STUDENT RESULT MANAGEMENT SYSTEM

Report

29/8/23

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STUDENT RESULT MANAGEMENT SYSTEM

1. Introduction

This document aims at defining overall software requirement for ACADEMIC RESULT

MANAGEMENT SYSTEM .Efforts have been made to define the requirements

exhaustively and accurately. The final product will be having only

features/functionalities mentioned in this document and assumptions for any

additional functionality/feature should not be made by any of the parties involved

in developing/testing/implementing /using this product .

1.1 Purpose

This specification document describes the capabilities that will be provided by the

software application STUDENT RESULT MANAGEMENT SYSTEM .It also states the

various constraints by which the system will abide. The intended audience for this

document are the development team, testing team and end users of the product.

1.2 Scope

The application will manage the information about various students enrolled in this

course in different years, the subjects offered during different semesters of the course, the

marks obtained by the various students in various subjects in different semesters.

The application will greatly simplify and speed up the result preparation and management

process.

1.3 Definitions, Acronyms, and Abbreviations

SRSSoftware

Requirement Specification

IEEEThe

Institute of Electrical and Electronics Engineers

DFDData

Flow Diagram

DBDatabase

OSOperating

System

1.4 References

IEEE 8301998

standard for writing SRS document.

Wikipedia

Software engineering by KK Agrawal

Software engineering by Roger S. Pressman

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

1.5 Overview

Student’s information is stored in mysql the authority is given to Administrator; he gives

the permission to instructor to enter the department data and student information. The

security is providing by giving password to each instructor..

2. General Description

This section of the SRS should describe the general factors that affect 'the product and its

requirements. It should be made clear that this section does not state specific

requirements; it only makes those requirements easier to understand.

2.1 Product Perspective

The application will be windows based, selfcontained

and independent software product.

Backend

DB

2.2 Product Functions

1) Information about the various Users

2) Information about subjects offered in various semesters

3) Marks obtain by Students in different semesters

4) Generation of Reports

2.3 User Characteristics

This subsection of the SRS should describe those general characteristics of the eventual

users of the product that will affect the specific requirements. (See the IEEE Guide to

SRS for more details).

2.4 General Constraints

Users at university will have to implement a security policy to safeguard the

marks related information being modified by unauthorized users (by means of

gaining access to the backend database)

Software Requirements Specification

Front end client Application

(with

data/entry/update/delete/view

and reporting facility)

ACADEMIC RESULT MANAGEMENT SYSTEM

2.5 Assumptions and Dependencies

1) The number of subjects to be taken by the student in each semester does not change.

2) The subject types do not change.

3) The number of semester do not change.

4) The users have sufficient knowledge of computers.

5) The users know the English language, as the user interface will be provided in

English.

3. Specific Requirements

This section contains the software requirements to a level of detail sufficient to enable

designers to design the system and testers to test that system.

3.1 External Interface Requirements

3.1.1 User Interfaces

The following screens will be provided:

Login screen: This will be the first screen that will be displayed. It allows user to access

different screens based upon the user role. Various fields available on this screen will be

User id: alphanumeric of length up to 10char.

Password: alphanumeric of length up to 10char

Role: Will have the following

Values: Administrator, Data entry Operator , student , teacher

2) Subject info Parameter Screen:

This screen will be accessible only to the Administrator. It will allow the user to enter the

semester number for which the user wants to access the subject information.

3) Student info Parameter Screen:

This screen will be accessible only to the Administrator. It will allow the user to enter the

Batch Year for which the user wants to access the student information.

4) Student Information Screen: This screen will be accessible only to the Administrator.

It will allow the user to modify the information about new/existing student for particular

batch year. Various fields available on these screen are:

Student Enrollment No: of the format B.E/YYYY where YYYY represents the batch year

Student Name: only alphabetic letters and length up to 40 chars.

Batch Year: of the format YYYY

5) Marks Entry Parameter Screen: This screen will be accessible only to the Teacher. It

will allow the user to enter the Batch Year, the semester number and the subject for

which the user wants to access the marks information.

6) Marks entry screen: Screen: This screen will be accessible only to the Teacher. It will

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

allow the user to add/modify/delete information about the marks obtained in the selected

subject by different students. It includes Student enrollment no, student name, internal

marks, external marks, total marks.

3.1.2 Hardware Interfaces

1) Intel p4 processor with minimum 2GHz speed.

2) RAM: Minimum 1GB

3) Hard Disk: min 20GB

3.1.3 Software Interfaces

1) Turbo C++

2) DB Server: SQL SERVER 2008

3) OS: Window Vista/XP/7/8/10

3.2 Functional Requirements

Depending upon the user role he/she will be able to access only the specific modules of

the system.

1) Login facility for enabling only authorized access to the system

2) User (with role Data Entry operator) will be able to modify /add/delete information

about different students that are enrolled for the course in different years .

3.3 Other Requirements

NONFUNCTIONAL

REQUIREMENT

1 .Safety Requirements

The database may get crashed at any certain time due to virus or operating system

failure. Therefore, it is required to take the database backup

2. Security Requirements

We are going to develop a secured database for the university .Depending upon the

category of user the access rights are decided. It means if the user is an administrator then

he can be able to modify the data, delete, append etc. All other users other than staff only

have the rights to retrieve the information about database.

3. Hardware Constraints

The system requires a database in order to store persistent data. The database should

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

have backup capabilities

DB Requirement

The following information will be placed in DB:

1) Subject info: Subject Name, Code, Semester

2) Student Info: Student Enrolment Number, Student name, enrollment year.

3) Marks info: Student Enrolment , Semester, internal marks in each subject, external

marks in each subject

4) User Account Info: UserName, User Id, password, role

4. Analysis Models

4.1 Flow Chart

Context diagramSoftware

Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

LEVEL1

DFD

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

LEVEL 2

DFD

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

USE CASE DIAGRAM

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

Software Requirements Specification

ACADEMIC RESULT MANAGEMENT SYSTEM

USE CASE DIAGRAM

Software Requirements Specification Page

ACADEMIC RESULT MANAGEMENT SYSTEM

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