1. Introduction

1.1 Purpose

This Web Application provides facility to conduct online examination. Users of this web application are faculty and students. It saves time as it allows number of students/users to give the exam at same time and display the results at the end of the test, so there is no need to wait for the result.

- Administrator has privileges to activate and deactivate the users and also change the user level from faculty to student and vice versa.
- Faculty can register, login and add, delete, modify questions in the database.
- Student can register, login and give the test with his specific username and can see the results also.

1.2 Document Conventions

This document's scope is to describe the requirements of Online Examination System and the interfaces for it.

1.3 Intended Audience

The different types of reader that this document is intended for are developers, project managers, marketing staff, users, testers, and documentation writers. The rest of this SRS contains overall description, external interface requirements, system features, non functional requirements and other requirements.

1.4 Product Scope

Scope of this project is very broad compared to manually conducted exams. They are:

- This app can be used in educational institutions as well as in corporate world.
- Can be used anywhere any time as it is a web based application.
- No restriction that examiner has to be present when the candidate takes the test.
- No manual work of preparing question papers for faculty.
- No manual work of correction of answer sheets for faculty.
- No manual work of preparing and storing the result information.
- Less time consumption, as the result is calculated immediately after the test and displayed to the student/candidate.
- For students/candidates, it saves time of going to far away centers to give exams.

2. Overall Description

2.1 Product Perspective

The Online Examination System is developed for handling the activites for various users such as faculty, student. This app will only allow the registered users to enter the test module. The various stages in the app are as follows:

Login
System Overview
Test
Result

Login:
This window offers the users two choices for logging into the system according to the preset privileges – Student login, Faculty login and Administrator login.
The Student login will take the user to the home page of his profile where there are options like Take Test and View Previous Scores.
The Faculty login will take the user to the home page of his profile where there are options for adding, selecting, deleting and modifying the questions.
The Administrator login will take the user to the home page of his profile.

System Overview:
This window can only be accessed by the administrator. It allows the administrator to activate and deactivate the users and also to change the user level from faculty to student and vice versa.

Test:
This window contains all the exams student can give. All the exams are organized according to the categories they fall in.

Result:
This window displays the results of the exams the student just appeared. This data will be stored and displayed when the user asks for the scores. The percentage of the result obtained is displayed as a pie chart.

2.2 Product Functions

The functions are divided according to user types such as:
Administrator:
The function of the administrator is to activate/deactivate the users and also to change the user level.
Faculty:
The function of the faculty is to add/edit exams in the test module.
Student:

The function of the student is to give various exams.

2.3 User Classes and Characteristics

The various users of this app are classified into three types. They are:
Administrator
Faculty
Student

This app requires the user to have characteristics such as the user should be able to communicate and write in English and should have previous of experience of giving an online exam. If not, the user should be instructed about the basic usage of the app by authorized personnel.

2.4 Operating Environment

This app is web based so it will run in any operating system with internet access through a web browser.

2.5 Design and Implementation Constraints

The student is allowed to take the exam any number of times, until specified otherwise by the faculty while building the test. While taking the exam the student is given only a set amount of time and the remaining time should be displayed, after which the exam should close and display the result.

2.6 Assumptions and Dependencies

Proper working of this app is dependent on the internet connectivity of the user's computer.
Assumptions and Dependencies:

- It is assumed that the user has basic knowledge of the system (i.e., he/she is not a first time user) as any action by the user is considered valid during an examination.
- It is assumed that the data entered by the user while registering is true.
- It is assumed that the student does not cheat during the exam as there are no supervisors around the monitor.

3. External Interface Requirements

3.1 User Interfaces

Registration Screen:
Various fields available on this screen will be:

- Username

- Email Id
- Password

Login Screen:
Various fields available on this screen will be:
- Username
- Password

Exam Selection Screen:
Various fields available on this screen will be:
- Types of Exams

Adding Questions:
Various fields available on this screen will be:
- Question
- 4 options
- Correct answer

Deleting & Modifying Questions:
Various fields available on this screen will be:
- Questions to be selected for deleting and modifying

Selecting Questions for particular exam:
Various fields available on this screen will be:
- Questions to be selected for particular exam

Exam Details Screen:
Various fields available on this screen will be:
- Exam Name
- No. of Questions
- Time limit
- Passing Marks

Result Displaying Screen:
Various fields available on this screen will be:
- No. of correct answers
- No. of incorrect answers
- Total points
- Percentage (pie chart)
- Result (pass/fail)

3.2 Hardware & Software Interfaces

Hardware:
Screen resolution of at least 800X600 is required for proper and complete viewing of screens. Higher resolution will be accepted.

Software:
- Any windows based operating system
- MySql Server Database
- Php

3.3 Communication Interfaces

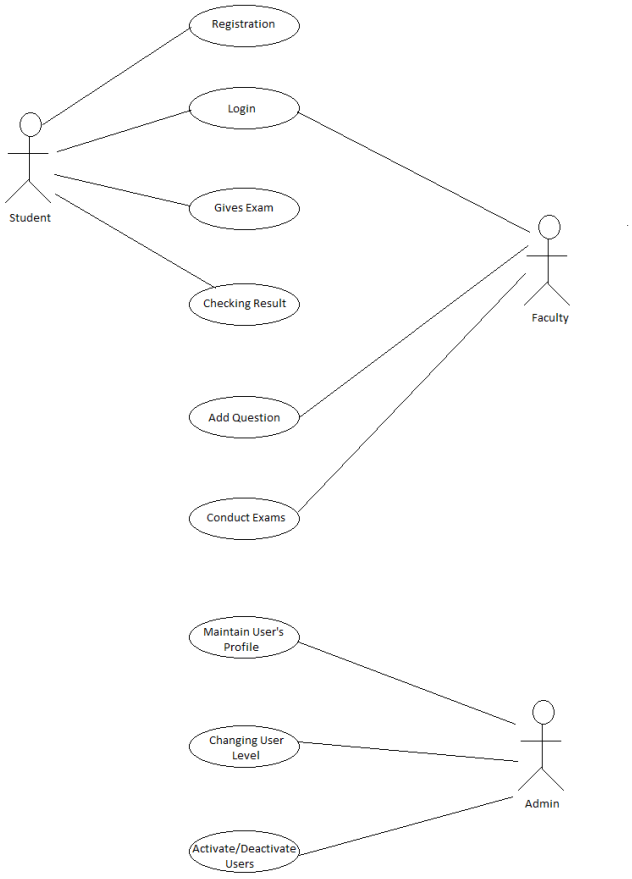
None

4. Functional Requirements

This section gives a functional requirement that is applicable to the Online Examination System. There are three sub modules in this phase.
- Student module.
- Faculty module.
- Administrator module.
- Result module.

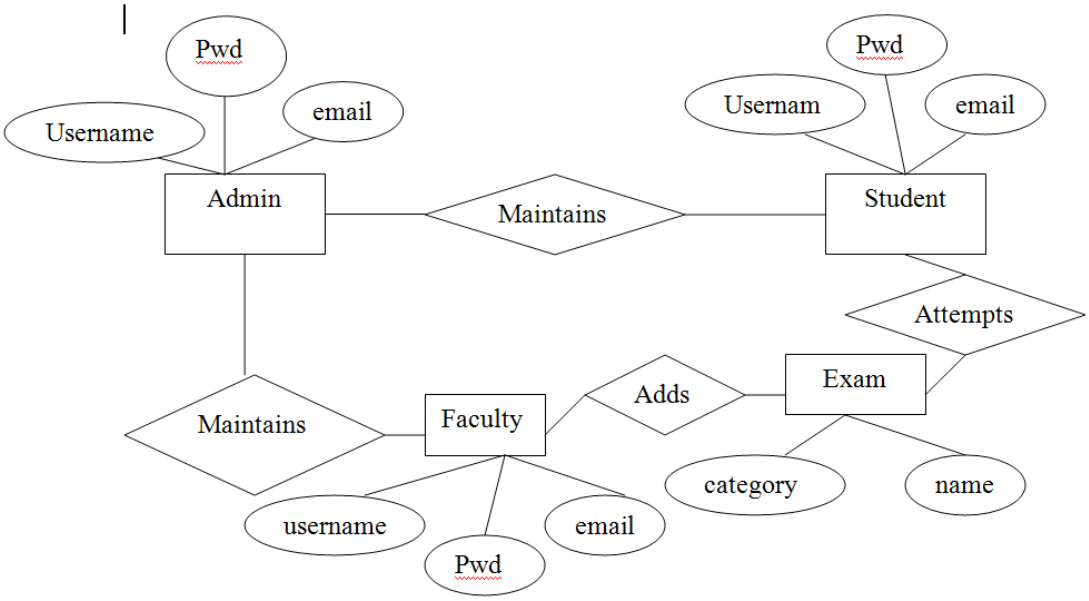
5. Behavior Requirements

5.1 Use case Diagram



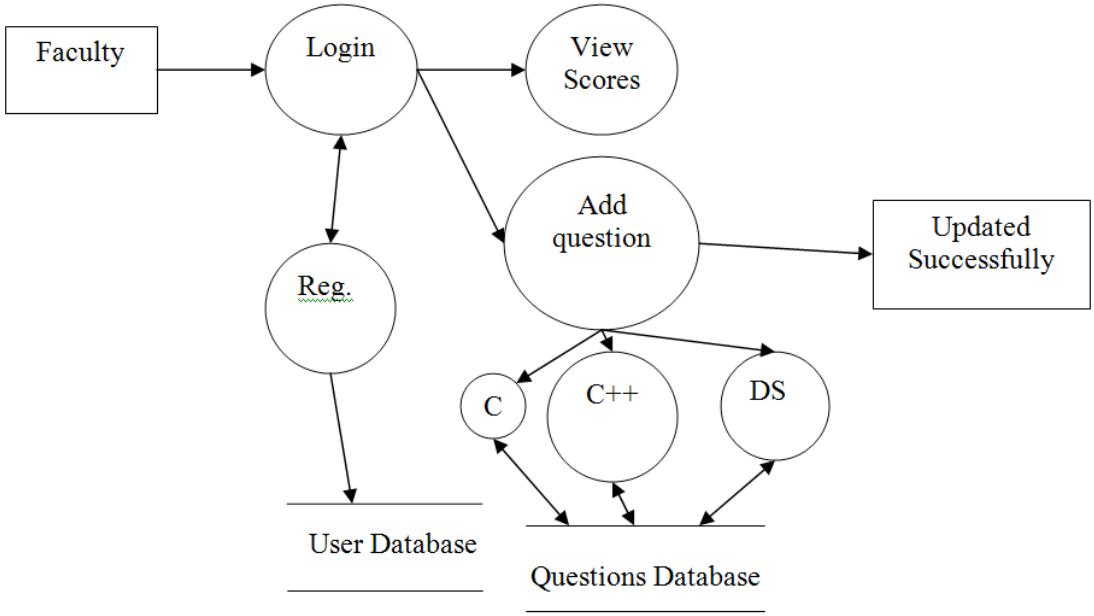
Use Case Diagram for Online Examination System

5.2 Entity Relationship Diagram

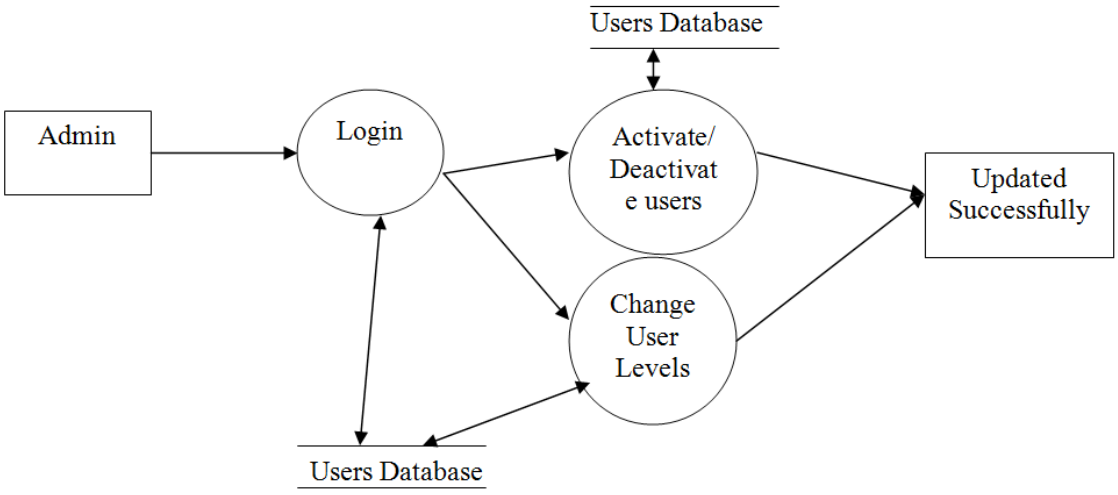


ER Diagram for online examination system

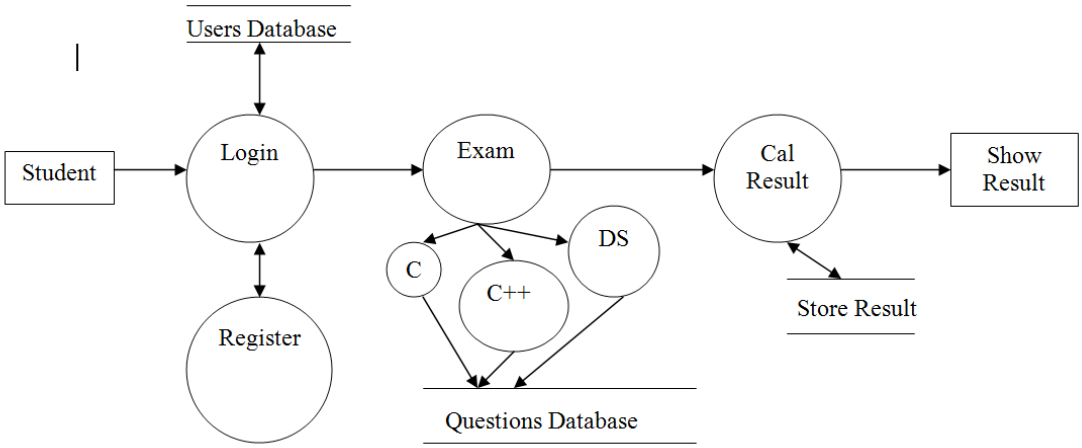
5.3 Data Flow Diagram



DFD for Faculty



DFD for Admin



DFD for Student

6. Other Nonfunctional Requirements

6.1 Performance Requirements

Some Performance requirements identified is listed below:

- The database shall be able to accommodate a minimum of 1,000 records of Users.
- The software shall support use of multiple users at a time.
- There are no other specific performance requirements that will affect development.

6.2 Safety Requirements

The database may get crashed at any time due to virus or operating system failure. Therefore, it is required to take the database backup.

6.3 Security Requirements

Application will allow only valid users to access the system. There are three types of users namely Administrator, Faculty and Student. Security is based upon the individual username and password.

6.4 Software Quality Attributes

The Quality of the system is maintained in such a way so that it can be very user friendly to all the users.

The software quality attributes are assumed as under:

- Accurate and hence reliable.
- Secured.

- Fast Speed.
- Compatability.

7. Other Requirements

Display result on user’s email-id