Jiskefet kickoff presentation

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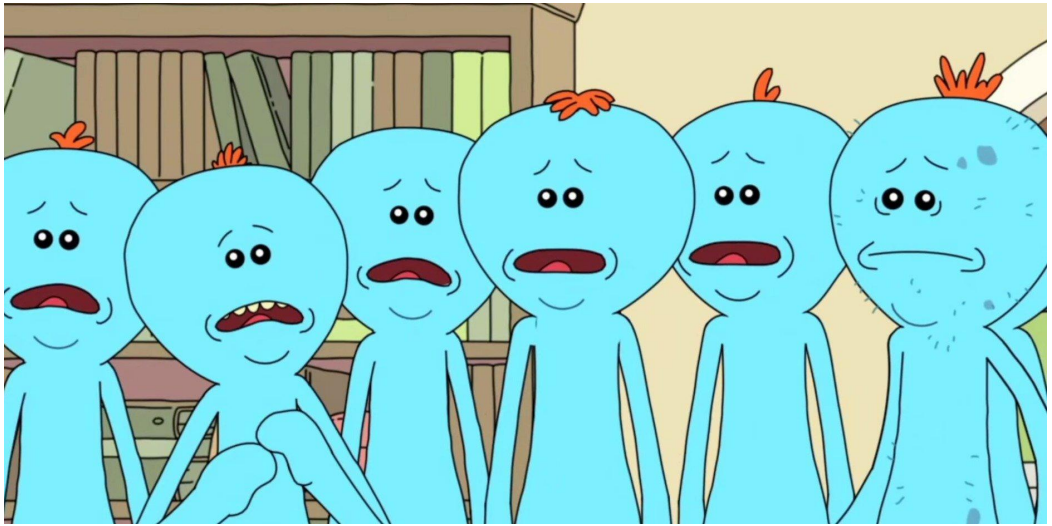
Introduction

Meet our best Scrum Team

Front end developers - Tetiana, Shayeed

Back end developers - Oscar, Lucas, Victorien

Product owner - Patrick



Client

Client - CERN (Center for European Nuclear Research) is the world's largest particle physics laboratory.

Users - Employees at CERN who are monitoring the ALICE experiments.

Currently running a system that is unable to visualize ALICE metadata dynamically. (requires people to spam F5)

Project Introduction

ALICE (A Large Ion Collider Experiment) is one of seven detectors at the CERN Hadron Collider, it is designed to study matter at extreme energy densities.

The result is a massive amount of data that needs to be stored. Therefore the “Jiskefet” project was created - a bookkeeping system for the ALICE detector at CERN.

Assignment

Creating an awesome and intuitive front-end with SPA (single-page application) framework.

Dynamic presentations of charts.

Front end

- React was used by previous developers.
- Angular 8 framework with JavaScript
  + widely used
  + front end team has a little bit of prior experience
  - had previous changes to the framework that broke working code
- Bootstrap
  + free and open source
  + large community and proven quality
- D3 library to visualize data
  + compatible with selected technologies
  + dynamic presentations of charts
  + widely used, so a large community exists
  - learning curve

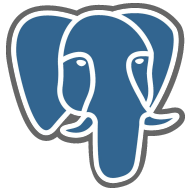
Back end

The back end will be rebuilt using Python3 and Django because:

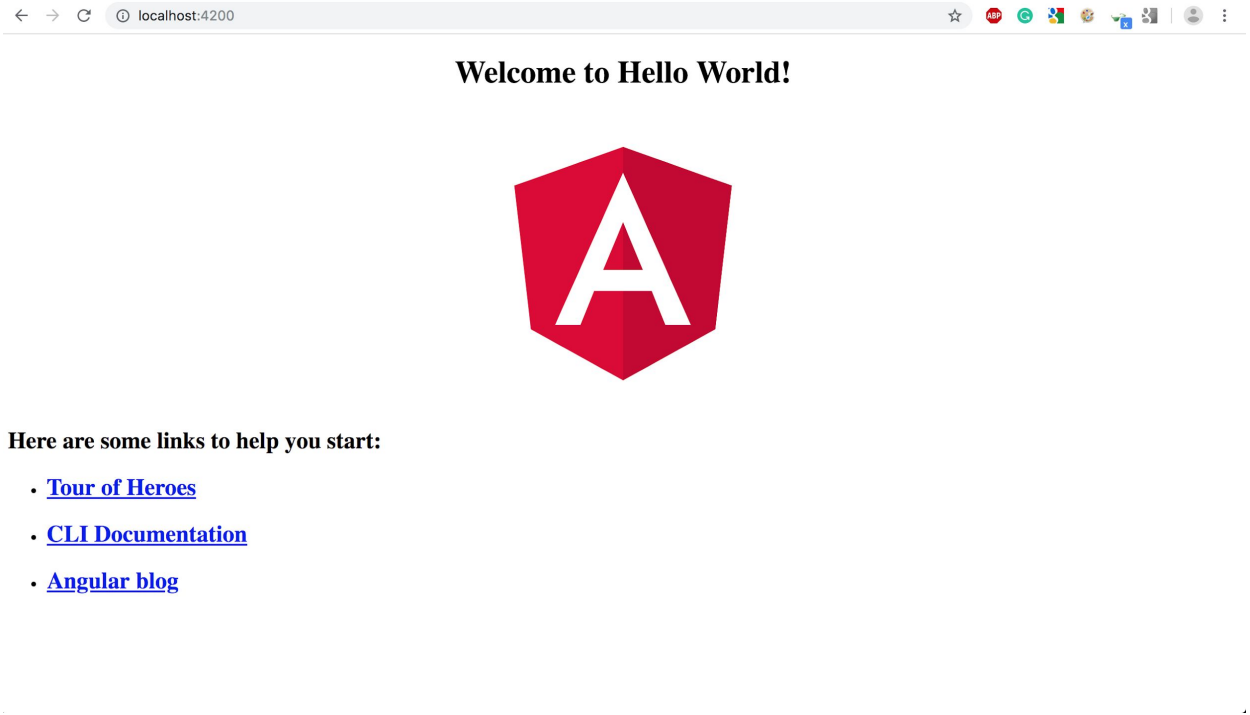
- Python is fairly present in the field of data science
- Django provides a set of useful features like ORM, Unit Test, Account management…
- There are many proven libraries for scientific work written in Python
- Old backend we considered to be too complex for the given time

The database will run on PostgreSQL because :

- It can be clusterized
- It has NoSQL capabilities
- PostgreSQL outperforms other open-source RDBMS'
- Open-source, unlike Microsoft SQL Server or MySQL

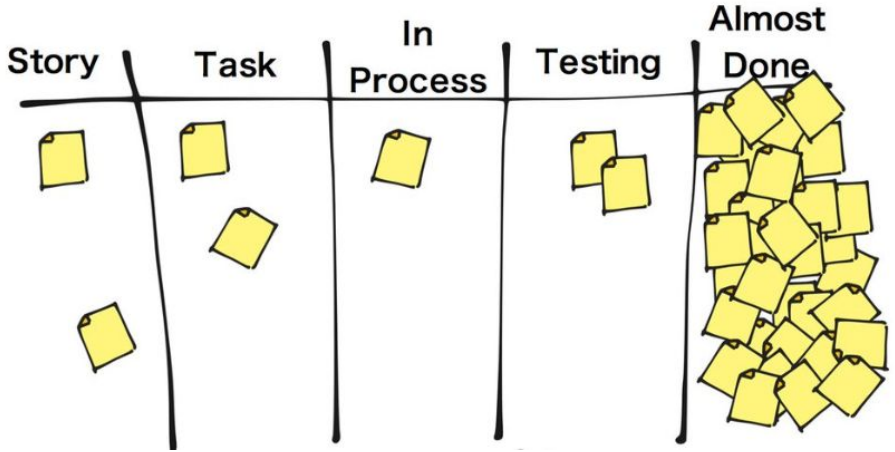


Hello world!


localhost:4200
Welcome to Hello World!
Here are some links to help you start:
Tour of Heroes
CLI Documentation
Angular blog

What is done

- Chose technologies and tools
- Created a kickoff presentation
- Created and initialized GitHub repositories for the front end, back end
- Configured a RedHat server to work as a webserver (apache2, PostgreSQL, Proxy, HTTPS)



What needs to be done

- Create a REST API
- Create front end UI
- Set up a database
- Dynamic charts presentation
- Store and process information from the database
- Connect front end and back end through the API

Questions?