

TRACKITIME

1. WHAT?

How many hours did you use with your practice work? Or with your origami project? Trackitime is an application to solve this problem. With Trackitime one can easily create a new project, and add time periods spent with the project. Later some statistics can be seen of the project: what have been done, how much time have been spent altogether and so on.

2. HOW?

Trackitime is used with an easily-used web application, which is also supportive for mobile browsers. The users are identified with a logging system and personal accounts.

3. WITH WHAT?

The language Trackitime is build with is JavaScript with [Node.js](#). Libraries used are [Express.js](#) (with all its dependencies) for creating and running the server and routing the requests. The user system is implemented in backend with [Passport.js](#). All data is saved into a PostgreSQL database.

4. WHERE?

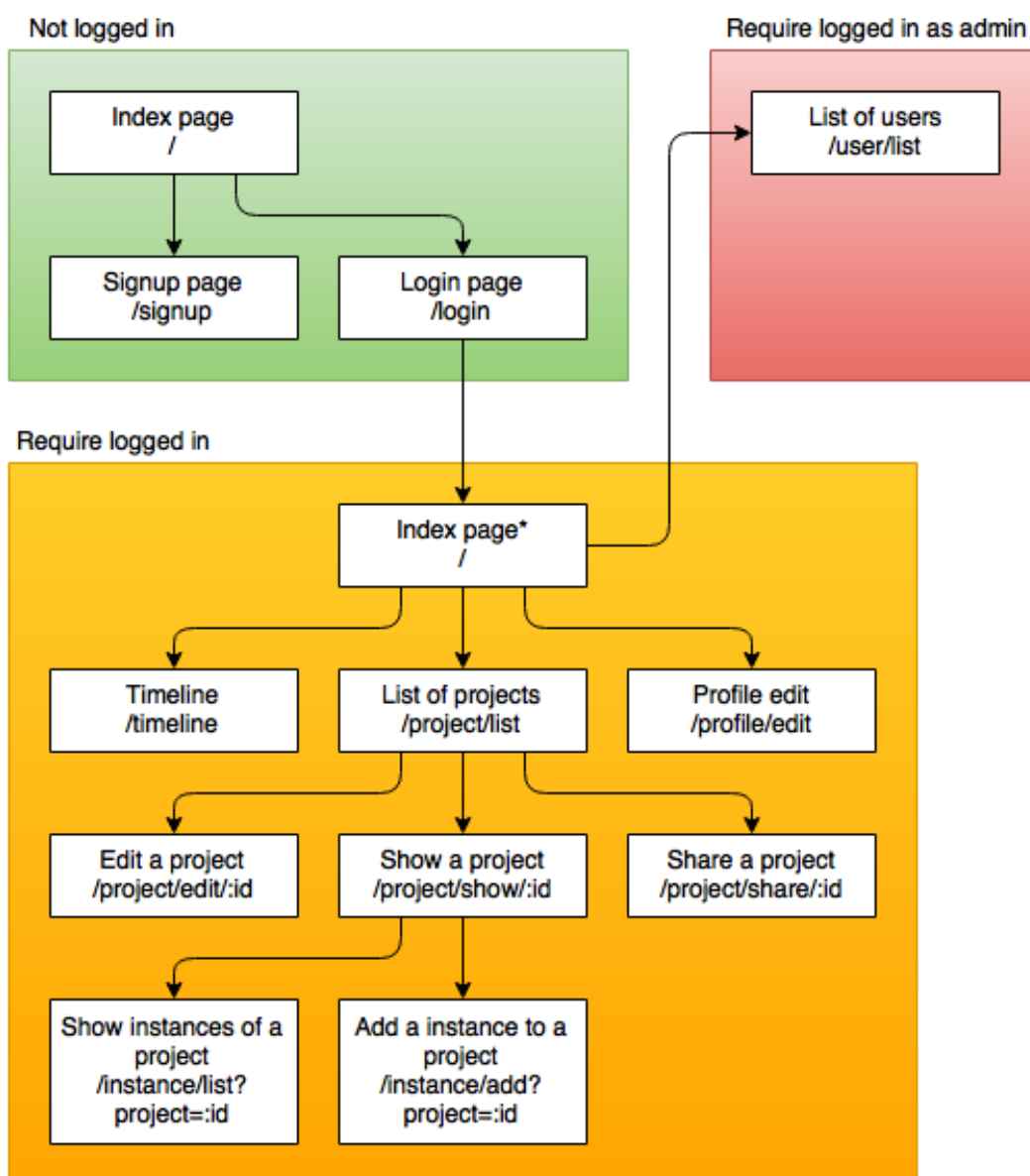
The code of Trackitime is stored in Git with a repository of the same name. The address of the repository is <https://github.com/Aapzu/trackitime>. At this moment the app is running in Heroku, and it can be found from the address <https://trackitime.herokuapp.com/>.

STRUCTURE OF THE APPLICATION

1. FILES AND FOLDER

The application follows the MVC model. Models are found from /models, views from /views and controllers from /routes. Configuration files/scripts are in folder /config, and other backend scripts in /app. All front-end related (except the views themselves) is found from /public.

2. SYSTEM COMPONENTS



* Different content whether user is logged in or not

USE CASES AND USERS

3. USERS

A. Unregistered user

B. Registered user

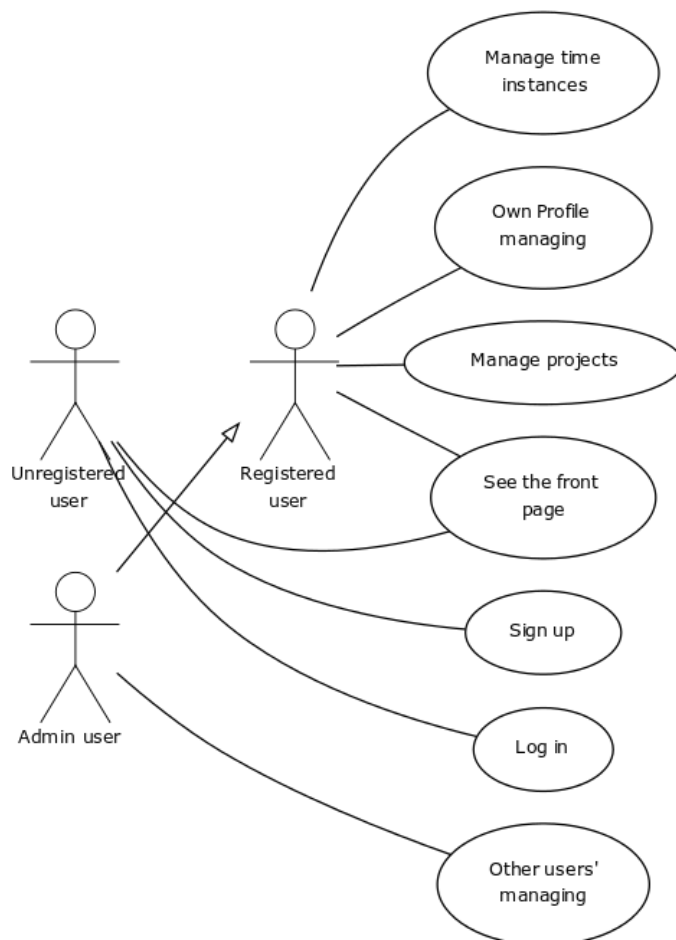
A registered user has signed up for the app and is logged in with their account. Almost all of the use cases require being logged in.

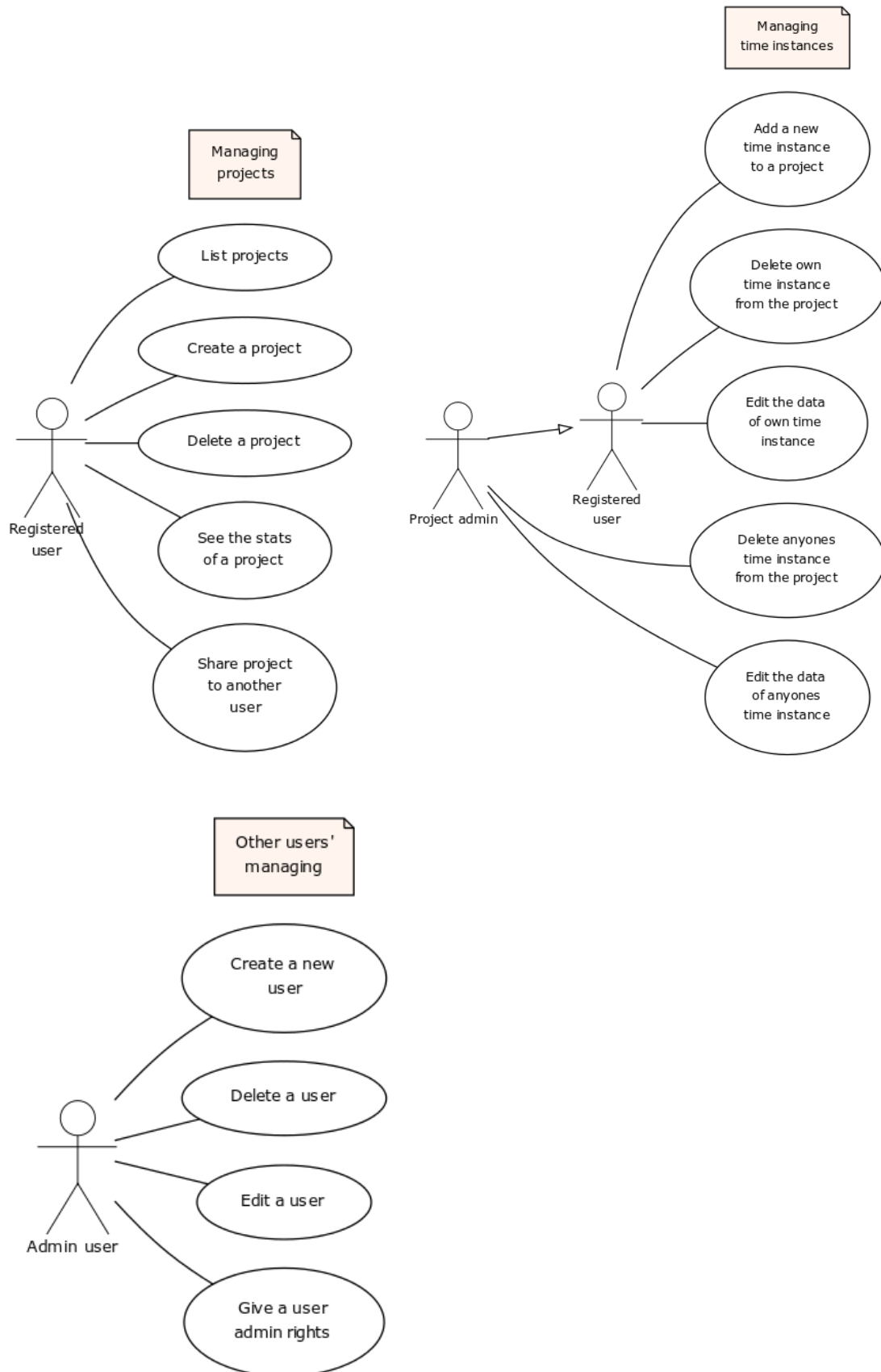
C. Admin user

Has all the rights of a registered user, but can also remove/edit other users.

4. USE CASES

A. Diagrams





B. Explanation for the most important use cases

Unregistered user

Sign up

By signing up an unregistered user creates an account for themselves. The real name, username and password are required for signing up.

Registered user

Create a project

A registered user can create projects. Projects can/must have some data, e.g. name, description and the date started. All time instances must belong to at least one project

Add a time instance to a project

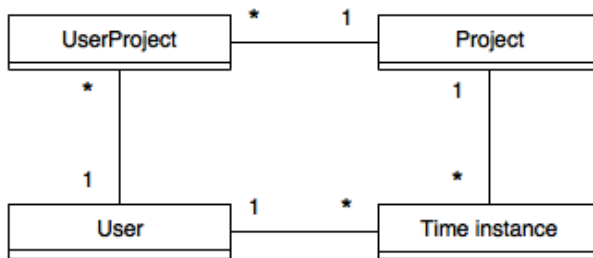
A time instance must have a date performed, description, duration and a project to belong to.

See the stats of a project

All the time instances used to a project can be seen from the statistics page of the project. The page can show at least the total amount of instances used, the total amount of time used, the average time spent per instance and so on.

DATA

1. DATA CONTENT



2. TABLES

A. User

Attribute	Type	Description	Foreign key?
id	Integer	Auto incremented id	
name	String, max 50 char	Real name of a user	
username	String, max 50 char	Unique username, cannot be empty	
password	String, max 50 char	Hashed password	

B. UserProject [connection table]

Attribute	Type	Description	Foreign key?
user	Integer		User.id
project	Integer		Project.id
isAdmin	Boolean	Is the user the admin of the project	

C. Project

Attribute	Type	Description	Foreign key?
id	Integer	Auto incremented id	

name	String, max 50 char	Name of the project	
description	String, max 500 char	Description of the project	
date_started	Date	Date project is started	

D. TimeInstance

Attribute	Type	Description	Foreign key?
id	Integer	Auto incremented id	
description	String, max 500 char	Description of the time instance	
from	DateTime	DateTime when started	
to	DateTime	DateTime when stopped	
project	Integer	The project the instance belongs to	Project.id
user	Integer	The user who performed the time instance	User.id

3. DATABASE DIAGRAM

