



Advanced Education System for Faster Student Data Processing

Dr. Aradhana¹, M. Akhila², Manikanta.C³, Pallavi .k⁴, Vijaya Narasimha⁵
Professor¹, UG Student^{2,3,4,5}

Department of CSE

Ballari Institute of Technology and Management, Ballari, India

Abstract:

“Advanced Education System for faster student data processing” is to provide an easy way not only to automate functionalities of a college, but also to provide full functional reports to top management of college with the finest of details about any aspect of college. Advanced education system is a application has the perspective of attaining attraction of those colleges which don't have one good performing application for keeping their information secure and make their management easier. Advanced education System provides one attractive environment where you can manipulate data and information about students and staff easily. So we can say the Core purpose of designing “Advanced education system” is to manage the task related to the college students/employees and to reduce time in searching of appropriate candidates in college view. This system has special access to the proctor to update the student's details and also includes the counseling of the ward about his/her performance. The administrator has the complete access to database so that the users do not modify the details updated by proctor.

I.INTRODUCTION

This system provides a simple interface for the maintenance of student information. It can be used by educational Institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using online student information management system. This system focuses on presenting information in an easy and intelligible manner which provides facilities like online registration and profile creation of student's thus reducing paper work and automating the record generation process in an educational institution. The design and implementation of a comprehensive student information system and user interface is to replace the current paper records. College Staff are able to directly access all aspects of a student's academic progress through a secure, online interface embedded in the college's website. In addition to a staff user interface, the system plans for student user interface, allowing users to access information. All data is stored securely on SQL servers managed by the college administrator and ensures highest possible level of security. The system feature ensures conformity to data access and is expected to increase the efficiency of the college's record management thereby decreasing the work hours needed to access and deliver student records to users. Previously, the college relied heavily on paper records for this initiative.

II.RELATED WORK

A. Purpose of the document:

To Design and develop the application that helps to mentor students in educational institutes, which is user friendly and automates the manual work.

B. Scope of the project: This application can be used on online based system and which reduces paper work.

III.EXISTING SYSTEM

In existing system every organization follows manual procedure in which faculty should enter all the details of the students such as attendance, internal marks which takes more time and there is a chance of misplacing the records.

IV. PROPOSED SYSTEM

We eliminate paper work and chances of losing the data as the project is based on online based system and the data is stored in the database.

V.REQUIREMENTS AND SPECIFIATIONS

A .Functional Requirements

- Admin creates accounts for students who newly admitted to college.
- Documents are uploaded and notification is sent.
- Students can view and verify their internal marks, attendance percentage and university results.
- Students can download the notes and assignments.
- Faculty can update the academic details of students .

B. Non-functional requirement

Performance: The system must be interactive and the delays involved must be less .So in every action-response of the system, there are no immediate delays.

Safety: Information transmission should be securely transmitted to server without any changes in information.

Availability: If the internet service gets disrupted while sending information to the server, the information can be send again for verification.

Security: The main security concern is for users account hence proper login mechanism should be used to avoid hacking. The tablet id registration is way to spam check for increasing the security. Hence, security is provided from unwanted use of recognition software.

Usability: As the system is easy to handle and navigates in the most expected way with no delays. In that case the system program reacts accordingly and transverse quickly between its states.

B. Minimum Hardware Requirements

- Processor : Pentium IV and above
- Hard Disk : 20GB
- RAM :1GB
- Keyboard
- Mouse

C. Software Requirements

- Server Operating System: Windows server.
- Database : MySql 5.1
- Technologies : Html, CSS, Python
- Server : Tomcat 6.0

VI. SYSTEM DESIGN

The purpose of the design is to plan the solution of a problem specified by the requirement specification. This phase is the first step in moving from problem to the solution domain.

A. Use case diagram

In software and systems engineering, a use case is a list of steps, typically defining interactions between a role (known in UML as an "actor", stick man symbol) and a system, to achieve a goal. The actor can be a human or an external system. In systems engineering, the various interaction of actors within system are quantized in to use cases (oval symbol), often representing missions or stakeholder goals

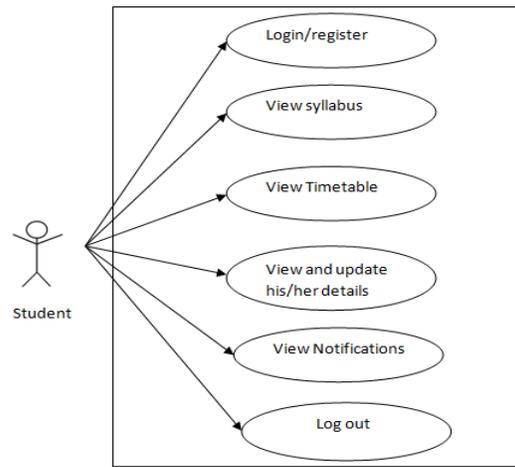


Figure.1. Use Case Diagram for SIMA.

B. Data Flow Diagram – Level – 0

The level-0 is the initial level Data Flow Diagram and it's generally called as the Context Level Diagram. It is common practice for a designer to draw a context-level DFD first which shows the interaction between the system and outside entities. This context-level DFD is then "exploded" to show more detail of the system being modeled.

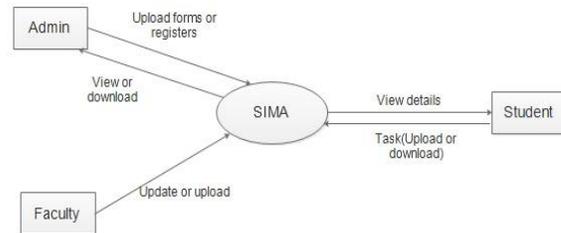


Figure.2.Context level DFD

C. Data Flow Diagram – Level - 1

The Level-1 Data Flow Diagram gives more information than the level-0 Data

Flow Diagram.

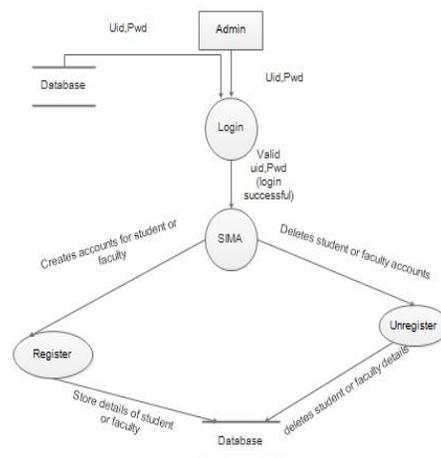
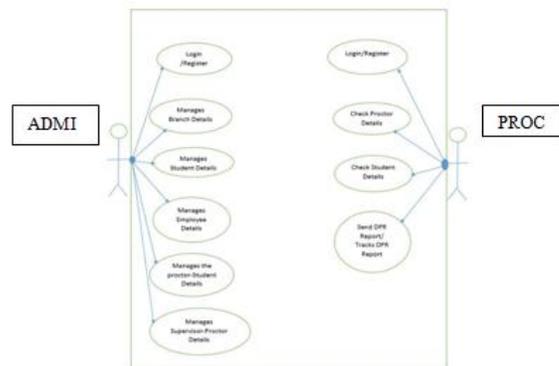


Figure.3. Level 1 DFD for Admin



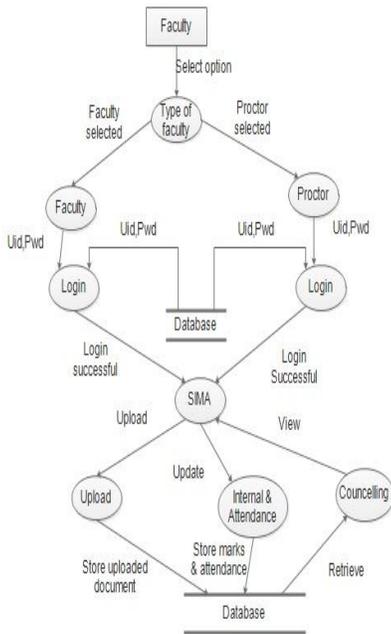


Figure.4. Level 1 DFD for Proctor.

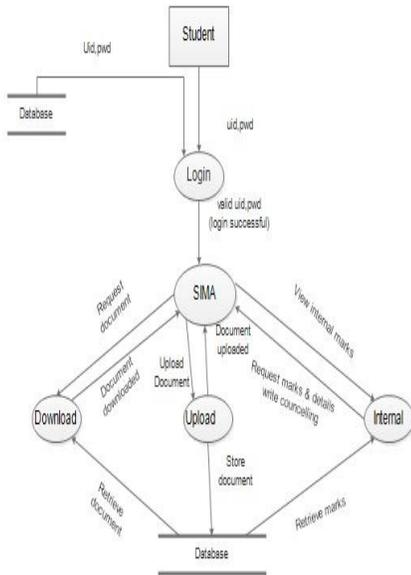


Figure.5. Level 1 DFD for Student.

VII. SNAPSHOTS



Figure.6.

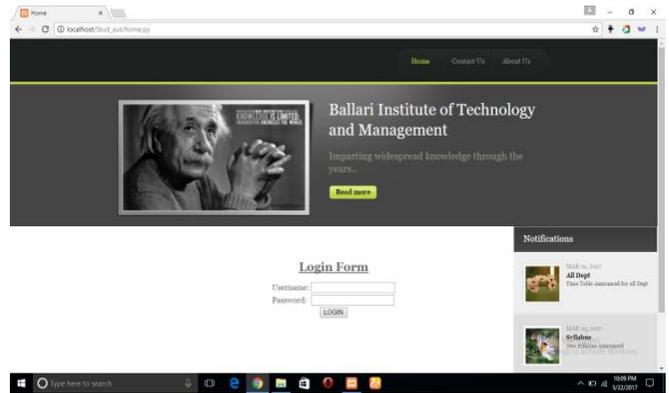


Figure.7.

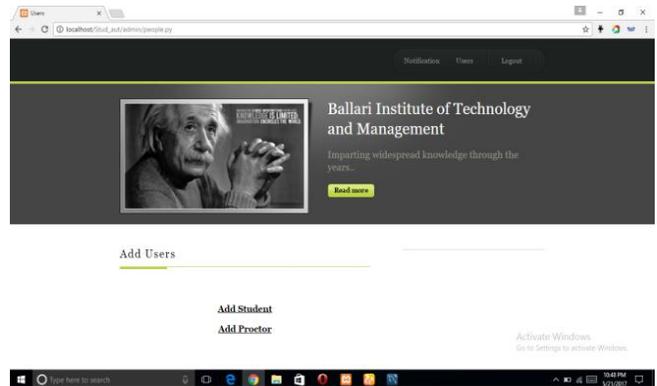


Figure.8.

VIII. CONCLUSION

Since the web based online system which reduces lots of paper work that permits admin to manipulate and present student data in a meaningful manner in generating a clear view of student records. This system is designed using modern system architecture to cope with changing requirement. This web based can further be implemented as a mobile app which can be accessed by the parents to keep track of their wards regularity and academic performance more easily.

IX. REFERENCES

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