CS 413 – Section 1
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JOBIFY

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1. Preliminary Scope Statement and Product Definition

The new career portal, Jobify, is a web-based application with mobile support that will make the job-seeking and recruiting process much easier and more complete. First of all, recruiters will be able to post new job openings on Jobify, and job seekers will be able to apply to these openings using the application. In addition to that, Jobify will collect the job advertisements posted on other career websites, such as LinkedIn, and job seekers will be directed to those platforms if they wish to do so. As a result, they won't be dealing with the burden of searching across multiple platforms separately and everything they need will be in a single platform.

2. Project Purpose

There are many websites that make it easier for people to find jobs. They have several outstanding points that attract users to register to their websites. Because of this situation, recruiters and HR teams of various companies have to register for these several websites to search for qualified candidates for a good job. The project Jobify aims to eliminate the requirement of surfing through different websites to find a good job or a qualified candidate by showing all job openings that are listed on these top job search websites.

Jobify not only displays other websites' candidates and job offers but also will provide the users of Jobify with the ability to post their job offers and their resumes if they want to. Because Jobify will be the job market which gives the most expansive results in that area, it aims to give the best and reliable search results to the users. We also aim to provide users with reliable information so Jobify will solve this problem by verifying account information. Any account without being verified by the Jobify will not be able to get a Jobify account.

Entering the user resume information to the websites has always been a long and annoying process for users, which waits to be solved. Jobify aims to solve this problem by upload and fill options. The users will be able to upload their resume to the system and the required fields will be automatically filled in their profile. They only need to check the fields to verify whether their information is extracted correctly from their resume to the system correctly or not. Vice versa, if the users have no resume yet, they will be able to fill the empty fields in Jobify and get the resume version of their information.

There are many websites and finding jobs is hard. This website will collect them in one place.

3.   Project Shareholders

Shareholders can be defined as the people, communities, businesses, and environments that experience the direct or indirect effects of the implementation of a decision [1]. In Jobify; users, customers, project managers, project members, business competitors, advertising agencies, and sponsors can be defined as the stakeholders. In large-scale projects, executives can also be counted as shareholders but we do not have any executive-level employee in our management hierarchy.

The roles defined above can be detailed as follows:

➢ **Users:** Users are job seekers and employers, or human resources staff of a company.

➢ **Customers:** Customer is the person who asks for this project in return for a payment. In this project, the customer is the sponsor at the same time for the project who is Haluk Altunel.

➢ **Project manager:** The project manager is the person who is responsible for the management of the project and project-related factors. In our project, Alptekin Önder is responsible for this work.

➢ **Project members:** The project includes four computer science students. These students will take over different roles as it is required. These roles may be web developer, database engineer, software architect, test engineer, and other similar roles related to the software development process.

➢ **Business competitors:** Business competitors are the websites that provide similar services as Jobify which are basically seeking for jobs and posting jobs. Jobify's target market in Turkey. Thus, Turkey-based job-seeking websites are direct competitors and foreign websites are indirect competitors. Major competitors are kariyer.net, indeed.com, isbul.net, yenibiris.com, careerjet.com and linkedin.com.

➢ **Advertising Agencies:** In future, if Jobify becomes a popular platform for job seekers and employers, this might attract the attention of advertising agencies. They may ask for advertising on the website in return for a payment. Thus, they are potential shareholders of Jobify.

4.   Project Organization

In project organization we will use composite organization structure. In composite organization, companies are divided into functional groups. Each functional group has several members. Projects are assigned to teams which are created from members of different functional groups. In our company, a team assembled to work on making the

application Jobify. Our team consists of 4 people, we will have 1 project manager from the managers group, 1 staff from the UI design group, 1 staff from the software development group and 1 staff from the testing group. Here is the overall structure of the company and our team.
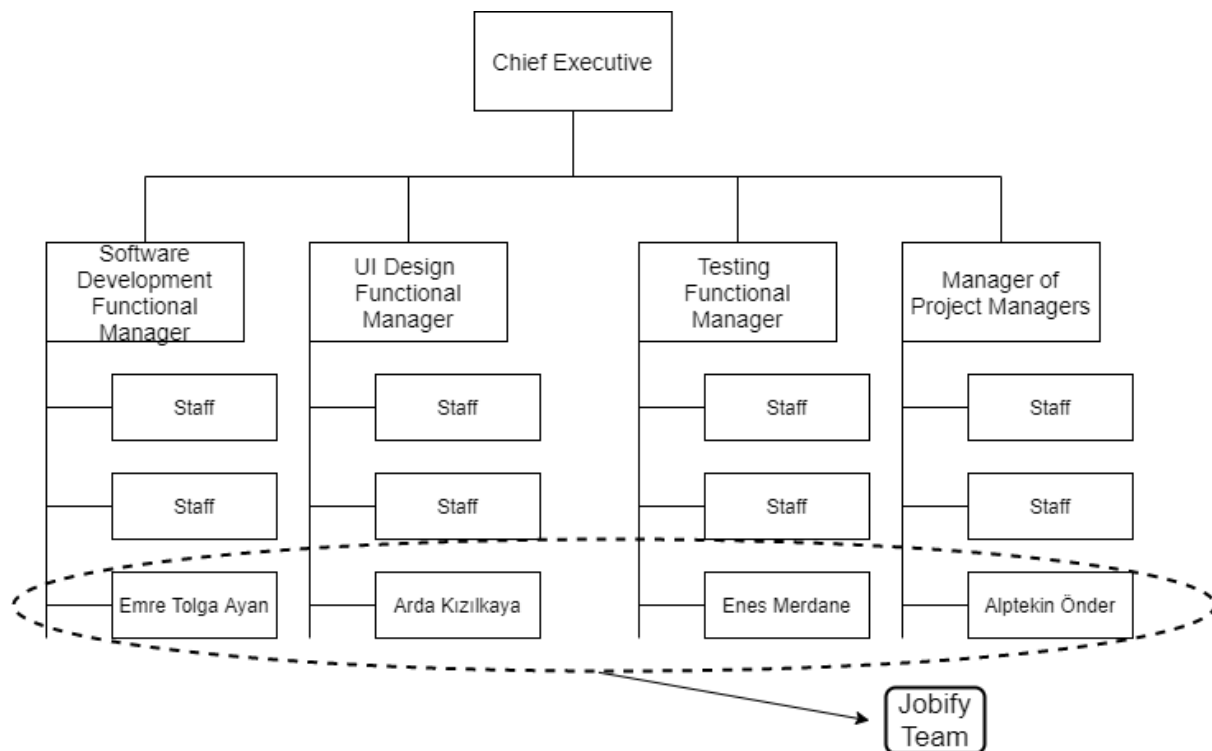
5.   Roles and Responsibilities

➢ Alptekin Önder has shown that he does not collapse under pressure when the deadlines approach or something goes wrong. When this is topped by his ability to effectively communicate with others, we all voted for him to be the project manager for Jobify. He is responsible for determining the work that must be done for achieving our goal at the end, and assigning this work to the project members. He is also responsible for monitoring the progress on each task and making necessary adjustments to make sure that the project is progressing as planned.

➢ Emre Tolga Ayan is responsible for designing the system architecture, designing the data model and back-end development of Jobify.

➢ Cemal Arda Kızılkaya is responsible for designing a friendly and intuitive user interface. He is also responsible for front-end development of Jobify and making sure that the connection between front-end and back-end is as flawless as possible.

➢ Enes Merdane is responsible for testing of the overall system, which includes creating possible test scenarios and testing the system under these scenarios to detect the bugs in the system, if any.

6. Milestones and Deliverables

Roughly, the deliverables are presented in table 1.

Deliverable Table	Description	Code
Jobify Website Project		1.0
Deliverable 1	Project Charter	1.1
Deliverable 2	Scope and Requirements Analysis Report	1.2
Deliverable 3	Software Project Management Plan	1.3
Deliverable 4	High Level Design Report	1.4
Deliverable 5	Low Level Design Report	1.5
Deliverable 6	Jobify Web Based Platform	1.6
Deliverable 7	Jobify Mobile Platform	1.7
Deliverable 8	Final Product Presentation	1.8

Table 1: Deliverables and Descriptions

Deliverable 1, which is this document, aims to present the project to the customer. Deliverable 2, 4 and 5 will include the requirements and scope of the project as well as software project plannings, and they will present to the customer what the application will be like, both in high level and low level. Deliverable 3 will include project resource and time plannings. Deliverable 6 will include the implementation of the web portal, and deliverable 7 will include mobile platform implementation. With deliverable 8, the project will be presented with all of its features to the customer.

6.1. Milestone 1: End of Project Analysis and Planning

Until this milestone, it is expected to deliver the first three deliverables, which are project charter, scope and requirements analysis report and software project management report. This phase of the project includes understandıng the domain and planning the resources accordingly. At this milestone, we will detect the scope and requirements of the project in detail, and we will be ready for working on the implementation.

6.2. Milestone 2: End of Implementation Design

Until this milestone, it is expected to deliver the deliverables 4 and 5 which are high level design report and low level design report. With these reports, we will know the implementation based requirements and we will finish the design of the application and be ready to start implementation.

6.3. Milestone 3: End of Implementation of Jobify

Until this milestone, it is expected to deliver the deliverables 6 and 7, which are the implementation of the web platform and the mobile platform. At this milestone, the website Jobify and its mobile application will be ready to be deployed to the web.

6.4. Milestone 4: Presentation of Jobify

At this milestone. We will be presenting the project to the customers and will be delivering the final project. Project will be completed with this milestone.

7. Effects of the Project

There are many hiring websites through the internet, each requires membership in order to apply to job offers or to post job offers. Job seekers go website to website and spend hours to find a job that meets their demands. Jobify will affect the market in a way that it will provide an environment that everyone can join and search for jobs from countless websites without leaving a webpage. From a job seeker point of view Jobify will be the only site that the seeker should create a membership and use in order to find a job. From a job owner point of view, Jobify will be a website that can truth check the information of jobseekers and provide a reliable work force for companies. Jobify not only offers these features on the website but also there will be a mobile application that everyone can use from anywhere. Therefore, job seeking and job offering will be much easier,faster and more reliable with jobify.

8. Assumptions and Constraints

8.1. Assumptions

Our main assumption is that the process of searching for a job is already a tedious work which can often discourage job seekers from searching for jobs due to the need of going through multiple websites to find the positions that they are interested in. The same situation applies to recruiters, since they also need to post their job advertisements on multiple platforms in order to reach as many candidates as possible.

8.2.   Constraints

8.2.1. Time and Budget Constraints

Since we are required to get Jobify ready by the deadline specified by the customer, we must plan ourselves accordingly and make sure that the project is progressing as expected to be completed on time. Additionally, we have to implement the project within the budget that we are provided with by careful resource management.

8.2.2. Legal Constraints

As we ask for data from our users, we must make sure that we comply with the regulations regarding the handling of data, such as the General Data Protection Regulation, at all times. Also, we have to make sure that we are not violating the intellectual property rights of the websites that we are retrieving job openings from.

8.2.3. Performance Constraints

The response time of Jobify must be as low as possible at all times in order to provide our users with a good experience while they are using the application.

8.2.4. Skill Constraints

Due to the possibility that some of the team members might be inexperienced in their tasks, all of the team members will be subject to a mandatory preliminary training related to their tasks to get them up to speed.

9.   Success Criteria

1. Website and mobile application of Jobify should be accessible 7/24.
2. Jobify should be able to scrape other career portals for getting job offers successfully.
3. Final product should meet all the requirements.
4. Info checking system should work at least %90 times correctly.
5. Final project should reach 1k minimum daily user number.
6. Project must be revised accordingly to the feedback of the customer for each deliverable.
7. Auto CV reading must be able to fill 90% of the user information correctly.
8. The website should appear on the first page in Google for the queries related to job seeking.
9. Project must be completed on time and with the provided budget.
10. Project meets the security policies on both website and mobile application.
11. Project must deliver all the deliverables within the scope.

10. Initial Risks

Like all projects there are some risks of starting this project. Below the risks, outcomes and suggested solutions are listed. The general focus of suggested solutions are informing the sponsor and getting their approval before the solution is applied. The risks are as follows:

Risk	Outcome	Suggested Solution
Lack of sufficient resources	The project may have a resource problem such as lack of time or employee that may cause the project not to be accomplished in time.	The project manager should decide which requirements to prioritize and implement first, and should have the allowance from the sponsor for this. If needed, more resources can be requested from the sponsor.
Employee Turnover	One or more than one of the employees may leave the project because of course withdrawal or any other reason.	An emergency meeting should be established and the work of the left employee should be seperated to the other employees because there is no chance to request more developers from the company. Also the sponsor should be informed about the situation and if needed more resources can be requested from the sponsor.
Specification Breakdown	While implementing the project or any of the design reports, it may show up that the specifications are incomplete or some requirements are conflicting.	An emergency meeting should be established. The purpose of the project should be discussed in detail and what should be done to solve the conflict or the missing requirement should be decided.
Poor Productivity	The team may have a chance to not give their best effort for any of the deliverables of the project for some reason such as the intense schedule arised by the other courses.	As a preventive action the project manager should distribute the workload of the deliverables to the days in a manner that the deliverable should be finished about two or three days before the deadline so that if any delay happens due to the poor productivity, the delay time won't cause any delay to the real schedule. If the deliverable finishes as planned just three or two days before the deadline, the surplus time can be used for the revision of the deliverable to be more sure that the deliverable meets the sponsor's expectations.

11.   References

[1]   Santa Clara University, "Identifying Project Stakeholders."
        https://www.scu.edu/ethics/focus-areas/more/engineering-ethics/ethical-consideratio
        ns-in-the-senior-design-project/identifying-project-stakeholders/ (accessed Sep. 29,
        2020).