SOFTWARE REQUIREMENTS SPECIFICATION

for

IICT WEBSITE

Version 1.0

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1 Introduction

1.1 Purpose

This is very much difficult to maintain all the data of a course as a hard copy. Any data can be changed, deleted, added at any time. Such as - A new teacher can be assigned for a course, he also can be changed ; And so many student are getting admitted every semester. So, "IICT WEBSITE" is the solution. "IICT WEBSITE" is a official website based on marking and resulting system of IICT authorized. The main concept of "IICT WEBSITE" is to devitalized PGD, MIT courses, their students and teachers data maintenance.

1.2 Intended Audience and Reading Suggestions

This SRS is for developers, project managers, users and testers. Further the discussion will provide all the internal, external, functional and also non-functional informations about "IICT WEBSITE".

1.3 Project Scope

"IICT WEBSITE" creates a space for Director, Teachers, Students and Office Staffs for maintaining particular programs like - PGD, MIT.
After getting admitted to a programs a student has been given a registration number, by using which he/she can inter from-fill-up page. It will take his/her personal informations, admitted fee imformations.He will be added as a student of that particuler programs after completing his/her payment process. After that he/she can select course of the program and then pay the fee for that. Student profile will contain all his personal informations, past results, recent result and notifications.
Office staff only post result publicly and also notice. But off course with the permission of Director.
Directors' main work is to assign teachers to the courses they will take, create teachers profile and approve mark-sheet. He can move a teacher from one course to another. He also can be a teacher and can also can take the courses and perform all the functionality of teacher like- marking papers. He can also directly post notice to the website, teachers and also students.
Teachers' account are created by director. They (Teachers) entry marks of the students, can view all the marks of the students and change it after submitted it to the director. Every student of that particular course will be under the teacher who is assigned to that

course.

Figure 1.1 (Entire work-flow) is the overview of the project. Connection of all the entities are dependable to each others. This gives the simple idea about the functional activities of the project.
Student cycle, In the Figure 1.1 "Student" takes "Courses" ; "Courses" is guided by "Teachers"; "Teachers" creates "Results".
Teacher cycle, In the Figure 1.1 "Director" assign "Teachers"; "Teachers" for particular "Courses"; "Director" publish "Results".
So, every entity is vary much interactive with each other.

2 Overall Description

2.1 Product Perspective

"IICT WEBSITE" is the replacement of the manual hard copy result process. The data have been stored in the hard file or papers, this website will store all of those in the website. Main goal of this project is to minimize the work and maximize the result of this result processing system.

2.2 User Classes and Characteristics

"IICT WEBSITE" has basically 4 types of users.

- Teachers
  - Director
  - Course Teacher
- Students
- Official Staff

Teacher has 2 types - Director defines the course teachers who will take the courses. Student fulfill all the requirements like- fees, informations can take advantages of the website.

2.3 Product Functions

"IICT WEBSITE" store all the results of the students of program PGD, MIT. Also others programs can be included if necessary.

Before using the main function of the software result process, users have to be registered.

All users have - login_parameter, user_name, first_name, last_name, user_id, role, post, email, phone_number, present_address, parmanent_address, blood_group, password_hash and timeStamp.

Students have some extra informations after complete his/her registration , such as - user_id(foreign key), registration_id, year, semester, course_array and drop_course_array. These are the information that contains his/her result of his taken courses and program. Each programs has some data - program_name, program_id, course_id, nunmber_of_semester, total_credit and course_length. There will be onew or many course_id in each

programs.

Courses table contains - course_name, course_id, course_code, credit, semester and teacher_-id.

Every course has its own Credit Values. Those have been 2 types - lab, theory.

Result is the main feature of all. It contains the values of all the exams of a particular student. It has data field - student_id, course_id, term_test, attendance, marks(A), marks(B), teacher_id(A), teacher_id(B), entry_date(A), entry_date(B), publish_date, semester and result_state.

2.4 Operating Environment

The website will be operate in any Operating Environment - Mac, Windows, Linux etc.

2.5 Design

Student activities have 3 steps -

- From Fill Up Process

- Courses Payment

- Student Profile

Top selected Student first fill his/her form, bank payment. After verification, student pays for their selected courses. Then he can enter his profile.

Every student profile contains his/her personal information, results, taken courses, dropped courses and notice.

Notice will contain all the news of IICT.

Teacher activities have 2 steps -

- Director

- Course Teacher

Director can re-view the result, publish result, give notice and also create teacher. He can also perform course teacher activities.
Teacher creates results, view students and create notice.
Staff has only one activity -

- Notice

3 System Features

"IICT WEBSITE" is a result processing web software. So the main art of this product is to enter data of results and publish.

3.1 Description and Priority

"IICT WEBSITE" has features that are main and also some are sub. But all the feature is necessary for this software.
The features with priority up to down -

1. Result Creation : This is the goal feature of this software. It is been operated by teachers. They input the results of the students.

2. Result Re-view : This is done by director.

3. Result Publish : It is basically notice. This is mainly done by director or sometimes by staffs commanded by director.

4. Teacher : Teacher takes the courses and create the results.

5. Student : Student takes the courses of a program.

6. Staff : Their only work is to post notice.

3.2 Functional Requirements

The "IICT WEBSITE" website is being build on .NET framework, C# language, React, React Redux, JavaScript and MongoDB.
Back-End - .NET framework, C# language.
Font-End - React, React Redux, JavaScript.
Database - MongoDB.

4 Other Nonfunctional Requirements

4.1 Performance Requirements

"IICT WEBSITE" will be used for result system of IICT programs, like - PGD, MIT.
So for more interaction .NET, React and MongoDB is used.

4.2 Security Requirements

No one without registered users can inter to the website. One particular user of a section
only can perform his/her particular actions.

4.3 Software Quality Attributes

In the development phase also testing and conferences of users is been continued. So
that the quality of the software is been maintained and all the requirements are been
fulfilled.
Database, logical and also UI test is required.

4.4 Business Rules

"IICT WEBSITE" is for storing students results and publish those results of particular
programs.
Basically save working time and pressure.

5 Other Requirements

"IICT WEBSITE" needs maintenance as it is a long process software. It will need refactoring and further the requirements can be changed as the field is changing frequently.