Department of Electrical and Computer Engineering North South University



CSE 299.4 Junior Design Project

Faculty Reviewer Application For NSUers

Group 09

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Abstract

In this report, we present a software that can be beneficial for students of North South University regarding getting information and reviews about faculties. The application will be cross-platform. The idea is to make the software available in android and windows platform. In our project, we will use Microsoft's C# .NET framework. For making it accessible via two platforms and for creating GUI interface we will use Xamarin Forms. Being a part of our university, each semester we can see the high demand in students for knowing the most suitable teachers in their upcoming courses. There are some groups in social media that helps a bit in that case. But the information those groups provide are not always valid and there are no good ways to verify the claims the students put give on teachers. There is another problem that is anyone can put comment on those groups, even people outside of NSU or people who have no idea on the specific faculties. Our software will be NSU domain restricted. Therefore, only the students of NSU will get the access. There will be a well written and critically followed user policy that every student must follow. An admin panel will be there to observe and control activities of the students. Our main aim is to create a faculty reviewing platform for NSU students but beside of this, there will be some other student friendly features such as CGPA calculator, To-Do list and daily remainder. The software will act as a faculty evaluation and information getting tool which will be accessible only by the students of NSU.

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Chapter 1 Project Overview

1.1 Introduction

Faculty review means evaluating a faculty by his students. It is based on some conditions such as how a faculty makes his class student friendly, what is his assessment process or grading process, also what is his teaching method etcetera. The student faculty review is detained for two reasons; the one for student perspective and another is for authority. North South University has the second one called Faculty evaluation. It mainly checks if a faculty is capable of taking a class of a particular course or not. But for the first reason there is no such an individual or acceptable platform for faculty review. So, we are going to build a platform which will be acceptable to everyone.

1.2 Our proposed project

The main idea of our project is building a Windows application and an Android application for faculty review. Additionally, we will add a CGPA calculator and To-Do list.

1.2.1 Description of the idea

The main work of the app, we will build, will be to review the faculty. Students will review faculty by giving ratings based on certain conditions. And they can also comment on the faculty. Our system will predict a score for every faculty based on given ratings. And there will be an admin panel to check the comment. And then other users will find the best positioning faculty for their course. Besides, we will even add some features for students' benefit. Such as CGPA calculator and To-Do list.

Capability of the system:

Our system will make a faculty position list for a course by using the faculties rating.

1.2.2 Problem Statement

The level of difficulty of this project is intermediate. We are planning to make a cross platform project (an App for Windows and one for Android). First, we have to develop our skill on C# and .NET to make a windows application and we have to learn Xamarin for GUI.

1.3 Motivation

At the start of every semester, almost every student of NSU faces challenges in deciding the best faculty for particular courses. They become frustrated and so confused to choose the best faculty. They seek advice from the senior or any friend who has done the expected course before and can give some suggestions. That's why they generally do a Facebook post in their university's closed Facebook group. But sometimes they don't get the exact solution of their problem from the post's comments. I am also the sufferer. Considering all these problems and confusion in choosing the best faculty, we have decided to work on this project. And we believe that by building up this App we can give an easy and fast solution to the student that will help to reduce their frustrations and confusions in every semester.

1.4 Summary

In this chapter, we briefly describe about faculty review and our main plan based on this content. We have described the capability which our app will grab. And also describe what motivated us to design this application.

Chapter 2 Related work/Literature Review

2.1 Introduction

In this chapter, we briefly discuss the existing works that are related to our project which is Faculty Reviewing platform. We have searched and looked out for systems that are similar to our system. Beside of this, we also searched out for research papers regarding similar topic. We found that there are very few existing systems whom have some similarities to our systems. And as it is a basic topic of interest, there are no researches regarding this.

2.2 Existing work related to Faculty Reviewing Platform

From our study we found few web applications slightly related to our topic. But most of them are not as similar as we wanted. User can just find some of their desired faculties and can just watch their rating and don't contain any comment about their opinion on teaching method, how friendly he is and behavior towards students. Some of them mention below:

Rate my professor:

It is a web-based platform where student can rate anonymously. Student can search Professor by their institute name according to their desire. It's easy to rate professor by giving thumbs up or thumbs down. There is no descript information about professor [1].

Rate my teacher:

It is also web-based platform. It is only available for some specific region as well as institution too. It has some special features like resources and also user can find university to apply according to their unweighted CGPA [2].

Students Review:

It's a web-based application where student can review their Institution and Faculties [3].

Rate my lecturer:

It is also web-based platform. It is worldwide platform. There are many features in this site. One of these is rank of lecturer all over the university. This site's rating concept is as ours. There is some condition to rate a lecturer as ours [4].

2.3 Summary:

The existing work related our topics that found useful have been described in this chapter.

Chapter 3 Theory

3.1 Introduction

The details of the theory of our system are discussed in this chapter. The theoretical explanation is divided into two sections

- 1. C# .NET Framework & Xamarin Forms
- 2. MySQL database

3.2 C# .NET Framework & Xamarin Forms

.NET Framework is a software framework. It was developed by Microsoft. The framework is highly recognized worldwide. The most highly used programming language is C# in .NET. But other languages can also be used. .NET has a wide range of libraries which are greatly efficient in writing code. The framework can be used to create windows application. There is another version of it which is asp.NET. asp.NET is mainly a web framework It very much useful in creating websites. C# was developed around 2000 by Microsoft as an aim to use it in .NET. At first C# was taken as a variant of C language. But later it got developed further more. Currently C# is one of the most well recognized and popular language around the world.

Xamarin is a very much popular mobile development framework. Xamarin.Forms is an extension of Xamarin which is suitable for using with .NET framework. With Xamarin.Forms cross platform application with attractive looking GUI interface can be made. For GUI interface in .NET some other tools are also seen to be used. For example, WinForms. But for making it accessible via multiple platforms, Xamarin is a better choice. In C# shared codebase, developers can use the tools of Xamarin to write Android, IOS or Windows apps with native user interfaces. And the code can be shared in multiple platforms. Microsoft acquired Xamarin in 2016 [5].

3.3 MySQL database

A database is a collection of organized data. A database is usually controlled by DBMS which stands for Database Management System. There are two options to any software developers when it comes to storing data. One is File system another is

Database. Database is more efficient to use in most of the cases. There are many popular DBMS in the world. One of the most popular DBMS is MySQL. MySQL is a free and open-source software. The first version of MySQL came to existence back in 1995 by a Swedish company named MySQL AB. There are two different editions of MySQL. One is open-source MySQL community server and another is Enterprise Server. In our project, we are going to use the community server.

3.4 Algorithm

There will be searching options in our project for searching faculties by initial or search courses to see which faculties are good choice for students. There are many searching algorithms. We will use appropriate searching algorithms for our project. We can use other algorithms as well beside of searching algorithm accordingly to our coding.

3.5 Summary

In this chapter, the theoretical part of the tools of our project has been described. We tried to explain the tools we are going to use and gave small description about those.

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