Project trckr

Technical Article

Ankeshian, Gabriel
ankesgab@students.zhaw.ch

Balidis, Dimitri
baliddim@students.zhaw.ch

Christen, Luca
chrisluc@students.zhaw.ch

Jossi, Savino
jossisav@students.zhaw.ch

Milenkovic, Daniel
milendan@students.zhaw.ch

Nominato, Angelica Helena Moreira Alves
moreiane@students.zhaw.ch

Pacassi, David
pacasdav@students.zhaw.ch

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The main goal of the present article is to describe the idea, goals and main functionalities of the web based app trckr. Trckr is for everyone, who works on a project and wants an intuitive and simple web tool with easy to learn handling.
To have an easy development, the backend is written in Python with the help of the framework Django, the frontend with the Javascript framework Vue.js. Users are able to create and edit projects after a successful registration. Time tracking starts with single tasks a user creates.
In order to compete with other tools and web services, trckr has big advantages in performance and usability. To extend the reach of trckr, more functions are planned to display projects and tasks in a userfriendly manner. These plannded features will give trckr a great advantage towards ever increasing complexity in project managment and task tracking, this would be especially useful for larger companies. Additionally we provide trckr as an open source solution and everybody can contribute features that could be useful for the greater userbase.

Contents

1 Introduction

Time tracking is an important process for daily business to have insight on the productivity of a team, this lead to ever improving processes and tools that allow for easier time tracking, no matter which branch. This also lead to multiple methods and tools being developed and enhanced in parallel, many methods are not very helpful for a certain branch because they might give enough insight or have too many features that are not going to be used. Yet these methods might be good for another branch, this tells us, that diversity is in no way an issue and tools and methods are adapting to teams, and not the other way around.

1.1 Objectives

The goal with project trckr is to develop and distribute a time tracking webapp, that is very easy to understand and use. It is highly important to have the least amount of steps possible, for a user to track his time on single tasks.

1.2 Main Features

The user is able to:

- register and login to trckr
- create and edit projects
- create, track and edit tasks
- visit trckr also on a mobile browser

2 Technolgies

2.1 Django

Django is an open source web framework written in Python. It is very useful for fast, clean and simple development of web applications.
One of the main advantages is its fast setup, therefore you can start developing your application very quick. Django comes with support of various database integrations.

2.2 PostgreSQL

Trckr runs with a PostgreSQL database in the backend. PostgreSQL is fully supported by Django and implemented from the beginning. With Django in use, not much has to be configured for the database, because the whole databse is written by Django.

2.3 Vue.js

Vue is a progressive framework for building user interfaces. Trckr is developed with vue.js because of its simplicity to learn it as a developer and the features it provides. It allows to create data structures that can easily be displayed in the HTML of a page. This and the ability to easily make calls to the backend makes it a perfect allround framework for trckr.

3 Results

As you can see in the figure 1, we have built a pretty simple architecture, including Django with PostgreSQL in the backend and a frontend based on Node.

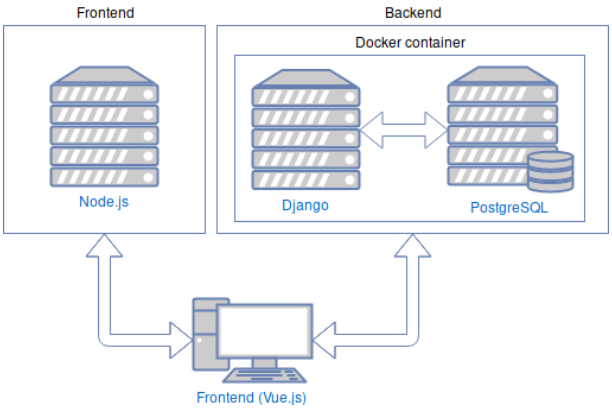

Figure 1: Architecture of trckr

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