

Web Based Design for Academic Management System and E-Learning Portal

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ABSTRACT

The Academic Management System is useful to both students and Faculties for Time table, Lesson Plan, Log Book upkeeping, viewing circulars sent by authorities, on-line assignment submission capability, Internal Marks entry, attendance and Mentoring and prepare the final report to be sent to parents. This system is developed as Web Application in ASP/ASP.Net for front end and MS SQL Server as the backend. Security is achieved by using SQL injections prevention coding and encrypted cookies and sessions. Username and password also given only in encrypted form. This automated implementation in our University environment has eased the work-load and enhanced the work efficiency of faculty members and students also feel happy to receive instantly all their Academic Information.

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1. Introduction

Before the advent of Web technologies, All the academic related work in educational institutions are done only manually. This process is cumbersome, time-consuming, difficult to maintain records, increased demand for resources boring due to mechanical routines etc leading to loss of efficiency of faculties involved. In this work we have implemented an automated academic maintenance system which eliminates all possible problems inherent with manual one and improves the overall efficiency, eases the work load by relieving all parties involved rid of their mechanical routines.

2. Proposed system

This system is developed as Web Application in ASP/ASP.Net for front end and MS SQL Server as the backend. Security is achieved by using SQL injections prevention coding and encrypted cookies and sessions. Username and password also given only in encrypted form. Thus it is user friendly and deployed in high security environment to protect the sensitive private data of users.

3. FEASIBILITY STUDY :

The main aim of feasibility study is to determine whether time and other resources invested, cost of maintenance and manpower involved in this project achieves the desired results. The following studies were carried out.

a).Economic Feasibility

Economic feasibility stands for the effectiveness of the implementation with minimum cost incurred. The application is deployed in Web environment with any browser accessibility.

b). Technical Feasibility

To develop this application a LAN server, Web Server, database Server, internet connection and IDE such as .Net are required. All these requirements being supplied by our

Centre for Computing System the application is successfully launched and running in our campus LAN server.

c). Social Feasibility

It is also socially feasible since there is no need to give technical guidance while using the system as all the modules interfaces are GUI – based and thus become user-friendly and easy to understand their functionalities.

4. System Requirements

a). Hardware Requirement:

Processor : Intel Xeon Processor**RAM** : 8 GB**HARD DISK SPACE** : 300 GB

b.) Software Requirement:

Operating system: Windows 2008 server**Services and applications**: iis7 with .net framework 4.0**IDE** : VISUAL STUDIO**Front End** : ASP/ASP.NET**Back End** : MS SQL SERVER.

5. Features

The following *modules* are designed for Development and hosting of Software Services catering to Departmental needs.

a).Attendance Management System

The software maintains the reports of the attendance of all the students, with access to authorized users through the Internet with a provision to calculate attendance percentage.

b). Admission Process Automation Software

This software helps to receive and process the applications received for admission, right upto the grant of admission, providing constant updates to the prospective candidates through the University Web Portal.

c). Online Courses

Design, development and deployment of Online courses on Sanskrit and Astrology.

6. Advantages :

- As the system is automated it eliminates all manual involvement and reduces the work –Load of the Staff Members.
- Students as well as Staffs can access the data at any time inside the campus just by logging –in
- As the data resides in the web server, all are free to any system available in the LAN and Wifi environment.
- High Security is maintained.

7. Result

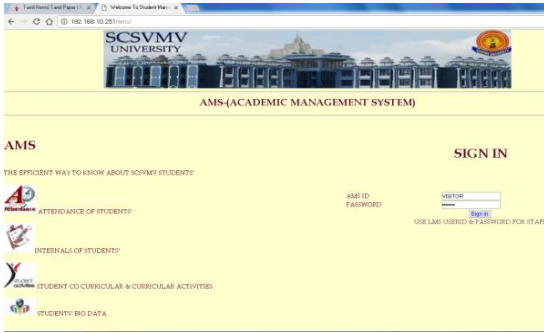


Fig 1.Home Page for (Academic management system).



Fig 2. Menus for Inserting Data in AMS.

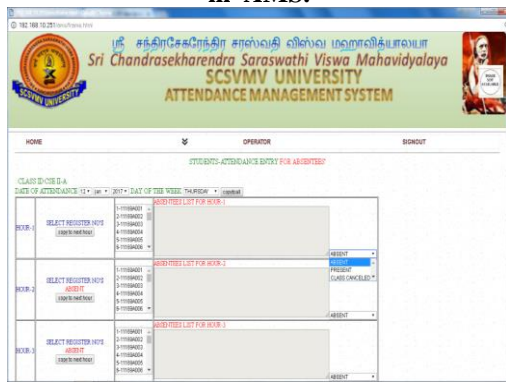


Fig 3.Inserting Attendance in AMS.



Fig 4.Menus for Various Reporting options in AMS.



Fig 5. Sample Attendance Report in AMS.

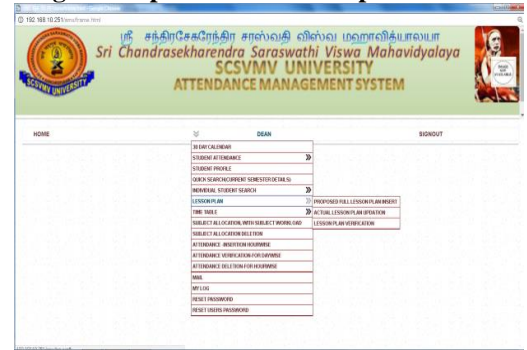


Fig 6.Menus for Faculty Lesson plan in AMS.

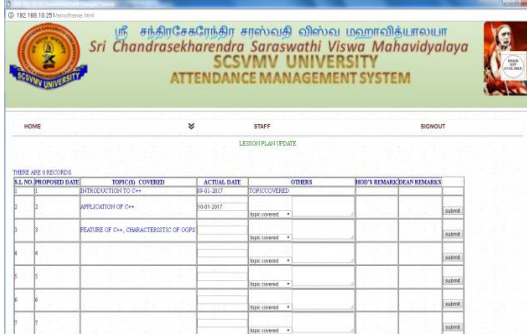


Fig 7.Sample Lesson plan update in AMS.

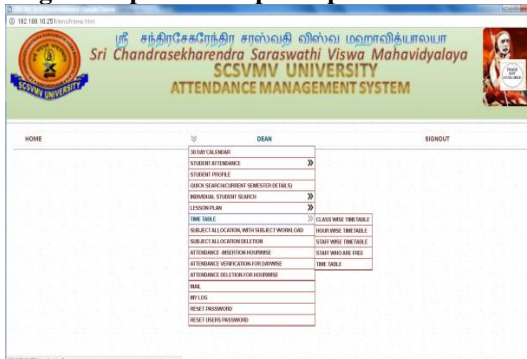


Fig 8.Menus for Timetable in AMS.

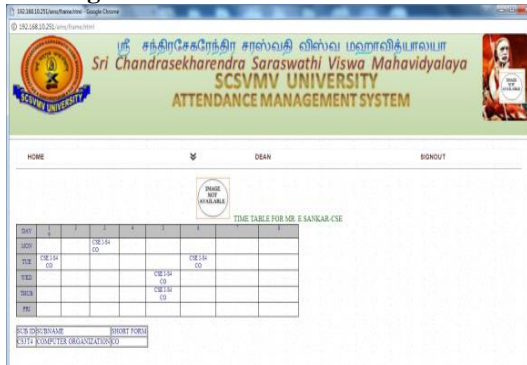


Fig 9.Sample Timetable in AMS.

REG. NO.	NAME	ATTENDANCE
IT1001001001
IT1001001002
IT1001001003
IT1001001004
IT1001001005
IT1001001006
IT1001001007
IT1001001008
IT1001001009
IT1001001010
IT1001001011
IT1001001012
IT1001001013
IT1001001014
IT1001001015
IT1001001016
IT1001001017
IT1001001018
IT1001001019
IT1001001020

Fig 10. Attendance log for the particular Subject in AMS.

Fig 15. Log details for Course Learners in Online Astrology Course.

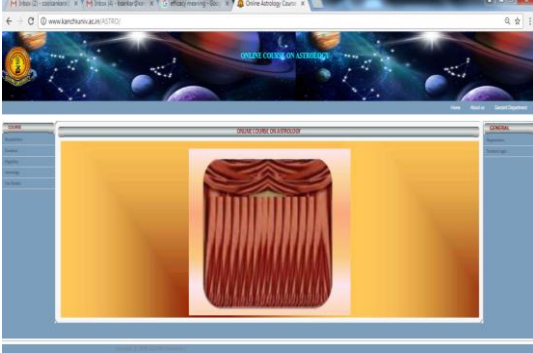


Fig 11. Online Astrology Course Home Page.

Fig 16. Approval of Enabling Examination in Course Completed Learners - Online Astrology Course.

Fig 12. Sample Numerology Calculation in Online Astrology Course.

Fig 17. Queries received from Learner - Online Astrology Course.

Fig 13. Syllabus for Online Astrology Course.

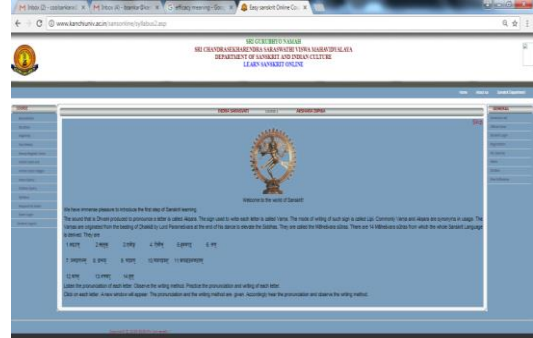


Fig 18. Instruction to Starting Page – Online Sanskrit Course.

Fig 14. data for Online Astrology Course .

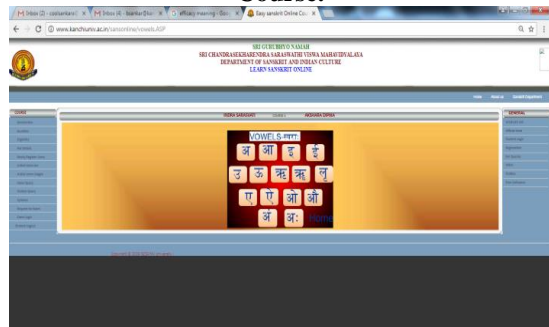


Fig 19. Vowels Symbols in Sanskrit – Online Sanskrit Course.

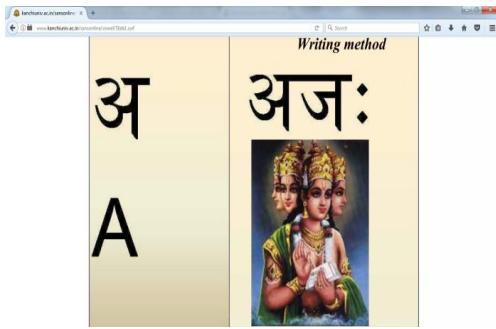


Fig 20. Studying Letters Sounds & Writing Methods in Sanskrit – Online Sanskrit Course.



Fig 21. Studying Writing methods for given Vowel in Sanskrit – Online Sanskrit Course.



Fig 22. Requesting for Online Exam – Online Sanskrit Course.

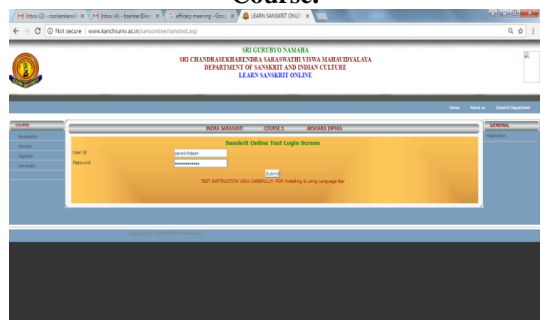


Fig 23. Online Exam Login page – Online Sanskrit Course.



Fig 24. Requirement for Online Exam – Online Sanskrit Course.

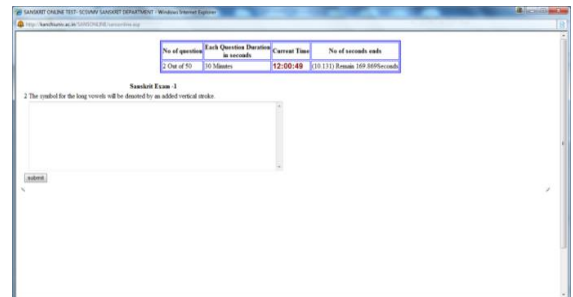


Fig 25. Online Exam Questions / Answering Method – Online Sanskrit Course.

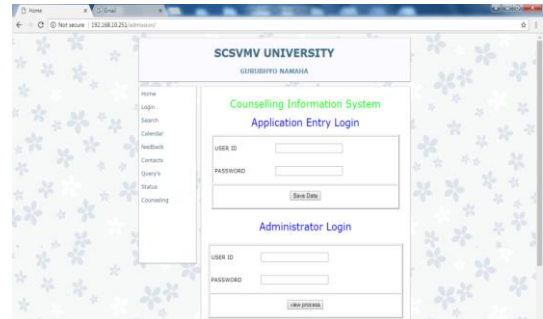


Fig 26. Home Page – Admission System.

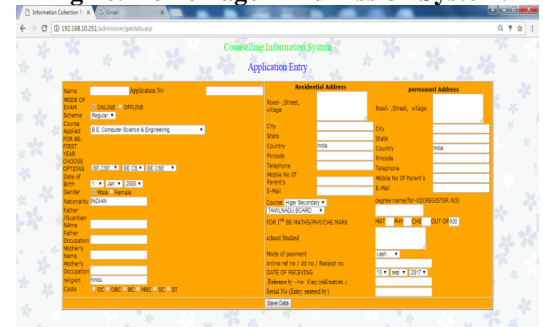


Fig 27. Application Entry – Admission System.

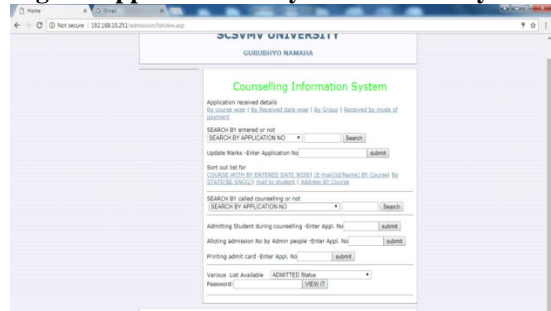


Fig 28. Counselling Process & Reports – Admission System.

8. Conclusion:

The system adopted is found to be efficient in functioning, efficacious in catering the need of all the people involved. In future it is proposed to develop the same system as enhanced by the feedback and also as a Mobile Application

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