CASE STUDY ON

UNIVERSITY ADMISSION
SYSTEM USING ASP.NET MVC

Document Revision History

Date	Revision No.	Author	Summary of Changes
26th March 2020	1	Ramkumar Nandabaalan	Initial Draft

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INTRODUCTION

This document outlines a case study on Module 3(ASP.NET MVC Programing). The project is to develop University Admission System. This document contains the requirements, workflow of the system and gives guidelines on how to build the functionality.

SETUP CHECKLIST

Minimum System Requirements

- Windows 8 or above
- Memory 4 GB
- Internet Explorer 6.0 or higher
- SQL Server 2012 client and access to SQL Server 2012 server
- Visual Studio 2017 or above

INSTRUCTIONS

- The code modules should follow all the coding standards.
- You can refer to your degreed course.
- You may also look up the help provided in the MSDN

PROBLEM STATEMENT

OBJECTIVE

Development of University Admission Management System.

Admission of students into any institution of learning is a core activity. Every academic institution needs students to exist and survive. Thus, an admission system of a University needs to be efficient and effective in order to avoid unnecessary delays and losses associated with such delays and inefficiencies. The system targets at quickening and simplifying the process of admitting students into the University. The system was developed using C#, ASP.Net MVC, LINQ & EF and SQL-Server.

ABSTRACT OF THE PROJECT

The proposed University Admission System should provide below functionalities:
1. Add Admission Details:
    - The user should be allowed to Add Admission details by providing the related information
    - Admission details can be:
        o AdmissionNo
        o StudentName
        o Address
        o DateOfBirth
        o SelectedCourse
        o SecuredGrade%

If the Grade % is more than 75%, then only application will allow to add the admission details in the database. After adding the admission details, Admission number should be generated automatically/

2. View Admission Details:
    - The user should be allowed to view all the created Admission Details

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3. Update Admission Details:
   - The user should be able to update the necessary admission related details by providing the appropriate Admission number.

4. Search Admission Details:
   - User will be able to search admission details using admission number and appropriate error message will be displayed for invalid admission number.

Develop the Application for the above requirement using ASP.NET with MVC (Scaffolding) connected with SQL Server Database with the use of LINQ to Entity Framework DB First Approach.
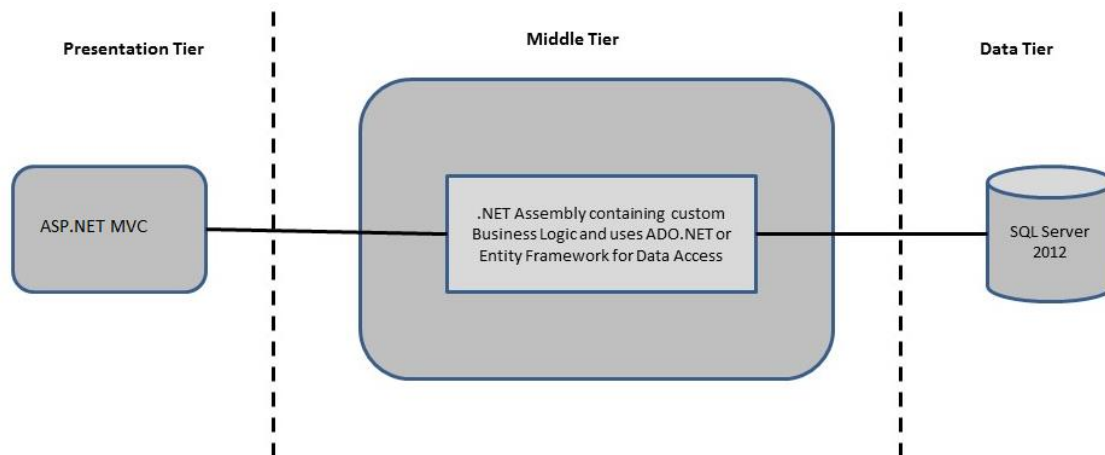
FUNCTIONAL COMPONENTS OF THE PROJECT

Application Architecture:
Distributed web applications traditionally to be designed and built across three logical tiers:
- Database Access Layer (DAL)
- Business Logic (BLL)
- Presentation Layer (UI)

The DAL refers to the data operations performed in SQL Server 2012. The BLL refers to the component that encapsulates all the business logic of the application and Presentation layer refers to ASP.NET MVC application

- **Design guidelines**
  - Presentation layer is ASP.NET MVC
  - SQL Server Data base connectivity implemented with LINQ & EF

TECHNOLOGY USED:

> *UI*
>> 1. *ASP.NET MVC Web Application*

> *DB Connectivity Logic:*
>> 1. *LINQ & EF*

> *Database*
>> 1. *SQL Server*

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