VISVESVARAYA TECHNOLOGICAL UNIVERSITY JNANA SANGAMA, MACHHE BELAGAVI – 590018 **KARNATAKA**



A Mini-Project Report On "College Internals Management System"

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DBMS LABORATORRY WITH MINI PROJECT (15CSL58) COURSE OF Vth SEMESTER

Submitted by

NAGESH KOLKAR V S [1CG19IS034] **PUNEETH N** [1CG19IS039]

Guide: Mr. Anil Kumar M. Tech., Asst. Prof., Dept. of ISE CIT, Gubbi.

HOD: Dr. Gavisidappa Head, Dept. of ISE CIT, Gubbi.

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING



Channabasaveshwara Institute of Technology (Affiliated to VTU, Belgaum & Approved by AICTE, New Delhi)





(NAAC Accredited & ISO 9001:2015 Certified Institution)

NH 206 (B.H. Road), Gubbi, Tumkur – 572 216. Karnataka.



Channabasaveshwara Institute of Technology





(Affiliated to VTU, Belgaum & Approved by AICTE, New Delhi)
(NAAC Accredited & ISO 9001:2015 Certified Institution)
NH 206 (B.H. Road), Gubbi, Tumkur – 572 216. Karnataka.

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

2021-22

CERTIFICATE

This is to certify that the project entitled "COLLEGE INTERNALS MANAGEMENT SYSTEM" has been successfully carried out by NAGESH KOLKAR V S [1CG19IS034] and PUNEETH N [1CG19IS039] in partial fulfillment for the V semester during the academic year 2021 - 22. It is certified that all the corrections / suggestions indicated for internal assessment have been incorporated in the report. The project report has been approved as it satisfies the academic requirements in respect of project work prescribed for the V semester.

project work prescribed for the V semeste	er.
Signature of guide	Signature of HOD
Mr. Anil Kumar M.Tech, Asst. Prof., Dept. of ISE CIT, Gubbi.	Dr. Gavisidappa Head, Dept. of ISE CIT, Gubbi.
Signatur	re of Principal
P	Suresh D S Principal T, Gubbi.
Exte	ernal Viva Signature with date
1	
7	



Channabasaveshwara Institute of Technology





(Affiliated to VTU, Belgaum & Approved by AICTE, New Delhi)
(NAAC Accredited & ISO 9001:2015 Certified Institution)
NH 206 (B.H. Road), Gubbi, Tumkur – 572 216. Karnataka.

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING 2021-22

DECLARATION

I, NAGESH KOLKAR V S [1CG19IS034] and PUNEETH N [1CG19IS039] student of V Semester, B E., in Information Science and Engineering, C.I.T, Gubbi, hereby declare that the dissertation work entitled "COLLEGE INTERNALS MANAGEMENT SYSTEM", embodies the report of our project work carried out independently by us under the guidance of Mr. Anil Kumar, Assistant Professor Department ISE, CIT, Gubbi, as partial fulfillment of requirements for the V Semester during the academic year 2021-22. I further declare that the project has not been submitted for the award of any other degree.

Place: GUBBI NAME: NAGESH KOLKAR V S

Date: USN: 1CG19IS034
NAME: PUNEETH N
USN: 1CG19IS039

ABSTRACT

The success of any organization such as School of Public Health, University of Ghana hinges on its ability to acquire accurate and timely data about its operations, to manage this data effectively, and to use it to analyze and guide its activities. Integrated student database system offer users (Student, Registrar, HOD) with a unified view of data from multiple sources. To provide a single consistent result for every object represented in these data sources, data fusion is concerned with resolving data inconsistency present in the heterogeneous sources of data. The main objective of this project is to build a rigid and robust integrated student database system that will track and store records of students. This easy-to-use, integrated database application is geared towards reducing time spent on administrative tasks.

The system is intended to accept process and generate report accurately and any user can access the system at any point in time provided internet facility is available. The system is also intended to provide better services to users, provide meaningful, consistent, and timely data and information and finally promotes efficiency by converting paper processes to electronic form. The system was developed using technologies such as PHP, HTML, CSS and MySQL. PHP, HTML and CSS are used to build the user interface and database was built using MySQL. The system is free of errors and very efficient and less time consuming due to the care taken to develop it. All the phases of software development cycle are employed and it is worthwhile to state that the system is very robust. Provision is made for future development in the system.

ACKNOWLEDGEMENT

A great deal of time and lot of effort has gone into completing this project report and documenting it. The number of hours spent in getting through various books and other materials related to this topic chosen by me have reaffirmed its power and utility in doing this project.

Several special people have contributed significantly to this effort. First, I am grateful to our institution **Channabasaveshwara Institute of Technology**, Gubbi, which provides me an opportunity in fulfilling my most cherished desire of reaching the goal.

I acknowledge and express my sincere thanks to our beloved Principal and Director (Tech.) **Dr. Suresh D S** for his many valuable suggestions and continuous encouragement and support in the academic endeavours.

I express our sincere gratitude to **Dr. Shantala C P,** Vice Principal & Head, Department of CSE, for providing his constructive criticisms and suggestions.

Thanks to **Dr. Gavisidappa**, head of the Department of Information Science and Engineering for his guidance on how to approach an engineering problem and come up with a solution in an organized manner.

I wish to express my deep sense of gratitude to Mr. Anil Kumar, Mrs. Thara D K and Mr. Praveen Kumar K C, Department of Information Science and Engineering for all the guidance and who still remains a constant driving force and motivated through innovative ideas with tireless support and advice during the course of project to examine and helpful suggestions offered, which has contributed immeasurably to the quality of the final report.

Project Associate:

NAGESH KOLKAR VS [1CG19IS034]

PUNEETN N [1CG19IS039]

CONTENTS

ACKNOWLEDGEMENT

ii

CHAPTERS	PAGE NO
1. INTRODUCTION	5
2. HISTORICAL REVIEW	7
3. REQUIREMENT SPECIFICATION	8
 3.1 SYSTEM REQUIREMENTS 	
 3.2 HARDWARE CONFIGURATION 	
 3.3 SOFTWARE CONFIGURATION 	
 3.4 DEVELOPMENT ENVIRONMENT 	
 3.5 NORMALIZATION 	
4. SYSTEM DESIGN	10
 4.1 E R DIAGRAM 	
 4.2 SCHEMA DIAGRAM 	
5 SYSTEM IMPLEMENTATION	12
 5.1 MODULES DESCRIPTION 	
 5.2 OPERATIONS PERFORMED 	

6. SAMPLE OUTPUT	13
6.0 INDEX PAGE	
6.1 ADMIN LOGIN	
6.2 STUDENT LOGIN	
6.3 ADMIN DASHBOARD	
6.4 STUDENT DETAILS	
6.5 STUDENT DETAILS UPDATE	
6.6 STUDENT MARKS DETAILS	
6.7 RESULT VIEW	
7. CONCLUSION AND FUTURE WORK	17

INTRODUCTION

1.1 Problem definition

Information plays a vital role in the development and growth of every organization. Currently, the various departments manage student information independently in their own ways. There are no common, standardized process and program for capturing, processing and storing student's information. This has kept student information disintegrated in different departments and information provided to the various departments by the students is characterized with discrepancies.

The various departments have systems in place to store and process student data but the systems are not able totalk to each other (Interoperability). This makes it difficult for the registrar to collate information of students across departments. For instance, if the registrar wants information about students with respect to their academic performance urgently, he must go to all the departments and collect the required data. On occasions where the department is not able to produce the needed information immediately, the business or activity at that particular time would come to a standstill. On the other hand, time is being wasted going round the various departments to solicit data. This situation is very frustrating and impedes smooth operations and decision making process.

One of the policies of School of Public Health, for that matter University of Ghana is the fact that students must not fail in three or more courses. Referrals in three or more courses will warrant expulsion from the school. The current information system is incapable of providing students with exams result before courses are registered for the next semester.

A past student who needs a transcript will have to travel all the way to the school before he could access it because the current system is so weak to the extent that it is unable to provide this document online.

The problems facing the current manual system are data redundancy, difficult to update and maintain, inconsistent data, insecurity, difficult to impose constraints on various data file and difficult to backup.

It is against this backdrop that automated Student Database System is being developed to address the problemscatalogued above.

1.2 Objectives

The purpose of developing the Examination Management Automation System is to automate the regular way of organizing the examinations in an educational institute and generating reports according to the examination type and time.

A. Disadvantages of current system:

- Takes a lot of time.
- Resembles like a complex problem while allocating faculty to different rooms.
- Less Accurate.
- Requires more manual work.
- Paper work required.
- Previous records not stored.

B. Advantages over current system:

- Easy to handle and operate.
- Friendly interface.
- Fast and convenient.
- Less human effort.
- Easy to update.
- Easy message passing.
- Smart way of communication
- No paper work required

HISTORICAL REVIEW

2.1 History of college internal management system

A project on Student Information Management system which was carried out by Kapil Kaushik Ankur Agarwal Tushar Somani, an IT student of Institute of Engineering and Technology, Maharishi provides a simple interface for maintenance of student information. It can be used by any educational institute or colleges to maintain records of students easily. Achieving this objectives is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information can be very time consuming. All these problems are solved using this project. Throughout the project the focus has been on presenting information in an easy and intelligible manner. The project is very useful for those who want to know about Student Information Management Systems and want to develop software/websites based on the same concept. The project provides facilities like on line registration and profile creation of student thus reducing paper work and automating the records generation process in an educational institution.

The goal of this chapter is to explain the theory of database management system development which will be applied in the development of student database management system for school of public health, University of Ghana. The following issues will be presented respectively.

This will give an insight into the project area and help to get information that will enhance the development of the student database management system.

2.2 History of database management system

A Database Management System [1] allows a person to organize, store, and retrieve data from a computer. It is a way of communicating with a computer's "stored memory". In the very early years of computers, "punch cards" were used for input, output, and data storage. Punch cards offered a fast way to enter data, and to retrieve it. Herman Hollerith is given credit for adapting the punch cards used for weaving looms to act as the memory for a mechanical tabulating machine, in 1890.

Much later, databases came along. Databases (or DBs) have played a very important part in the recent evolution of computers. The first computer programs were developed in the early 1950s, and focused almost completely on coding languages and algorithms

REQUIREMENT SPECIFICATIONS

3.1 SYSTEM REQUIREMENTS

3.1.1 Hardware Configuration

- 1. Pentium IV Processor
- 2. 512 MB RAM
- **3.** 40GB HDD
- **4.** 1024*768 Resolution Color Monitor

3.1.2 Software Configuration

- 1. OS: Windows XP
- 2. PHP Triad (PHP5 6, MySQL, Apache, and PHPMyAdmin)

3.2 DEVLOPMENT ENVIRONMENT

3.2.1 Frontend-HTML, CSS-

It is the standard mark-up language for creating web pages and web applications. With CascadingStyle Sheets (CSS) and PHP, it forms a triad of cornerstone technologies for the World Wide Web.Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document. HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of webpages. Inclusion of CSS defines the look and layout of content. The World Wide Web Consortium(W3C), maintainer of both the HTML and the CSS standards, has encouraged the use of CSS overexplicit presentational HTML since 1997.

3.2.2 Backend-MySQL-It is an open-source relational database management system (RDBMS). TheMySQL development project has made its source code available under the terms of GNU General Public License, as well as under a variety of proprietary agreements. MySQL is also used in many high-profile. Large-scale websites, including Google, Facebook, Twitter, Flickr, YouTube.

3.3 PHP-[2] PHP is a server-side scripting language designed for web development but also used as ageneral-purpose programming language. PHP is now installed on more than 244 million websitesand 2.1 million web servers. Originally created by Rasmus Lerdorf in 1995, the reference implementation of PHP is now produced by The PHP Group. While PHP originally stood for Personal Home Page, it now stands for PHP: Hypertext Preprocessor, a recursive backronym.PHPcode is interpreted by a web server with a PHP processor module, which generates the resulting web page: PHP commands can be embedded directly into an HTML source document rather thancalling an external file to process data. It has also evolved to include a command-line interface capability and can be used in standalone graphical applications. PHP is free software released under the PHP License. PHP can be deployed on most web servers and also as a standalone shell on almost every operating system and platform, free of charge.

3.4 APACHE - The Apache HTTP Server is a web server software notable for playing a key role in the initial growth of the World Wide Web. In 2009 is became the first web server software to surpass the 100 million web site milestone. Apache is developed and maintained by an open community of developers under the auspices of the Apache Software Foundation. Since April 1995Apache has been the most popular HTTP server software in use. As of November 2010 Apache served over 59 35% of all websites and over 66,56% of the first one million busiest websites.

3.5 XAMPP-[3] XAMPP is a small and light Apache distribution containing the most common web development technologies in a single package. Its contents, small size, and portability make it theideal tool for students developing and testing applications in PHP and MySQL. XAMPP is available as a free download in two specific packages: full and lite. While the full package download provides a wide array of development tools, XAMPP Lite contains the necessary technologies that meet the Ontario. Skills Competition standards. The light version is a small package containing Apache HTTP Server, PHP, MySQL, phpMyAdmin, Openssl, and SQLite.

SYSTEM DESIGN

4.1 ER DIAGRAM

An entity-relationship model (ER model) describes inter-related things of interest in a specific domain ofknowledge. An ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between instances of those entity types.

In software engineering an ER model is commonly formed to represent things that a business needsto remember in order to perform business processes. Consequently, the ER model becomes an

abstract data model that defines a data or information structure that can be implemented ina database, typically a relational database

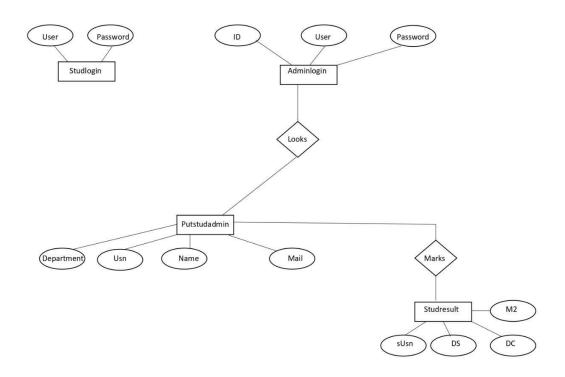


Fig 4.1 ER Diagram of College internals management system

4.2 SCHEMA DIAGRAM

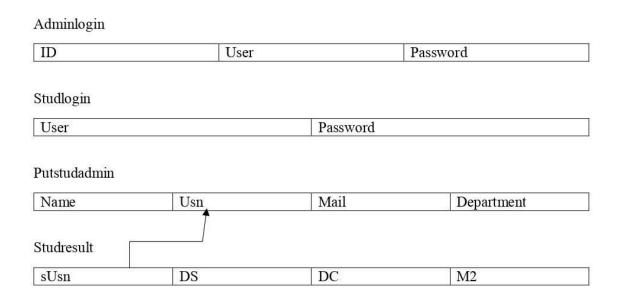


Fig 4.2 Schema diagram for College internals management system

SYSTEM IMPLEMENTATION

5.1 Modules description

Create, create table statement is used to create table to store data. Integrity constraints like primary key, foreign key, unique key, can be defined while creating the table

5.2 Operation Performed

Insertion, insertion is use to insert the tuple or row to the table. We insert value from frontend by making use HTTP the value inserted from to frontend will be going to store in backend database in XAMPP Server.

Update, update will help to edit the tables in the database. In this project we have given update option for table package, to update the place column in package table.

Delete, delete will help us to delete a tuple or row from the table. In this project we have delete option for table employee to delete the particular row or employee information from the table.

Trigger, a trigger is a special kind of stored procedure that automatically executes when an event occurs in the database server. DML triggers execute when a user tries to modify data through a data manipulation language (DML) event. DML events are INSERT, UPDATE, OR DELETE statements on a table or view.

Stored procedure, a stored procedure is a set of Structure Query Language (SQL) statements with an assigned name, which are stored in a relational database management system as a group, so it can be reused and shared by multiple programs.

View, views can join and simplify multiple tables into a single virtual table.

Views can act as aggregated tables and can hide the complexity of the data

SAMPLE OUTPUT

6.1 Index page



Fig 6.1 Index page

6.2 Admin login

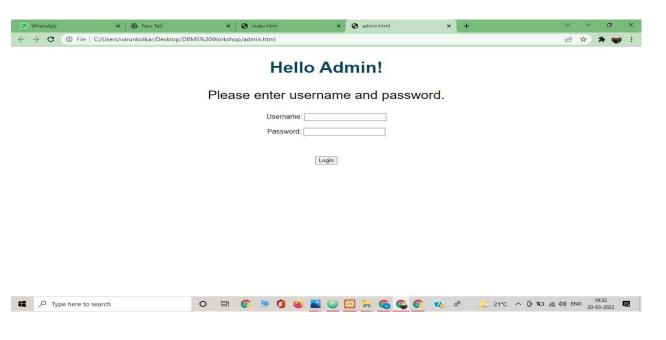


Fig 6.2 Admin login

6.3 Student login

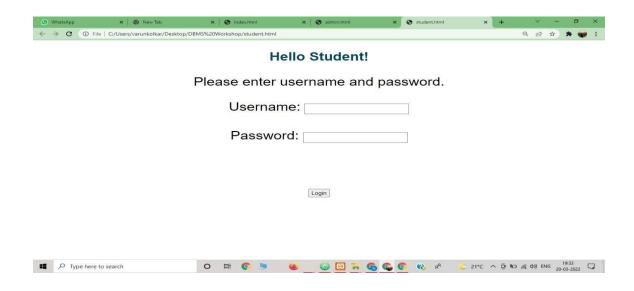


Fig 6.3 Student login

6.4 Admin Dashboard

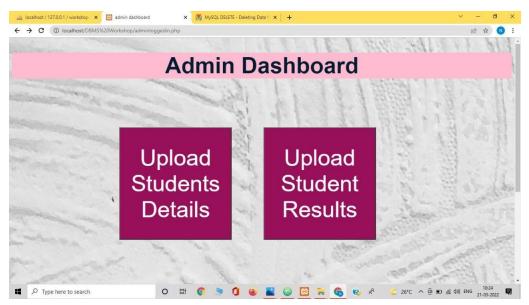


Fig 6.4 Admin dashboard

6.5 Student Details

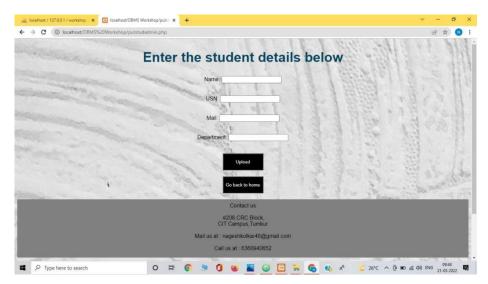


Fig 6.5 Student details

6.6 Student details update

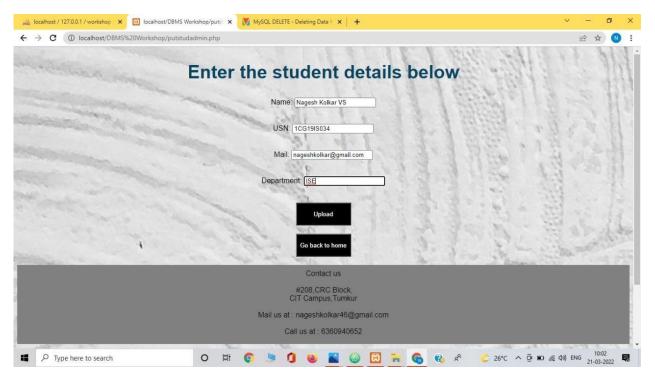


Fig 6.6 Student details update

6.7 Student marks details

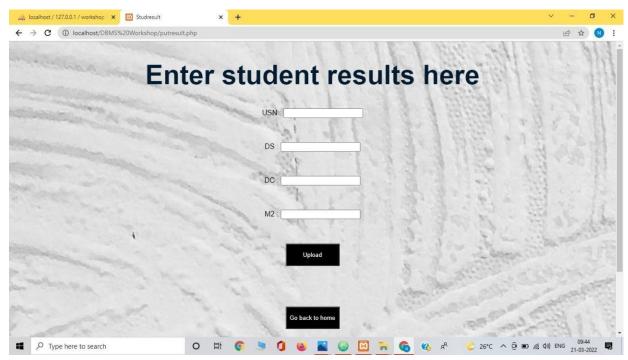


Fig 6.7 Student marks details

6.8 Result view

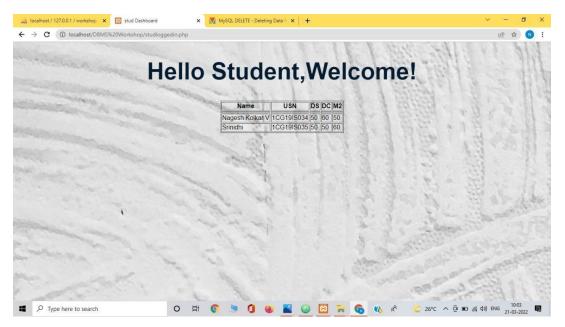


Fig 6.8 Result view

CONCLUSION AND FUTURE WORK

To conclude the description about the project: The project, developed using PHP MySQL is based on the requirement specification of the user and the analysis of the existing system, with flexibility for future enhancement

The expanded functionality of today's software requires an appropriate approach towards software development. This system is a user friendly system, which is very easy and convenient to use. The system is complete in the sense that it is operational and it is tested by entering data and getting the reports in proper order. But there is always a scope for improvement and enhancement. During the development of this coding standards are followed for easy maintainability and extensibilit