

## Portal for Student Academic Records Management

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**Abstract** -In this paper, development of a portal for student academic records management is discussed. Student admission management is an important issue for the safety in an institute. The maintenance of student information using paperwork is very difficult in terms of time. Student management portal is mainly needed in institutes and organizations. The system will have three different types of login which will be differentiate as student admin, faculty admin and administration. And it will have such functions as addition, modification and deletion of student information. The system can also generate records useful for arranging online test for different purpose like practical exam and workshops. System can also send notification to users for effective maintenance of data. And it will provide a user interface to the users and at the same time maintain an easy backup of the entire database. The system can be used to improve the work quality, reduce the maintenance cost and promote the safety of all records. This system can also generate a unique identification for each student by which user/admin can easily get their data.

**Key Words:** Administration, Online tests, User Interface, Management portal, Unique identification.

### 1.INTRODUCTION

In today's IT scenario, all educational institutes have offline admission procedure for students. These offline procedures are time consuming and complex. Time management and effort management is an important issue. In addition, the use of an onlinestudent admission system effectively promotes less time consumption and less efforts. To optimize the process of student admissions, an online admission portal is developed.

This portal has an integrated online system which adds new students and feeds in their basic data while student is taking admission in the institute. Also, all the students are managed inside a master administrator and students are served with a unique student account where student can view their basic data whichever we have fed while admitting a student in the institute.

This portal has three level administration out of which first is administrator for admissions, second is administrator for examination portal and teacher's management, and the third last is teachers to feed questions, topics, subjects and other data. On the other side student side has full featured exam interface with

rapid result generation and can attend tests for different topics and subjects. Also, all the test results are displayed inside the same.

### 2.OBJECTIVES

The aim of this project mainly reflects the main objectives to be achieved in order to overcome various issues defined in above problem definition.

The primary objectives are mainly to reduce the manual efforts, to make the current Offline Admission Portal Online which will in turn reduce the time complexity. Overall use of automation will also help us in the reduction of both issues to use proper automation technique will also be the main objective.

Another important objective to safeguard the security issue will be providing a multilevel administration module with a proper access to each admin inorder to achieve designated tasks.

Also to provide proper tabs to perform operations such as:

1) Add Student – A complete module allowing admin to new Student Data.

Further it will consist of sub modules such as Account Management, Exam Management, Student Management dedicated solely to accomplish the purpose of efficient management of Admission Records data.

2) Delete Student – Unnecessary data in database can directly be eliminated using this Tab as a single click on it will trigger a function displaying complete list of Student Id's with select options for desired deletion.

3) Update Student – Moreover considering frequent changes in student details due to them being a) Promotable and b) Personal Issues.

4) Search – A search module for retrieving desired data from database related to desired Admission details with desired options to modify or use data in various sense.

5) Web Development Technology – Using this technology will be very useful as it will be accessible anywhere thus reducing the work stress and making it more robust.

6) Other Administrations – There are various levels of administrations included in the system from student, faculties, to administrators each have separate functions on dedicated to their dashboards.

### 3. APPROACH AND DESIGN

The existing admission system has many drawbacks which all are eliminated in this new portal. This proposed system which will replace the previously outdated offline system eliminates the problem of data getting misplaced, lost or misused making it most secure. This portal will provide a better user interface which will help the user to learn the usage of application easily and quickly, which is very important for the students, because they will also have to give tests through the portal. Moreover, the security is one thing which is most important and there is no need to worry about it as various algorithms are being used in this portal. There is sensitive information which is associated with the system. So, here to improve the security features of the system, repeatedly failed login will directly deny the authority to user, successful login directly leading towards a dashboard.

For adding new test, the user will have a option there. Whereas, one can also add question to the existing test. All these options are easily available on this portal.

So, the access to various options of the portal is very easy and convenient. After adding tests or questions to the test, it will immediately get updated. Unnecessary data will be deleted on one click or multiple data can also be deleted at a time. This portal also has the feature to enable the option such as sending various notifications to user.

Following diagrams are used to illustrate the flow of the process:

#### • Data Flow Diagram

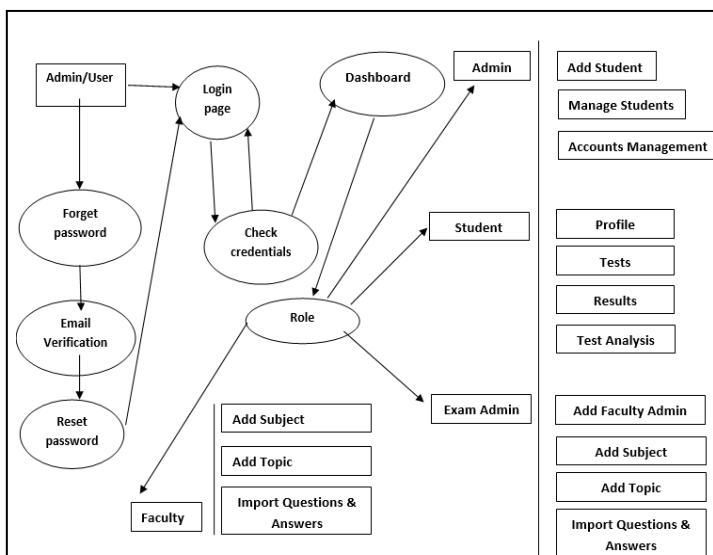


Figure 1- Data Flow Diagram

#### • Control Flow Diagram

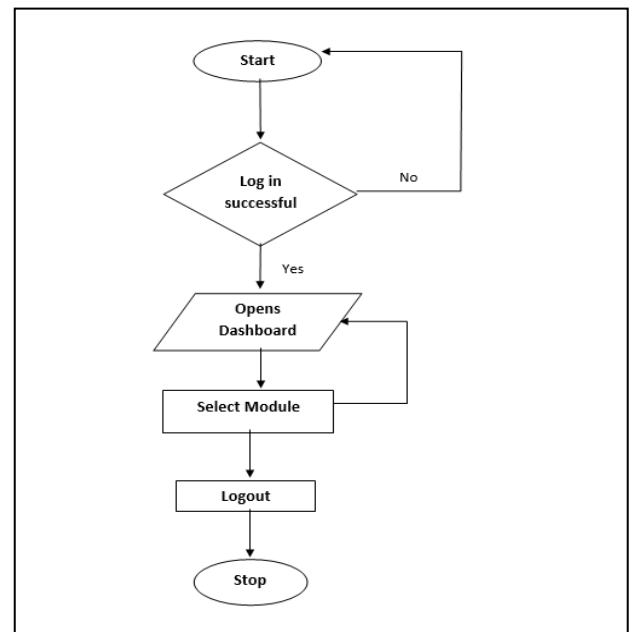


Figure 2- Control Flow Diagram

#### • Architectural Flow Diagram

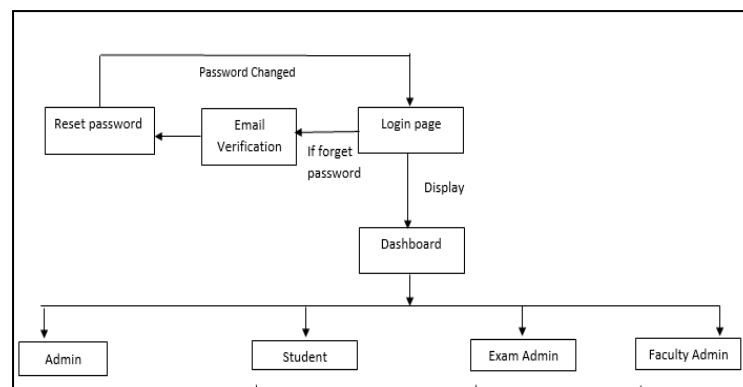


Figure 3- Architectural Flow Diagram

### 4. EXPERIMENTAL SETUP

Hardware and Software used:

#### 4.1 Hardware

Processor Used: Core i5 (Minimum – Core i3)

Ram Used: 8 GB (Minimum – 4 GB)

Hard disk Used: 1TB (Minimum – 100 GB)

Operating System : 64 bit Windows OS

#### 4.2 Software

Wamp Server 3.1.3

Visual Studio Code

Composer Dependency Injection Tool

Frameworks – Laravel 5, Bootstrap 4, JQuery 3

Front End – HTML, CSS, JS

Backend – PHP & MYSQL

## 5. RESULTS

Following are the screen captures of the software with various facilities:

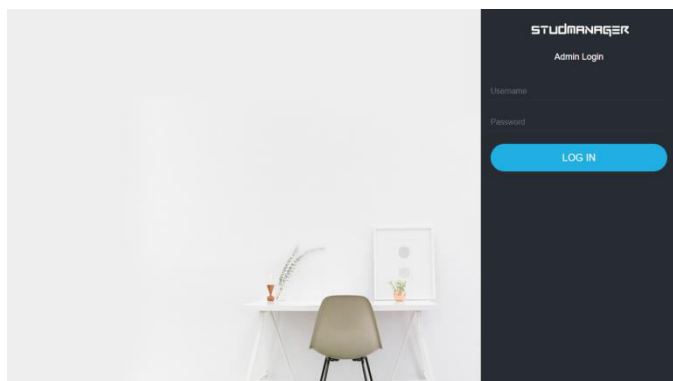


Figure 4- Admin Login

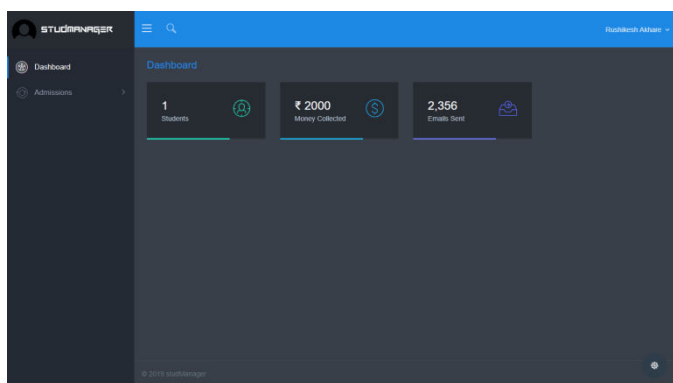


Figure 5- Admin Dashboard

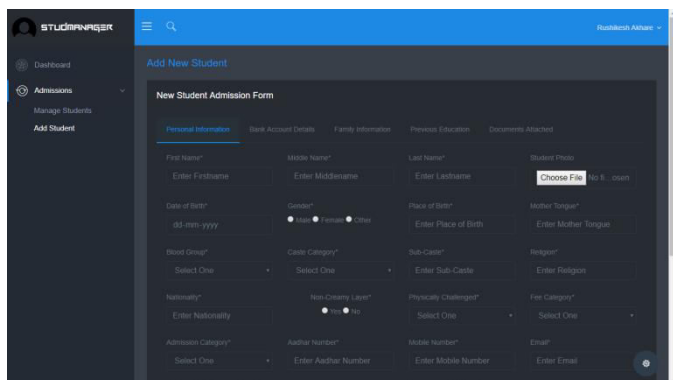


Figure 6- Add New Student – Personal Information Form

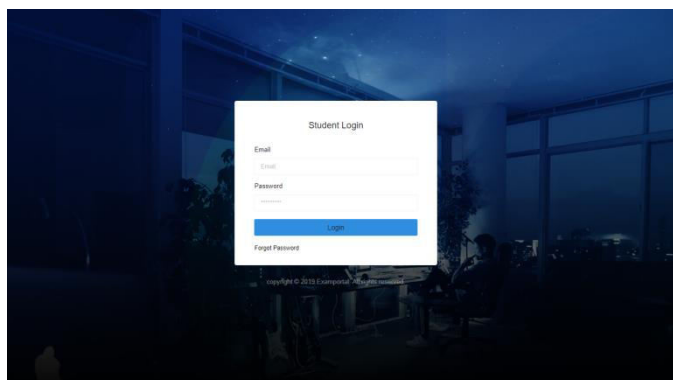


Figure 7- Student Login

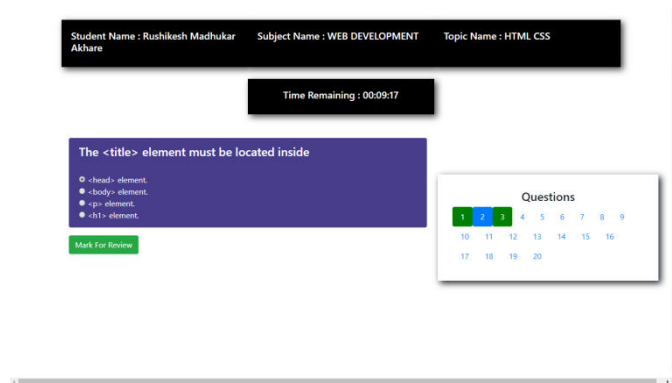


Figure 8- Student – Test Interface

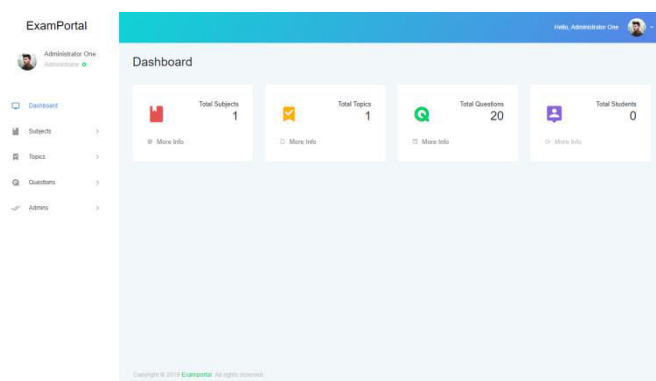


Figure 9- Exam Admin / Faculty – Dashboard

## 6. CONCLUSION

A good data maintenance program results in high level performance and greater reliability of results. It is essential that good documents and records be maintained. These will include a complete and accurate inventory of all documents provided by different administrator, lecturer and students. We have developed student academic record management system which is suitable for various purposes such as it provides a proper, faster and cost effective service to users thus reducing the time required to maintain records of the students. This system for management of equipment and it is flexible and reliable. The user interface is pleasant and comfortable. Data input is easy and quick. Fixed report modes make it possible to get desirable and reliable information rapidly and simply. The student record management system designed to fulfill the requirements of any college member For future work directions, we can include more features which are very useful to everyone. As system is developed for particular department in institute, in future system can be developed for other departments in institute and database can be centralized with other departments in institute.

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