**Software Requirements specification**

**For**

**Student course allocation system**

**Version 1.0 approved**

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Revision History

Student course allocation system

Version 1.0

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# Introduction

## 1.1 Purpose

This document describes the software requirements for a web based student Enrolment system. It is meant to be used to maintain a shared understanding of the requirements between the developers and the clients of the system.

**1.2 Documents conventions**

This database use the following conventions

1. DB – database
2. DDB – distributed database
3. ER- entity relationship
4. Use cases

And the priority is the students enroll the subject with any problem. This documents use 14 font size and text TIMES NEW Roman

**1.3 Intended audience and reading Suggestions**

This project is a prototype for the Student course allocation and it is restricted within the university premises. This has been implemented under the guidance of university rules. This project is useful for the course allocation for students and for admin to enroll students, add course and subject

## 1.4 Product Scope

The function of the system is to facilitate student activities such as Enroll course according to timetable, Timetable will be given separately, Check pre-requisite, Student are able to give feedback, Generate reports, Generate enrollment slip in “PDF” format.

# Overall description

**2.1 Background**

As the student population of University grows over time, the volume of student registration and manual process of recording, retrieving and updating each record getting very hard. Student’s waiting and processing time. With the current process involved and the mounting frustrations and complaints from students, faculty and university self, there is an urgent need to develop the university’s online registration system.

**2.2 Product perceptive**

Enrolment Systems requires the development of a centralized system for facilitating all student administrative tasks such as registering for courses, and transcript requests, Enroll course according to timetable, Timetable will be given separately, Check pre-requisite, Student are able to give feedback, Generate reports, Generate enrollment slip in “PDF” format.

Not only will the system be designed for students, there will be a feature to allow Records Administration to handle transcript requests.

## Product Functions

There should be a single log-on portal with which the user can access all the above systems. The user would be directed to the appropriate page depending on whether the user is a student or staff (admin)

If the user is a student:

* They are directed to a Main page that has links to the other systems. (Course Registration, Course time-Table, Check pre-requisite, Generate reports, give feedback and enrollment slip)
* The Course Registration page will provide course information and allow the user to register for course as well as view his time-table.
* The Course time-Table page will provide general course information without any need of registration.
* The Check pre-requisite page will display all Subject pre-requisite in coming for next semesters
* The give feedback page will display the form in which students give feedback about the teachers
* The enrollment slip page will display the student enrolled subjects list is also have option to print that enrolment slip in PDF form

If the user is a faculty employee:

* The user is directed to a page that allows them to process Student Record related requests like add subjects

## Operating Environment

This system uses the web interface and work on window operating system.

## Design and Implementation constraints

* The English Langue will be used.
* The system must be delivered before July 22, 2019.
* The System must be run on windows OS

# 3. External Interface Requirements

## 3.1 User Interfaces

The student course allocation system will have following functions

* Student Login: Allow student to login to the system with password as he/she set for login
* Add Feedback: Give feedback about the teacher.
* Course detail: To maintain courses detail of the program.
* Time table detail: To see the current time table version upload by admin
* Enrolment Slip: To see the Enrolled subjects and also print the slip in PDF
* Check Pre-requisites: To check the Subjects pre-requisites for incoming semesters
* Admin login: Different login for admin.
* Add course: To make it easier for admin to add course and subjects of specific student and upload the timetable.

## 3.2 Hardware Interfaces

## Screen resolution of at least 1024\*480 or above.

## Computer system will be in networked environment as it is a multi-user system.

## 3.3 Software Interfaces

* Operating system such as Windows.
* SQL server 2012 for maintaining the records for users.
* HTML5, BOOTSTRAP, JQuery, JavaScript for designing front-end.

# System Requirements

## Functional Requirements:

1. **Enroll course according to timetable.**

The Student should allow enrolling the new course in new semester after check the pre-requisite subjects also check the timetable at background to handle the subject clash. All requests will be sent and managed by the university records database

1. **Timetable will be given separately**

The student should allow checking the current timetable version on this system. . All requests will be sent and managed by the university records database

1. **Check pre-requisite.**

The student should allow to checking the pre-requisite subjects for incoming semesters.

1. **Student is able to give feedback.**

The student will also give feedback about the teachers

1. **Generate enrollment slip in “PDF” format.**

The student will check the enrolled subjects list is also have option to print that enrolment slip in PDF form. All requests will be sent and managed by the university records database

1. **Generate reports.**
2. **Enable forced allocation.**

## 4.2 Non Functional Requirements

**1. System must be secure.**

The system checks if the entered student number and password are valid.

Input: Student enters student number and password

Processing: The system checks if the student number is valid and the password is correct. The system authorizes the student to access their record information if they entered valid student number and password.

Output:

* System returns the user to the log in page if the student number or password is invalid.
* System provides user with options to access different records and do different functionalities with the system if the student number and password are correct

The records should be saving and secured.

**2. System must be efficient.**

How much the new system quick and speedy. Operations by the student or faculty members will be process so quick that they cannot wait more than 15 seconds.

**3. System must be reliable.**

In the event of a system crash during and operation, the current operation will either complete or not completed. This will be handled by an already existing database.

**4. System must be easy to use (usability)**

The new system will be accessible in any computer that is connected to the internet

The new system will have an interface that is very easy to use and does not require training to use

**5. Retain quickly after failure.**

The system must effectively recover from a crash within five seconds. For the system to effectively recover, it must be able to restart a sessions with the user within the time limit

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# Use Cases

## Student

## 5.2 Admin

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