Project Proposal

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Title

Hiring Dashboard - A web application to support the recruitment process of an IT business.

Background

Gfi recruitment process has evolved beyond the functionalities available from the tools currently used within the company.

When searching for a new employee, a process made of several steps, each lead by different people, demands a collaborative tool that may implement a workflow and provide a central information repository where every stakeholder may consult the real-time up-to-date information and take action.

The main aim of this project is to develop a system that supports the hiring process for an IT company, more specifically Gfi Portugal.

The solution will most likely be a responsive mobile-first web application consisting of several views of the hiring process, allowing recruiters, recruitment managers and even candidates to access current requests and their state.

Objectives

- Develop a web app responsible for managing hiring processes and its candidates.
- Design an entire system for recruiting management.
- Implement a system capable of following the workflow of a hiring request and its several steps.

- Identify and implement the best practices surrounding the making of a high scale project.
- Meet the specifications required by Gfi Portugal and further enrich the project.

Justification

This project requires diving into the development of a complete Web Application from top to bottom and apply it in a real-world scenario. It also enables cooperation with a company like Gfi.

The topic further grants the opportunity to showcase and test the knowledge acquired from subjects such as Internet Programming, Software Laboratory, Web Application Development and Information Systems. It will also be the first chance to tackle a project of large dimensions.

Scope

The functional scope of the project, and the resulting web app, is suitable for any core business in need of:

- Having a workflow for a hiring process that allows sharing information with multiple stakeholders.
- Managing multiple candidates and assigning them to multiple hiring requests.
- Following the hiring procedure steps leading to the recruitment of a candidate.
- Checking the state of a hiring request.

Approach and Deliverables

Approach

The technical approach will be based in Node.Js [**1**] for the Server-Side of the application, as for the Client-Side we decided the use of Angular [**2**] framework would be the most adequate since it fulfils the front-end demands of this project such as responsive mobile-first interfaces. For the Database Management we chose PostgreSQL [**3**] for its open-source and extensible nature.

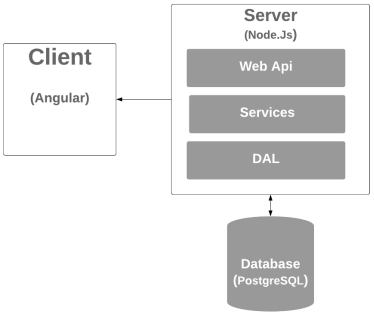

Figure 1: Software Architecture

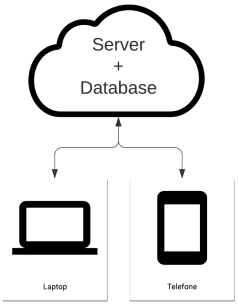

Figure 2: Hardware Architecture

Deliverables

With the development of this project we are committed to deliver not only a working web app but also it's unit and integration tests, an user manual(a guide for users on how to use the app) and a final report, documenting the project progress.

Constraints and assumptions

- The only technologies for which the skills are missing are Angular and TypeScript.
- If Angular support is required the company is willing to aid in that matter, however, all interactions would be restricted by the company's personnel work agenda.
- Deliveries and milestones cannot be exceeded, with no exception.
- Every task related to a software component is accompanied by unit and/or integration tests.

Keywords

Recruitment; Kanban Board; Web Application; Postgres; Angular; Node.Js; TypeScript [**4**]; Responsive.

Resources

The project is expected to make use of hardware and software that is freely available to us at Gfi Portugal or ISEL. In any event, Gfi Portugal is available to assess further needs and discuss possible solutions.

Risks

Given that this project will make use of two unfamiliar technologies, Angular and TypeScript, there is a risk of delving into major problems due to the use of those technologies.

Even though the company is willing to assist us with any development issues, their work schedule is a factor to keep in mind.

Project organization

The project will be conducted by Gonçalo Pestana, Luís Barros and Pedro Tereso. The project supervisors will be João Pereira, of Gfi Portugal and Professor Filipe Freitas, of ISEL. The client sponsor is Gfi Portugal. The main user contact and representative will be João Pereira.

Major milestones

These are the milestones that we are able to establish from initial planning:

- Project Proposal → March 16th, 2020
- Data Model Implementation → March 23rd, 2020
- Report (initial version) and individual presentation → May 4th, 2020
- Limit for the Definition of Functional Requirements → May 11th, 2020
- Limit for the Definition of Technical Requirements → May 18th, 2020
- Poster and Beta Version → June 1st, 2020
- Final Version → July 25th, 2020

Project Plan

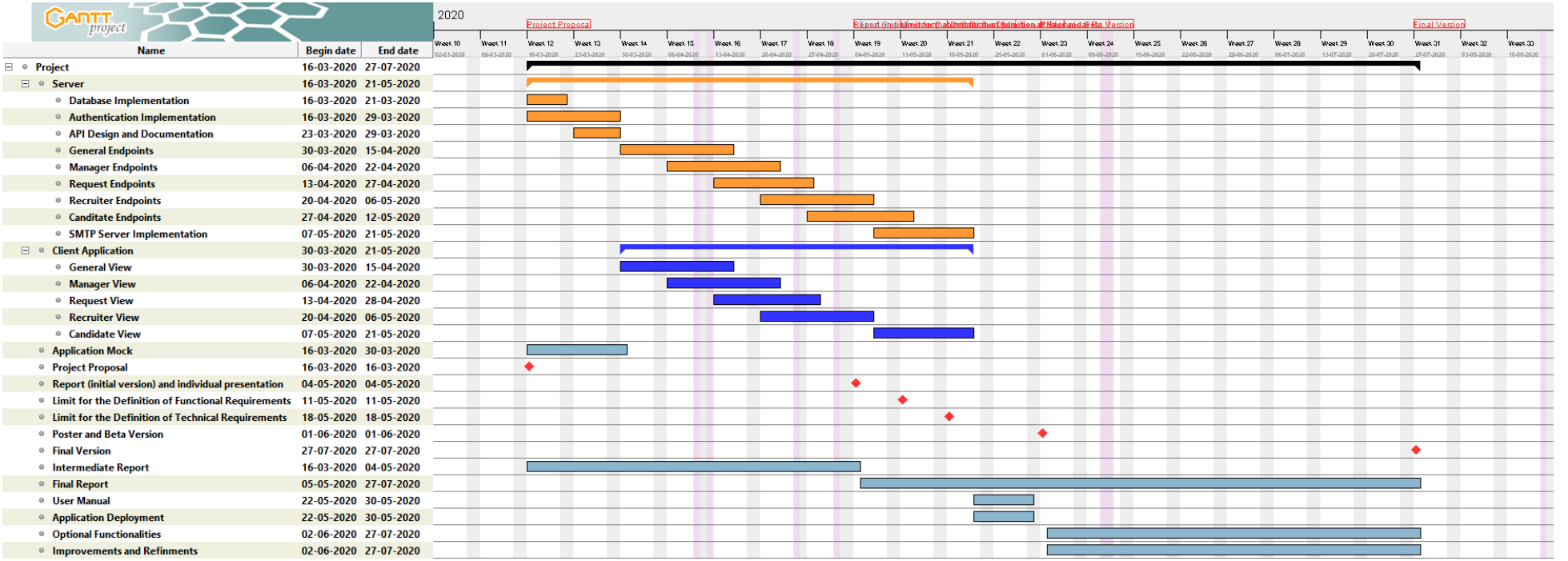

Figure 3: Project's Timeline

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