Project Proposal

For

<University Portal>

Submitted by

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**Project Category:**

**B-Web Application/Web Application based Information System**

# Abstract.

The university portal will act as an online platform for the interaction between student and coordinator. The coordinator will be able to enter marks, attendance and allow registration of courses through the portal in every semester. The fee of every semester will be generated depending upon the number of registered courses of the student. The student will be able to view marks of his quizzes, assignments, and exams and the timetable of his classes of whole week depending upon the courses, he had registered and student will also be able to request to drop any course to coordinator through portal and due to which his timetable will change.

The application will make the life of coordinator and student easy as it reduces the work of coordinator and makes it easy for students to interact with coordinator. The application will be developed using HTML, CSS and PHP and the database will be maintained using SQL.

# Introduction

The purpose of the application is to reduce effort that is required for coordinator to fulfill his duties as it becomes easy to insert, delete and update the record of students. Also the application is trying to provide a platform for students to keep record of their marks online and to interact with coordinator and perform many activities instead of physically going to the coordinator. It provides information that is personalized for each visitor. Also a way of reducing errors and inconsistency in the record as compared to if it is kept in hard form.

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unified way. It may contain services that provide standard search engine feature, e-mail,

news, information, databases and entertainment.

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The term portal is known as gateway which opens a gate for the user to the information that is related to him or he is allowed to view. Most Universities have now either implemented or are considering the implementation of a Universityt Portal. There is a broad range of technology in use, such as: U-Portal or Campus Pipeline, SITS E-Vision, Black Board, Oracle Portal and bespoke developments.

My application will solve all the problems that occurs in keeping the record in hard form. It reduces the effort that is made in searching, deletion, insertion and modification of record of students. It reduces time complexity of performing all the possible operation on the records. The application also allows the coordinator to perform his duties without being physically present in the university which means if the coordinator is absent, it does not stop students to interact with the coordinator. The student also do not need to be physically present in the university to perform possible tasks. The manually kept record in hard copy also increases the chances of misplacement. Also some student can easily change or destroy the records by gaining access to the location where the records are kept. The course registration will be performed much faster.

Inshallah I will be able to learn the ins and outs of database tables and relationships between them and that will make me able to structure one from a scratch. I will be able to manipulate data in the tables through SQL queries and perform any task that is required. As I will be developing application in using PHP(Personal Home Page) and SQL(Structured Query Language), this combination will make me ready to tackle wide range of projects in future. I will also learn HTML(Hypertext Markup Language) and CSS(Cascading Style Sheets) which will open gates for me to web development.

# Proposed System

The application reduces effort and chances of inconsistency as if the same data is present in more than one columns and if the data is deleted or modified from one place, the same operation is performed on the data on the other place or one can restrict the data from deletion or modification if it is present in two places. The application reduces time complexity as it performs searching, deletion, insertion and modification on the records of students in seconds by using the most efficient algorithm possible. The physical presence of user in university is not necessary as the user can use application from anywhere using any device having internet service. The chances of misplacement of data due to some mistake is reduced as in case of application the data is stored in computer and is backed up i.e. if the data at the computer is lost due to some issue it can be restored from the location where it was backed up. The chance of intentionally destroying the data is reduced, up to some extend as it is backed up, encrypted and protected by some password. But if the data is not backed up then it becomes very easy for hackers to gain access of the computer where the data is stored and delete or modify the data. Course registration is performed faster as it is done online through one click by students using their devices and they do not have to physically visit the coordinator which wastes a lot of time.

# Advantages/Benefits of Proposed System

As the effort of the students is reduced so they will be able to focus more on studies instead of coming to the office again and again which wastes a lot of time. It saves papers which are made from wood so my application is indirectly saving the environment. It is cheaper as due to the application only one coordinator can easily manage the records but in case of storing records in hard form one has to hire more people. The course registration is performed faster so proper classes can be started from the first day of semester and the valuable time of the students will not be wasted.

# Scope

The student/coordinator will be able to login through the login system by using unique username and password provided to him. Student/coordinator will be allowed to change password afterwards if he wants but the username will remain the same. Student will be able to view marks of his assignments, quizzes and examinations through his profile. He would also be able to view his attendance i.e. number of presents and absents uploaded by the coordinator. Student would also be allowed to request to coordinator to register the courses of his choice from the given list of courses. The student will only be allowed to register maximum of five courses per semester. He would also be able to request for drop of any number of courses from the list of registered courses. He would also be able to view the timetable of his classes depending upon the courses he had registered. The coordinator would be able to accept or reject the request of student from course registration and he would also be responsible to allow or reject the request of course drop. Coordinator would also be able to enter attendance i.e. number of presents and absents of students and he would also be able to enter marks of quizzes, assignments and exams of students through the application. Coordinator would also be able to edit the marks of quizzes, assignments and exams which were entered before using the application.

# Modules

**Explanation of a Module:** Module is a section of a program that performs a task. Programs consist of [modules](http://www.webopedia.com/TERM/M/module.html), each of which contains one or more routines. The term routine is synonymous with procedure, function, and subroutine.

## Module 1: Login system

This module is used to manage login operation of students and coordinator. Username and password of coordinators and students is stored in a table and whenever a username and password is entered this module tries to match username name entered with all the usernames in the table and if the username is matched, it compares the password in that row with the password entered and if it also matches then the profile of that user is opened otherwise message of “invalid password or username” is showed. This module is also responsible for changing the password of a user, first it find the username in the whose profile is opened and then update the password in that row.

## Module 2: View marks and attendance

This module is used to view marks and attendance of a student to him by taking join of tables to reach the marks of a particular student. Through username, student’s registration number is found by taking join of student and user table and then taking more joins marks of that student are found and then only the marks which do not contain null are displayed on the screen if the “View Marks” button is pressed. Same is the operation done while finding the attendance of the student and is then only the attendance which do not contain null is displayed to the screen if the “View Attendance” button is pressed.

## Module 3: Edit marks and attendance

By default, null is be stored in the table of marks and attendance. This module can be used to enter new marks or attendance and change the marks which were entered before. It asks the registration number of the student whose marks or attendance coordinator want to edit and then ask the coordinator whether it’s a quiz, assignment or exam and then asks to enter new marks and then goes to the field where those marks should be stored by using registration number and then insert the marks in that field of the table.

## Module 4: Course registration and drop

This module will allow the student to request to coordinator to allow him to register or drop a course. The coordinator will be allowed to accept or reject the request. If the request of course register is accepted, the course will be added to the table of registered courses of a student and if request is rejected no table is modified. Similarly, if the request of course drop is accepted by the coordinator, then that course will be deleted from the table of registered courses otherwise no table is modified.

## Module 5: Generate timetable

This module will be called if the button of the “View Timetable” will be pressed by the student. This module will check the courses registered by that student and will show him the time of the classes of those courses along with the teachers names. A table of the all possible courses class timings will be maintained and this module will use that table to find the timings of all the courses that student had registered. The button of “View Timetable” will be located at the profile of every student, which could only be accessed with the username and password of a student.

# System Limitations/Constraints

* Due to short time, I will not be able to take suggestions and feedback from the people who will be using the application after development which is a very bad practice.
* Since I am a beginner, so the application will not be fully protected from various attacks. That means the data will not be secure from hacker.
* The number of modules in the application are very limited due to shortage of time. A university portal should also contain some other modules.

# Tools and Technologies

Table 1 Tools and Technologies for Proposed Project

|  |  |  |  |
| --- | --- | --- | --- |
| **Tools**  **And**  **Technologies** | **Tools** | **Version** | **Rationale** |
| Atom | 1.37.0 | IDE |
| MS SQL Server | 2015 | DBMS |
| MS Word | 2016 | Documentation |
| **Technology** | **Version** | **Rationale** |
| PHP | 7.0 | Programming language |
| SQL | 2013 | Query Language |
| Html | 5 | Web Development |
|  | CSS | 3 | Style Sheet Language |

# Conclusion

In the end, I would say that a portal has become necessary for a university if the university wants to survive in the market. This technology stipulates university growth and development but it will not be enough to just initiate online university portal and associate services without taking into consideration user perceptions, requirements and needs, all of which will contribute to the overall goal of the institution to enhance learning and at the same time manage student records appropriately.

# References

https://www.wikihow.com/Write-a-Proposal

https://mashable.com/2017/08/11/learn-essential-sql-skills/