Department of Computer Science

Faculty of Engineering, Built Environment & IT

University of Pretoria

COS301 - Software Engineering

Software Requirements Specification

Ada

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Rachel Hamilton, Business Analyst, u20453478

A. Introduction:

This documentation has all the necessary documentation from Feature Group Ada.

B. Roles:

* Project Manager - Isheanesu Joseph Dzingirai

* Business Analyst – Rachel Hamilton

* API Engineer – Siphesihle Vezi

* Data Engineer – Sechaba Mache

* Designer – Sean Nkosi

* Developer Operations – Isheanesu Joseph Dzingirai

* Service Engineer – Agape Mamphasa

* Tester – Lehlohonolo Sehako

* UI Engineer – Ryan Broemer

C. Feature:

Company Representative Profile

1   Introduction

1.1. Purpose of product:

The purpose of the following documentation is to provide the software requirements (functional and non functional), acceptance criteria, constraints and overview of the company representative profile feature. Our role is to build a company representative profile that will be responsible for containing all information and media about the representative. The representatives will have access to other profiles in the system (student profiles, company profiles).

1.2 Scope of product:

Company Representatives will be able to sign up and sign into their account and have access to their profile where they are able to update and change the data, they want on it. The goal is to create a profile that will consist of a

company page view, where the representative is able to upload media, profile information, view graduates profile information, and have access to registration and login. Company representatives will also be able to access graduate profiles when in need to view a graduate's information and/or contact them.

1.3 Acronyms, Abbreviations and Definitions:

- FR – Functional Requirements

- NFR – Non Functional Requirements

- API - Application Programming Interface.

- UI - User Interface

- C – Constraint

1.4. Overview:

The document follows the following scheme:

- An overall description

- Specific Requirements

- Acceptance Criteria

2   Overall Description

2.1 Product Function:

• The company representative logs in to his/her profile

• The company representative adds information to his/her profile.

• The company representative adds or changes his/her profile picture.

- The company representative explores prospective students by some criteria.

- The company representative receives results of students matching the criteria.

- The company representative logs out of his/her profile.

- The company representative can delete his/her profile.

2.2 User Characteristics:

The company representative profile is intended for the use of: The company representative of a company looking to hire.

2.4 Constraints:

C1. The profile must be maintained and managed by the Ada team.

C2. All profile implementation and documentation must be done by the Ada team.

C3. The company representative profile design created by the team designer; must be the design the Ada team follows.

C4. The UI Engineer of Ada must use nwrl/Angular to complete this project.

C5. The API Engineer of Ada must use GraphQl to complete this project.
C6. The Data Engineer of Ada must use Prisma, NestJS and Postgre to complete this project.

C7. The Services Engineer of Ada must use NestJS and CQRS to complete this project.

2.5 Assumption and Dependencies:

- Assumptions:

  - The user is the representative of a company.

  - The user has an internet connection.

  - The user is using a PC that has a UI.

- Dependencies:

  - Time management - Our group is dependent on time management to be able to complete our feature.

  - Difficulties collaborating with other teams - Our group is dependent on working with other features to ensure our design and implementations collaborate with corresponding features.

  - Lack of knowledge to create a solution for a requirement - Lack of knowledge to implement a feature has a big effect on our team completing this feature.

3   Specific Requirements

3.1 Functional Requirements:

- FR.1. The system must allow the company representative to have the ability to delete a profile.

- FR.2. The system must allow the company representative to have the ability to edit the profile.

  - FR.2.1. The system must allow the company representative to be able to add/remove basic profile information.

  - FR.2.2.The system must allow the company representative to be able to add/remove general information on the company representative.

  - FR.2.3. The system must allow the company representative to be able to add/remove and change their profile picture.

- FR.3. The system must allow the company representative to add a prospective student to the userScouted table.

- FR.4. The system must allow the profile to be graduate oriented, thus showing information related to the representative.

- FR.5. The system must allow the representative to explore students.

3.2 External Interface Requirements:

3.2.1. User Interfaces

- The company representative profile can only be accessed by a PC with a UI.

3.2.2. Hardware Interfaces

- Connection to the internet.

3.2.3. Software Interfaces

- Web browser.

3.3 Performance Requirements:

All the features of the company representative profile must function as expected just as any profile on a web app should.

3.4 Design Constraints:

The company representative profile is dependent on the design and implementation of other feature teams, such as the company profile, therefore the Ada team cannot go forward with certain designs or implementations if they haven't communicated thoroughly with other feature teams first.

3.5 Quality Requirements:

1. The basic design of the representatives profile should have a look that aligns with the UI of the company's portal.

2. Data integrity - The company representative must have access to certain information on the graduates such as their academic record. This information cannot be leaked and should only be accessed by the company representative.

3. Security - Certain information on the company representatives profile that needs to remain private, for the company representative's eyes only, can not be accessed by anyone else unless they login to the company representatives profile.

4. Performance - All the features of the company representative profile must function as expected just as any profile on a web app should.

3.6 Architectural Requirements:

3.6.1 Flexibility:

- - The profile page must function on a device that has a UI.
- - The profile page must function using all web browsers.

3.6.2 Maintainability:

- There must be constant communication between developers of the Ada team and the project owners in order to identify and fix errors to improve the quality of the feature.
- Clear documentation of requirements must be provided to ensure maintainability.

3.6.3 Security

- Certain information on the company representatives profile that needs to remain private, for the company representative's eyes only, can not be accessed by anyone else unless they login to the company representatives profile.

3.6.4 Availability:

- The company representative profile must be available and easily accessed by any device, desktop or mobile with a UI.
- The company representative profile must be available at all times.

3.6.5 Reliability:

- The company representative profile is reliable on internet connection.

    – The company representative profile must ensure a stable experience to the user.

3.6.6 Usability:

    – The company representative profile must be mobile friendly.

4 Attributes

- Availability

  – The company representative profile must be accessible to the company representative at all needed times.

- Security

  – Private information belonging to the company representative cannot be leaked, and must remain private.

5 Acceptance criteria

4.1 All information that the company representative gives our feature must be in the database and displayed on the user interface without hiccups. (e.g. contact info).

4.2 2. The system must allow the Company Representative edit his/her information.

    – Update information

    – Change profile picture

4.3 The system must allow the Company Representative to be able to explore prospective students.

4.4 The system must allow the representative to delete his/her profile.
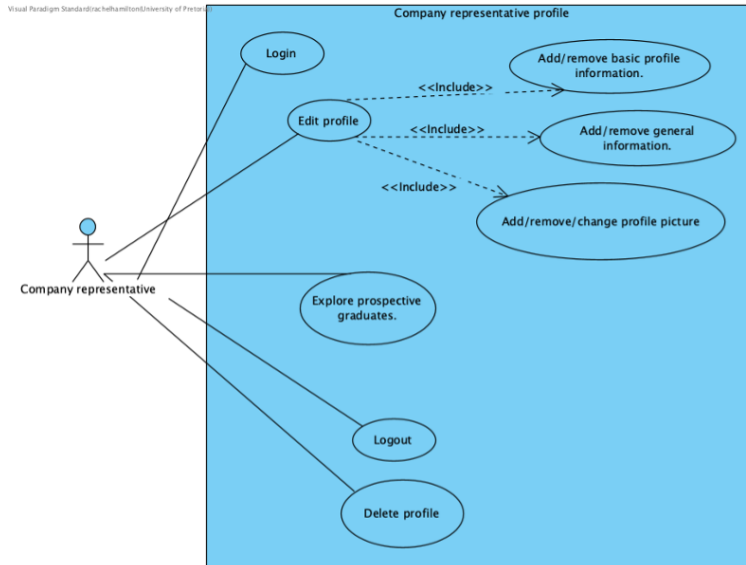
6   Appendices

Figure 1 is a use-case diagram representing the company representative profile
system

I confirm that all acceptance criteria were implemented and true in this project.
Signed by Rachel Hamilton, the business analyst for team Ada.

21/04/2022