Feature Group C# Documentation

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A   Introduction

This documentation has all the necessary documentation from Feature Group C#

B   Roles (Sprint 1)

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C   Feature

UP Integrations

1   Introduction

1.1 Purpose

The Purpose of this document is to build a UP Integration system that will be responsible for the sharing of information between the graduate portal and the UP website. It will also facilitate any other communication that needs to take place between the portal and UP.

The Intended Audience

This project is a prototype for the UP Graduate Portal and it is restricted within the UP premises. This has been implemented under the guidance of UP professors. This project is useful for the graduates of UP and as well as to the prospective employers of those graduates.

1.2 Scope

A. UP Integration
B. The product will verify the cs email account of students at the University of Pretoria and will check if the academic record of the student is valid to prove that they are indeed graduates. Once blockchain integration has occurred, this product will retrieve the

degrees from UP to be accessible through the portal. The product will not violate the student's privacy and any UP laws and rules regarding access to their servers.

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1.3 Definitions, Acronyms and Abbreviations

UP - University of Pretoria
CS – Computer Sciences
IT – Information Technology
FR – Functional Requirements

1.4 References

1.5 Overview

This document will layout the overall description of the product, it will also contain the functions and design constraints of the product. Specific requirements and several other requirements such as FR will also be contained, including software system attributes, assumptions and dependencies.

2 Overall Description

2.1 Product Perspective

2.1.1 System Interfaces

2.1.2 User Interfaces

2.1.3 Hardware Interfaces

2.1.4 Software Interfaces

- An API would be used to retrieve the necessary data from UP

2.1.5 Communications Interfaces

2.1.6 Memory

2.1.7 Operations

- The UP integration feature is going to retrieve data such as graduates' details and academic records and store them in the graduate portal via the storage feature.

2.1.8 Site Adaptation Requirements

2.2 Product Functions
- Act as a bridge between the UP portal and the graduate portal

2.3 User Characteristics

2.4 Constraints
- We do not have a university API, this means we must look for other ways to gain access or get the necessary records we need for the portal, which won't be easy.

2.5 Assumptions and Dependencies
- Assume that the students' privacy is always a priority.
- The relevant documents have been verified and authenticated

3 Specific Requirements

3.1 External Interfaces Requirements

3.2 Functional Requirements
- Getting the academic record for student authentication
- Verify if the CS email account is valid
- Retrieve degree to be stored on the blockchain
- Retrieve student details for the student profiles

3.3 Performance Requirements
- Student privacy must always be maintained
- The retrievals should be quick as to not create a speed bottleneck for the whole   project

3.4 Design Constraints
- The API is required to use graph QL

3.5 Software System Attributes
- The system will always need to be secure and all the relevant parties using the system must be comfortable to put their confidential details and documents in there and not worry about security.

3.6 Other Requirements