

Time to get things done!

You are getting this task because throughout our screening process we found your profile to be very interesting, and potentially a good fit for our mission...

Now we would like to learn a bit more about you in the context of a real project. This will allow you to demonstrate us the different aspects of your web capabilities: such as programming and design skills, autonomy, sense of accomplishment and creativity.

This task consists of creating a small Web application that does simple analysis of data coming from external services and displaying the results in a Web browser.

Analysis of GitHub repositories activities

GitHub is a Web based hosting service for software development projects' source code. For a given project it contains the history of the commits and activities.

GitHub offers a public REST API and a developer dedicated Web site (<https://developer.github.com/v3/>) that contains documentation and examples of using this API.

Specifications:

Using this API (and any other public services you want), your Web application must fulfill the following requirements:

1. A user should be able to search for a public project (also called repository) hosted on the GitHub platform.

2. The user will choose one of the projects returned by the search.
3. Your application would show three basic types of analytics for the selected project:
 - List of committers (users) for this project.
 - Based on the 100 latest commits, the impact of each user on the project (based on number of commits)
 - Based on the 100 latest commits, the projection of commits on a timeline.
4. This result page must be bookmark-able for later direct access.

Optional:

Along with these basic needed features, feel free to extend the requirements by:

- Adding new kinds of analytics if you think that manipulating data is fun.
- Extending and polishing the user interface (Ajax, auto-suggest, animated results; ...) if you're a UI guy.
- Exposing these results through an API if software design is your passion.
- Doing all three if you are Super(wo)man.

Technical requirements:

You are free to implement this project using the Java based technology of your choice. However, keep in mind that we want a Web application!

The target is any recent Web browser (Chrome, Firefox, Safari, IE9) so feel free to use cutting edge Web technologies.

Presentation of your project:

You will have thirty minutes on a given date to present the result of your work. We expect to see the application running. You can bring your own laptop with the application already installed. We will need also your source code, and we will deploy it on one of our machines. Obviously we can't have all dependencies already installed so please send us a note before the meeting to plan the installation of any special component.

Attending, will be some of your potentially future colleagues. This is your opportunity to explain your technical choices and detail any problem you encountered during the implementation.

Two points are of particular interest: the final result, and quality of code.

Hints:

It is essential in this exercise to have a final presentable result. So please focus on getting something done. If you feel blocked by any aspect, try to move on. Presenting to a client with something working is often better than going empty handed.

We invite you to demonstrate and use your special capacities to add your special touch to the project.

Prefer using technologies you are comfortable with. We don't evaluate regarding a particular technology, but rather the way you handle and deal with the complexity of a project.

The GitHub API is very friendly, yet you need to do some search to find what you need.

Good luck.