Software Requirements Specification

for

S5 DBMS Course Project on

Applying certificates online in Academic Section

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1.0. Introduction

1.1. Purpose

The purpose of this document is to present a detailed description of our project, applying certificates online in Academic Section. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate. This document is a part of the DBMS course project.

1.2. Product scope

This product is a web application to keep track of certificates applied by students of the college.

Usually students have to go to Academic Section to apply for a certificate such as Bonafide, provisional Grade card etc. They are given an approximate time for the documents ready. Documents may be delayed due to different factors. The reasons depend on the following factors.

1) public holidays,

2) the number of applicants for the same document

3) the corresponding issuer may be on leave.

Students may need to visit Academic Section more than once. To reduce this ambigious state and wastage of time in wandering around Academic Section, we are implementing a web application where students can apply online for the required documents and will be mailed when the corresponding documents are ready.

All system information is maintained in a database.

1.3. Intended audience

This project is a prototype for applying the certificates online in Academic Section and it is restricted to the students of this college. This project will be implemented under the guidance of course faculty, and is useful for the student community as well as the staff working in Academic Section.

1.4. References

Fundamentals of database systems by Ramez Elmarsi and Shamkant B.Navathe

2.0. Overall Description

2.1. Product perspective

This system will consist of a web application. The web application will be used to keep track of the certificates which are applied in Academic Section by the students . Since this is a data-centric product it will need somewhere to store the data. For that, a database will be used. The web application will communicate with the database. The application will use the database to get data as well as add and modify the data.

2.2. Product functions

With the application, students of this college who needs certificates from the Academic Section will be able to sign up using their nitc mail and by entering their credentials, can login to the web application. On the home page they will be to see the status of the already applied documents if any. They will be able to apply for a new document if they require. The different types of documents that can be applied are:

1) Bonafide certificate
2) Provisional Grade card
3) Fee structure
4) CGPA conversion
5) Duplicate ID card
6) Migration Certificate
7) Transfer Certificate
8) Course Completion Certificate.

Certain type of documents require a specific amount of money to be paid and a user can apply that document if and only if the corresponding amount is paid in favour of the Admin. If this stage is completed, the user is allowed to fill the corresponding credentials required by the document. After once the request is submitted, he will be able to see the expected date of arrival of the document. Once the document is ready the user will be mailed. The user can also check regularly the application to see the status of document.

The Admin has complete view of the database. He can view the list of students who requested for different type of documents, so that necessary actions can be taken. According to the applied date by the user, he manages the database and process the documents accordingly. After the document is ready, the Admin changes the status of the document from processing to ready. If an user enters the wrong credentials, he will be informed through mail to change the corresponding credentials.

Admin has complete access to the database. He can also give priority to the requested documents based on urgency of the purpose.

2.3. User classes

There are three types of users that interact with the system:

Students

Admin

2.4. Operating Environment

Operating environment for applying the documents online in the Academic Section is as listed below.

Database : MySQL

Client/server system
Operating system: Windows
HTML/ CSS
Platform: PHP

2.5. Design and Implementation Constraints

Capacity of the database
Need for yearly updation of the databases
Reliability of the server

2.6. User documentation

A user manual will be provided with the product.

3.0. Specific requirements

This section contains the functional and quality requirements of the system.

3.1. User interfaces

The first page of the web interface gives the user an option to specify whether the user is a student or the Admin. Students are redirected to a page where they can choose one of the two options i.e.,register and login. He can login using his userId and password. If the student is a new user, he needs to register by entering his credentials once.

Admin can login using their ID and password. All actions accessible to them will be enlisted in the redirected page.

3.2. Hardware interfaces

Since the web application does not have any designated hardware, it does not have any direct hardware interface.

3.3. Software interfaces

The communication between the database and the web application consists of operation concerning both reading and modifying the data.