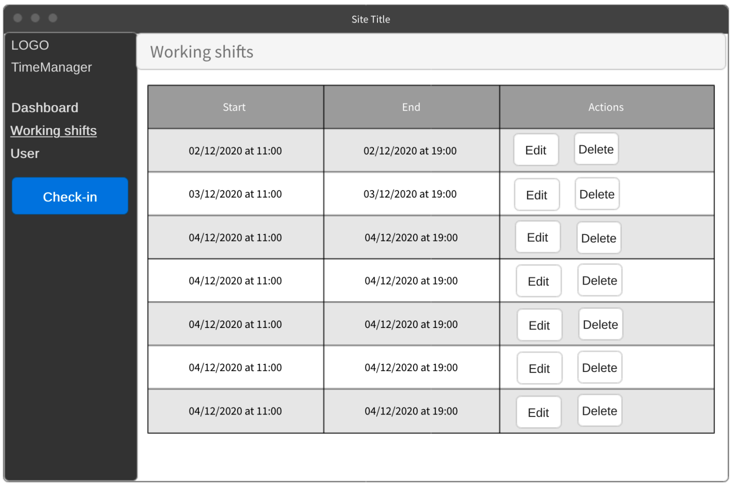
End hour

Add working shift

Start	End	Actions
02/12/2020 at 11:00	02/12/2020 at 19:00	Edit Delete
03/12/2020 at 11:00	03/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete

Note:
The charts will be configurable by the user

Other navigation possibilities for the user



Site Title

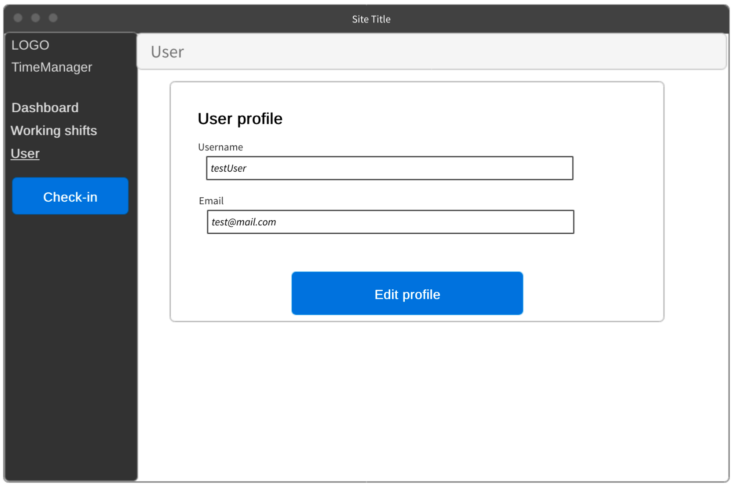
LOGO
TimeManager

Dashboard
Working shifts
User

Check-in

Working shifts

Start	End	Actions
02/12/2020 at 11:00	02/12/2020 at 19:00	Edit Delete
03/12/2020 at 11:00	03/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete
04/12/2020 at 11:00	04/12/2020 at 19:00	Edit Delete



Site Title

LOGO
TimeManager

Dashboard
Working shifts
User

Check-in

User

User profile

Username

testUser

Email

test@mail.com

Edit profile

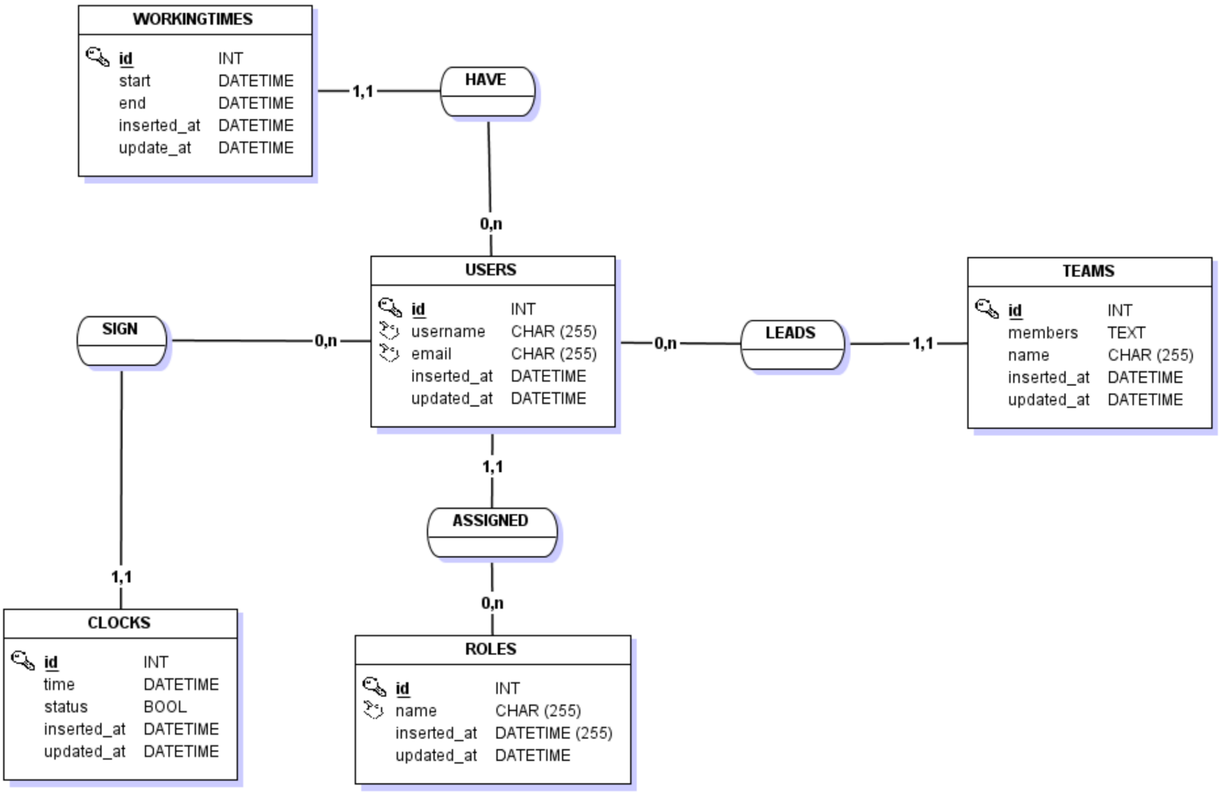
2.2. Web interface : manager

In the interface the manager has more rights than a simple employee. First, he has all the rights and interfaces that an employee has. The dashboard will be more configurable to be able to see the graphs and working shifts for an employee or a team.

The managers-exclusive features will be seen on the User part :

3. Project architecture

3.1. Database architecture



4. Situational setting

This project is realised to be used by the employees of a whole company. Therefore, we have to inform them of the creation of this platform but also train them to use it.

4.1. Notify the employees

When the application will be released a mail will be send to all the company's employees with a link to access it. They will also have a tutorial to get started with the platform.
Here is the mail template that will be sent :

From : top-manager@gotham-city.com
To : All company
Object : New time management interface
Attachment : *How_to_use_timemanager.pdf*

Good-morning,

As you may know, following your numerous requests, we commissioned a development company to create a new time management platform.
Today is the day the platform is released. You will now be able to manage your working shifts and and your actual working hours.
To learn how to use the platform we provide you the PDF tutorial which is attached to this email.
If you encounter any problems you can search for it in the platform's FAQ or ask to your manager.

Best regards,

Mr Wayne,
Top manager

4.2. Train the employees

If the tutorial provided in the first email is not enough the managers will be able to train their employees on the basic features. A training session will also be available for the ones those want it.
The tutorial is accessible at the link :
https://timemanager-epitech.herokuapp.com/tutorial.pdf

4.3. Answer the employees questions

During the use of the platform the employees may have multiple questions. To answer them a FAQ has been created on the platform.
It's accessible at the link : ***https://timemanager-epitech.herokuapp.com/#/help***

5. Platform security

In order to have a secure platform we have set up some security mesures. Here is a list of it :

- The application is deployed by **Heroku.** This platform allowed us to have *https* on all the website.
- In the back-end, the SQL requests are done with **Ecto** which is an *ORM* (*Object Relational Mapping*). Which means that the SQL injections are impossible as **Ecto** removes them if it recognises one in the variables we pass to it.
- The front-end of the platform is compiled at deployment and then is served by the back-end. With this system, no configuration files are accessible by a user.
- The front-end implements *guards* on its routes that use the user's token. It means that if a user is not connected to the platform he won't be able to access any routes except */signin* and */signup* (so he can create an account or log in).
- The endpoints of the *API* are accessible only if a valid token is passed to it. So a non connected user won't be able to call any endpoints.
- The password hash is using **MD5** with a key. In this way, it is very hard to decode it.
- When a user signs in, its password is compared by the back-end to the **MD5** encoded one.