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Introduction:

Documentation conventions:

This document uses the following

conventions. Include the conventions as per your application

DB - Database

DDB - Distributed Database

ER - Entity Relationship

1.1 Requirement elicitation techniques:

There are several techniques available for elicitation:

1) Stakeholder Analysis
2) Brainstorming
3) Interview
4) Focus Group
5) Interface Analysis
6) Prototyping
7) Survey/Questionnaire

1.2 Purpose:

This document describes the software requirements specification (SRS) for the Collage Management System that provides the access and management of information of different modules in a collage-like Students, Guardians, Teachers/Faculty, Finance, Examination, HR. The purpose of this document is to present a detailed description of the College Management System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the client and the developers of the system and will be proposed to the Administrative head for its approval.

1.3 Project scope:

As Colleges are growing day by day more and more, and also increasing the complexity of storing information of students and related to the college system, they face many related issues: attendance and fee of students, salary details of employees, etc.

This project is based on the educational institute system where this application gives maximum services in a single software product that is used by teacher and system administration. This project is based on a desktop application that is sharing information on different departments in a college.

Admin can view all of the information that is stored in the database through application and admin also can modify this information because the admin has full access to the system.

The teacher can view and modify the information related to students, teachers have limited access. This project can adjust any additional module at any time.

Overall Description:

2.1 Product Perspective:

The product will be a standalone application and may be run on multiple systems within an Internet network. The product will require a keyboard, mouse and monitor to interface with the users. The minimum hardware requirements for the product are specified in this document

2.2 Product features:

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This software system will be a College management system for a the members of an organization. This system will be designed to maximize the administrative, academic and overall productivity by providing tools to assist in automating the technical procedures and processes, which would otherwise have to be performed manually. By maximizing the users work efficiency and production the system will meet the user needs while remaining easy to understand and use. It is a user-friendly portal to interact, manage, access the information.

2.3 User class and characteristics:

A user class is a set of developer-defined attributes (characteristics) and methods (behaviors) that you can use to refer to multiple data items as a single entity. You create user classes are classes that you create in the visual development environment as part of an application. A user class is a convenient way to manipulate related data elements as a single object.

The HOD is responsible for maintaining the attendance, punishing any new notice, create time-table and assign teachers to them, submit the marks of the student, update the student profile depending on the attendance and exam status. Student can ask questions in the question and answer portal that has been designed. Any random student of the institution can answer that question. He can also check his internal marks and his attendance.

Staff, Administration
Faculty, Administrator

2.4 Operating Environment:

The software we have developed will be installed on different computer systems within a college and software will be connected to a centralized database through LAN within a college and then the user can interact with the system and can store the data and other users can get access the stored through a centralized database.

This application is developed for windows operating system that can be run on Windows XP and above.

Operating environment for the airline

management system is as listed below.

Include the details as per your application

- distributed database
- client/server system
- Operating system: Windows.
- database: sql + database
- platform: vb.net/Java/PHP

Project Requirements:

3.1 Functional Requirements:

The basic service that automation system will provide are:

- Entry of the new staff to the department. Entry of attendance. Entry of examination marks.
- System shall provide username and password for the users of the system. Only the username of the student will be generated by the software that is his/her email-Id.
- Register new students.
- Record the attendance of students.

- Record the internal marks of students.
- Record the feed details of students.
- Register a new teacher/employee.
- Register a new user for the system.
- Record the salary details of employees.
- Record the course details and subject information.
- Record the scholarship details and information.
- Generate various reports for all transactions in the system.

3.2 Non-Functional Requirements:

In this system, the authentication of the user is an important factor. In this system, user authentication will be done by login by user-name and password and classified by user type. Users will get access to the system as permissions are classified for that type of user.

The system has a consistent interface so that the system is easy to use and in the interface of our system buttons and forms are used to enter data related to a specific module.

3.3 Users-Requirements:

The following requirements are raised

during the analysis of the needs of the users:

- A Person Should be able to login to the system through the first page of the Application.
- The Administrator can create users as per user requirement.
- A general user will have access to see the status of particular Student id number.
- Student (user) can use all the facilities, same as which are provided to him in the college.
- Student can see attendance, notices, grades, report and other facilities in updated manner.
- There will be a separate page for every student as his account in which he can get notices, attendance, grades, assignments etc.
- Faculty can give the attendances and notices for the students.
- The administrator verifies all these reports and generates them for users to view them.

3.4 System Requirements:

i) Maintaining a teen friendly site
is deemed of highest priority in order to hold
student
attention and guide the viewer to
information that will lead to a decision to
pursue a career in BE
ii) Stimulus/Response Sequences
Maintaining a feedback column will help
website to frequently change according to
user need.
Functional Requirements
There are no special functional requirements
Very obvious: internet connection.

Requirement Validation Techniques:

4.1 Prototyping:

In this validation

techniques the prototype of the system is presented before the end-user or customer, they experiment with the presented model and check if it meets their need. This type of model is generally used to collect feedback about the requirement of the user.

4.2 Test case design:

Requirement mentioned in SRS document should be test able, the conducted tests reveal the error present in the requirement. It is generally believed that if the test is difficult or impossible to design than, this usually means that requirement will be difficult to implement and it should be reconsidered.

4.3 Security Issues:

- **Academics**

Complete academic data of students such as examination grades, scores, and overall student performance report cards could be manipulated or lost.

- **Fees And Dues**

Educators could lose important information related to fees and the remaining balance within a blink of an eye. It will lead to a huge monetary loss for the institution.

- **Spam Activities**

Hackers may intrude in the college management system and send spam emails or messages demanding money.

Administrator and Users with valid credentials will be able to log in to Portal Administrator will have access to the database structures at back-end, Administrator will have the rights for modifications as well as any updation, work for the datasets and website. Access to the various subsystems will be protected by a user log in screen that requires a username and password. to be updated in future.

References:

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