## **ACKNOWLEDGEMENT**

With reverential pranam, we express our sincere gratitude and salutations to the feet of his holiness Paramapoojya Jagadguru Byravaikya Padmabhushana Sri Sri Sri Dr. Balagangadharanatha Maha Swamiji, his holiness Paramapoojya Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Maha Swamiji and Pramapoojya Sri Sri Mangalnatha Swamiji, Sri Adichunchanagiri Mutt for their unlimited blessings.

First and foremost we wish to express our deep sincere feelings of gratitude to our institution, **Sri Jagadguru Chandrashekaranatha Swamiji Institute of Technology,** for providing us an opportunity for completing our DBMS miniproject successfully.

We extend deep sense of sincere gratitude to **Dr. G T Raju**, **Principal**, **S J C Institute of Technology**, **Chickballapur**, for providing an opportunity to complete the DBMS miniproject.

We extend special in-depth, heartfelt, and sincere gratitude to HOD **Dr. Manjunatha Kumar B H, Head of the Department, Computer Science and Engineering, S J C Institute of Technology, Chickballapur,** for his constant support and valuable guidance of the DBMS miniproject.

We convey our sincere thanks to Project Guide **Prof. SWETHA T, Assistant Professor, Department of Computer Science and Engineering, S J C Institute of Technology,** for his constant support, valuable guidance and suggestions of the DBMS miniproject.

We also thank all those who extended their support and co-operation while bringing out this DBMS miniproject report.

NIKITHA MD(1SJ19CS109) PALLAVI N(1SJ19CS112)

#### **ABSTRACT**

Online course registration system will help the student to gather information about a particular course and then they can easily register them self in a particular course. The management of the institution can easily see the records of the student and course and Fees. This project work is about the analysis of on line course registration system. Diagram purpose is to present system clearly and completely as possible

ONLINE STUDENT TEST is a project developed to provide an easy way to develop a student's skills. This project helps users by analysing the areas where students are weak and allows tests accordingly.

On-line Exam System is very much important for any Educational Organizations to prepare their students for any exams by saving the time. It will check the paper and generate mark sheets as well. It will also help the Organization to test the students and develop their skills. But the disadvantages for this system are, it takes a lot of time when you prepare for the exam at the first time for usage.

The effective use of "On-line Exam System", any Educational Institute or training centres can use it to develop their strategy for arranging the exams, and for getting better results in less time.

# TABLE OF CONTENTS

Acknowledgment	i
Abstract	ii
List of Figures	iii
Index	iv

Chapter Number	Chapter Name	Page
		Number
Chapter1:	Introduction	
1.1		1-2
1.2		2
1.3	Purpose	2
1.4	Objectives	3
1.5	Project scope	3
1.6	Overview	4
Chapter2:	Literature Survey	
2.1	Problem Statement	
Chapter3:	System Requirements and	
	Specifications	
3.1	System Requirements	
3.2	Hardware Requirements	
Chapter4:	Design and Methodology	

4.1	Conceptual Database Design	
4.2	Logical Database Designs(ER	
	Mapping)	
Chapter5:	Implementation	
5.1	Modules that can be accessed	
	by admin only	
5.2	Modules that can be accessed	
	by student only	
Chapter6:	Table creation	
6.1	Creation of tables	
6.2	PHP Code	
Chapter7:	Result and Discussions	
Chapter8:	Conclusions	
	Bibilography	

## **INTRODUCTION**

System may be defined as a layered structure that depicts how programs involved would interrelate and communicate. In computers, System may also include actual programs, programming interfaces and tools for managing the larger system. The term system may be used differently in different contexts, but more or less the concept remains the same. Online student course registration system combines multiple systems to construct a combined framework. This framework consists of multiple modules, which further contain different systems along with the implementation oF their defined constraints. Basically, systems are implemented for facilitating complex manual processes and that is exactly what we are trying to achieve. System is implemented as per user requirement. We have sought help from computer programming for automation of manual registration system. With the introduction of computers, every aspect of our lives has been revolutionized. When used judiciously, computers can help us save time, secure our personal information, access the required information whenever and wherever required. Keeping all these positive points in mind, we have developed an Online Course Registration System is Web-based registration software that helps you to register courses online. It is ideal for adult schools, educational camps, corporate training programs, and online training programs. It also provides time to time current status information related to courses. It can help for the student need to register by giving necessary details, for the desired course. In Online Course Registration we use PHP and MySQL database. It is webbased registration software that helps you to register courses online. Hence, in current scenario, automated system is required for course registration of students.

#### . 1.2 PURPOSE

The purpose of project is to build an application program to reduce manual work for managing the course through internet. This application has good appearance and easy to operate. It is very simple and easy to access. This project provides lots of features to manage in very well manner. This project contains advance modules which make the backend system very powerful

## 1.3 OBJECTIVES

The current project aims at reducing the workload all the entities involved in the registration procedure for the students. The project objective will be focused on developing an online course registration to ensure the effectiveness of the flow of registration. Moreover the system will offer a complete management system that integrated with the online course registration to help the stakeholder for maintaining the flow process of the course. The registration process can be done online without the need of paperwork anymore. It is also help the student to get more information about the course process while they enrolled.

The objectives of this proposed web application system are:

- To computerize student and faculty database.
- To maintain data consistency and integrity.
- Allowing faculty to acknowledge registration requests from anywhere. With the requirement of registration process for every course, it becomes all the more important to simplify a process which is highly repetitive. The achievement of the above objectives can help in managing the resources efficiently. The automated process will lead to time saving and eradication of common errors.

## 1.4 PROJECT SCOPE

Without an Online Student Registration System, managing and maintaining the details of the student is a tedious job for any organization. Student online registration system will store all the details of the students including their background information.

**Admin Module:** The Administrator for the system will be divided to several privileges on how they can use the system. Administrator for example, have all the privileges such as adding instructor, adding courses, update information, adding downloadable material, registration module, etc., but Instructor only have several privileges on what they can do and not do in the Online course registration and management system.

**Student Module:** Student will get a more accessible way in order to register and booked the seat for the courses. They also can get updates from administrator keep track on the progress of the course.

## 1.5 OVERVIEW

The purpose this document is to present a detailed description of the Online Course Registration System. It will explain the purpose and features of the software, the interfaces of the software, what the software will do, the constraints under which it must operates and how the software will react to external stimuli. This document is intended for both the end users and the developers of the software.

Specific design and implementation details will be specified in a future document. The course registration system has to handle records for many students and maintenance was difficult. Though it has used an information system, it was totally manual. Hence there is a need to upgrade the system with a computer based information system which is Online Course Registration System.

## LITERATURE SURVEY

## 2.1 PROBLEM STATEMENT

The purpose of project is to build an application program to reduce manual work for managing the course through internet. This application has good appearance and easy to operate. It is very simple and easy to access. This project provides lots of features to manage in very well manner. This project contains advance modules which make the backend system very powerful.

## SYSTEM REQUIREMENTS AND SPECIFICATIONS

## **3.1 SYSTEM REQUIREMENT:**

1. Operarting system : windows 7,8,10

2. Front end : PHP,HTML,CSS

3. Back end : ORACLE(MYSQL)

4. Web server : XAMPP Contolpanel

## 3.2 HARDWARE REQUIREMENT:

1. Processor : intel processor above 500Mhz

2. Ram : 4GB or more

3. Input device : standard keyboards(108keys) and mouse

(compatible)

4. Out device : high resolution monitor

## **DESIGN AND METHODOLOGY**

## 4.1 CONCEPTUAL DATABASE DESIGN

ER Diagram: The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

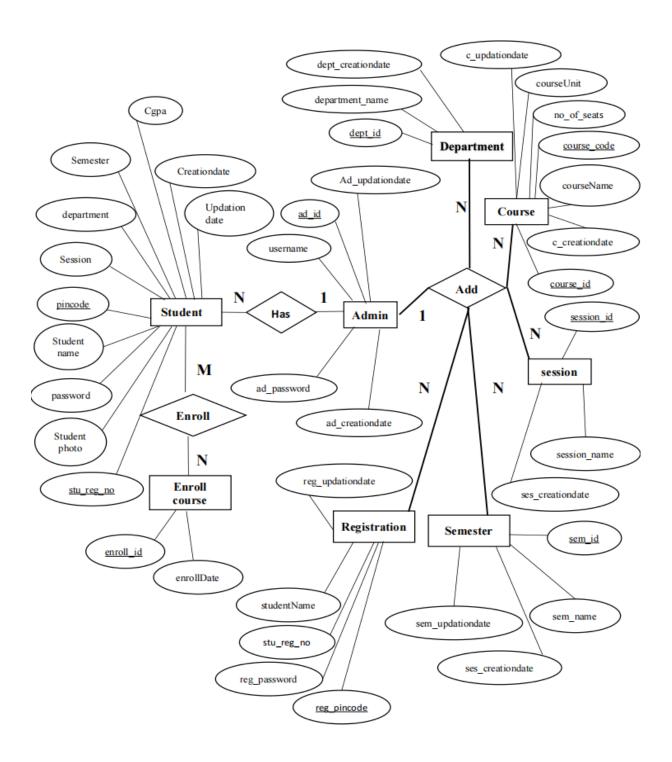
- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

#### **ER Notation:**

There is no standard for representing data objects in ER diagrams. Each modelling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by nonacademics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection.

## **E R DIAGRAM**



## **4.2 LOGICAL DATABASE DESIGNER(ER MAPPING)**

Relational mapping: Course enrolls: En\_id Dep\_id SRegNo Ses id Sem id C id En\_Date  $\bigvee$ Students: SResgNo Password Sphoto **SName** Pincode Cgpa C\_Date Up\_date Session: Ses\_id Ses\_name Ses\_C\_Date Department: Dep\_id D\_name D\_C\_date Semester: Sem\_C\_date Sem\_id Sem\_name Sem\_Up\_date Course: C\_id CourseCode CourseName courseUnit noOfSeats C\_C\_date C\_up\_date Admin: A\_id A\_password A\_C\_date A\_up\_date A\_username

## 3.2 CONNECTIVITY

Steps:

- Create MySQL Database at the localhost.
- Create a database called "OnlineCourse"
- Add all the tables along with the attributes to this database.
- Create a folder in htdocs included in the xampp folder.
- Create a PHP file and add a database connection in the PHP file.
- Run

The below is an example how we connect the PHP file to MySQL Database:

```
<?php
define('DB_SERVER','localhost');
define('DB_USER','root');
define('DB_PASS',");
define('DB_NAME','onlinecourse');
$con = mysqli_connect(DB_SERVER,DB_USER,DB_PASS,DB_NAME);
// Check connection
if (mysqli_connect_errno())
{
    echo "Failed to connect to MySQL: " . mysqli_connect_error();
}
?>
```

# IMPLEMENTATION MAJOR MODULES

## 5.1 Modules that can be accesses by admin only:

#### **5.1.1 Course:**

An admin can add a course or delete a course based on the requirements.

## 5.1.2 Semester:

An admin can add the semester and can also delete a semester based on the requirement.

#### 5.1.3 Session:

An admin can add the session and can also delete a session based on the requirement.

## **5.1.4 Department:**

An admin can add a department if he wants to create course regarding that particular department and can also delete the department if the particular department students would not be helped with the courses offered.

#### **5.1.5 Student Registration:**

An admin can register a student into the organization, so that the student can have access to the courses offered by the organization.

## **5.1.6 Manage Students:**

An admin has the privilege to manage the students in his organization as it allows him to add or delete the students in the organization.

## **5.1.7 Enroll history:**

An admin can view the enroll history for his courses and also print the enrollments.

#### **5.1.8 User log:**

An admin can keep track of a student's activities as he has the privilege to view the latest student logs.

## 5.2 Modules that can be accessed by student only:

#### **5.2.1 Course Enrollment:**

A student can enroll into any course after verifying his pin code.

## **5.2.2 Enroll history:**

A student can view all the courses that he has enrolled into and can also print the enrollment details.

#### **5.2.3 Student Profile:**

A student can view his profile and update it if needed.

## 5.3 Modules that can be accessed by both admin and student:

#### **5.3.1 Login module:**

An admin and student can login using their username and password. After authorization, they will be navigated to the index page. They can have access to their respective modules as mentioned above.

## **5.3.2 Logout Module:**

A logout module simply logs a particular user out. So that their current session is ended and they have to login again in order to get authorized and be able to access their respective modules

#### **6.1 CREATION OF TABLES**

#### **CREATION OF COURSE ENROLLS**

Create table course enrolls( En\_id number(6) primary key, SRegNo varchar(13) not null, Ses\_id int not null, Dep\_id int not null, Sem\_id int not null, C id int not null, En date date);

#### **CREATION OF STUDENTS TABLE**

Create table Students( SRegNo varchar(13) references course enrolls (SRegNo) on delete cascade, Password varchar(15) not null, SName varchar(15) not null, Pincode number(8) Not null, Cgpa float(6) not null, Up\_date date, C\_date date, primary key( SRegNo,Pincode));

#### **CREATIOIN OF SESSION TABLE**

Create table session (Ses\_id int references course enrolls(ses\_id) on delete cascade,Ses\_name varchar(10) not null, Ses\_c\_date\_date\_,primary\_key(Ses\_id));

#### **CREATION OF DEPARTMENT TABLE**

Create table department ( Dep\_id int references course Enrolls ( Dep\_id) on delete cascade , D\_name varchar(10) Not null ,D\_C\_Date date ,primary key (Dep\_id));

#### **CREATION OF SEMESTER TABLE**

Create table semester( Sem\_id int references course Enrolls ( Sem\_id ) on delete cascade, Sem\_name varchar(10) not null , Sem\_c\_date date, sem\_UP\_date date ,primary key(sem\_id));

#### **CREATION OF COURSE TABLE**

Create table course ( C\_id int references course enrolls(C\_id) On delete cascade, CourseCode varchar (10) not null, CourseName varchar(10) not null, CourseUnit int not null, No.of.seats int not null,C\_C\_DATE date, C\_up\_date date, primary key ( C\_ID));

#### **CREATION OF ADMIN TABLE**

Create table admin( A\_id int not null, A\_username varchar(15) not null, A\_password carchar(15) not null, A\_C\_Date date, A\_up\_date date, Primary key (\_id));

## **6.2 PHP CODE:**

Includes: In the "includes" folder we includes 4 files as follows:

The header.php code:

```
<?php
error_reporting(0);
?>
<!-- HEADER END-->
<div class="navbar navbar-inverse set-radius-zero">
<div class="container">
<div class="navbar-header">
<button type="button" class="navbar-toggle" data-toggle="collapse"
datatarget=".navbar-collapse">
<span class="icon-bar"></span>
<span class="icon-bar"></span>
<span class="icon-bar"></span>
</button>
<a class="navbar-brand" href="#" style="color:#fff; font-size:24px;4px;
lineheight:24px; "> Online Course Registration </a> </div>
<div class="left-div">
<i class="fa fa-user-plus login-icon" ></i>
</div></div>
</div>
The config.php code:
define('DB SERVER','localhost');
```

```
Online Course Registration
                                                           2021-22
define('DB_USER','root');
define('DB_PASS' ,");
define('DB_NAME', 'onlinecourse');
$con = mysqli_connect(DB_SERVER,DB_USER,DB_PASS,DB_NAME);
// Check connection
if (mysqli_connect_errno())
echo "Failed to connect to MySQL: " . mysqli_connect_error();
?>
The footer.php code:
<footer>
<div class="container">
<div class="row">
<div class =col -md-12>
Online course registration
</div>
</div>
</div>
</footer>
```

## RESULT AND DISCUSSION

## **7.1 Admin**

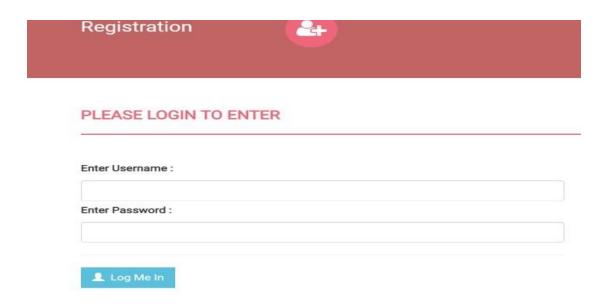


Figure 7.1.1:Login page

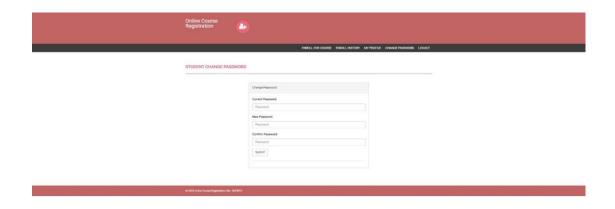


Figure 7.1.2:Admin change password:

# Online Course Registration

## 2021-22

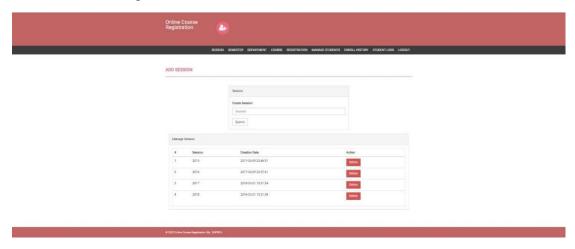


Figure 7.1.3:Add Session

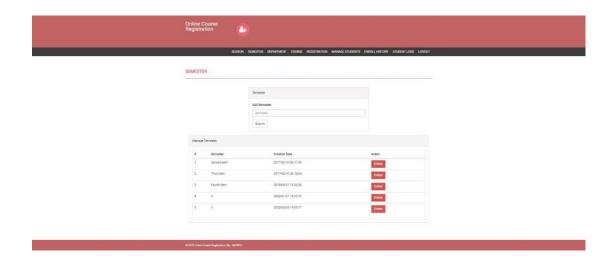


Figure 7.1.4: Semester

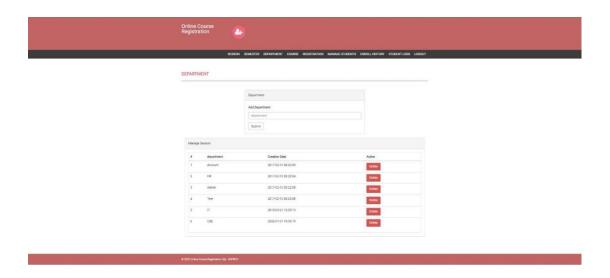


Figure 7.1.5: Department

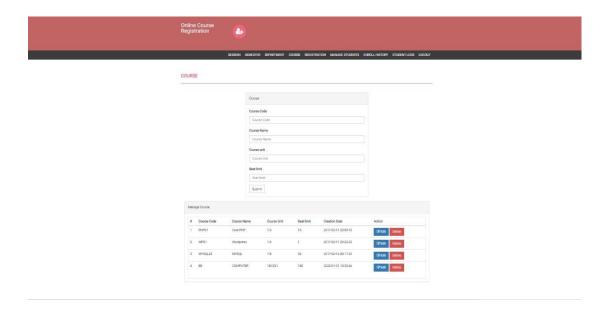


Figure 7.1.6: Course

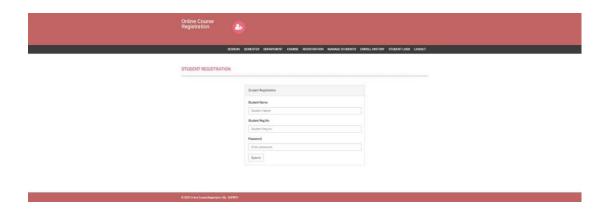


Figure 7.1.7: Registration

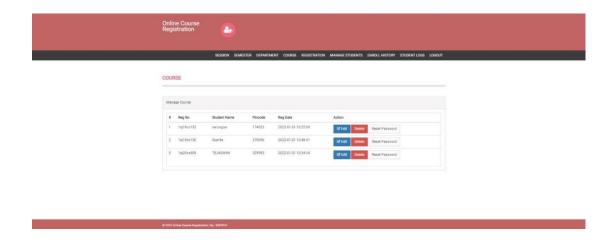


Figure 7.1.8: Manage Students

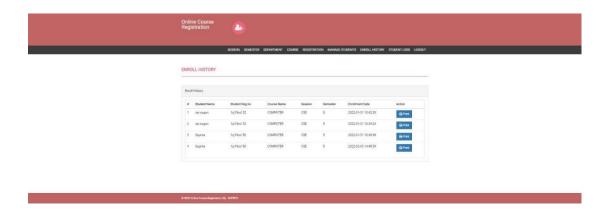


Figure 7.1.9: Enroll History

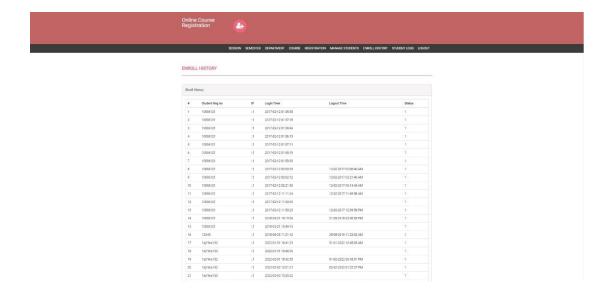


Figure 7.2.0: User log

# 7.2 Student:



Figure 7.2.1: login page

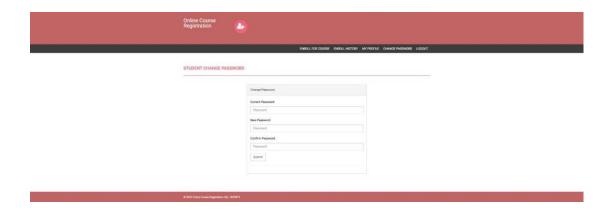


Figure 7.2.2: Student change password

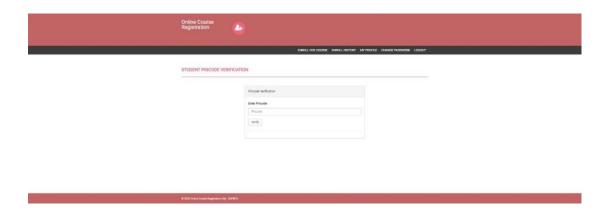


Figure 7.2.3: Pincode verification for enrolling into course

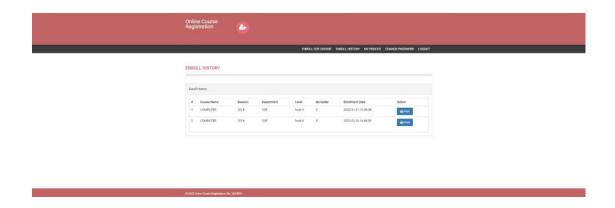


Figure 7.2.4: Enroll history

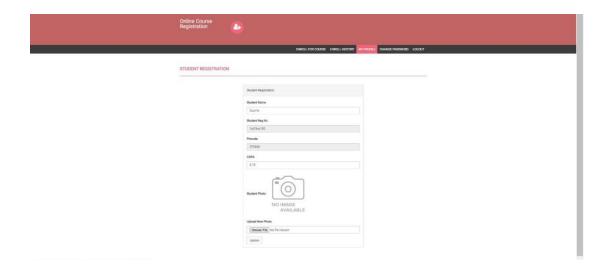


Figure 7.2.5: My profile

## CONCLUSION

The primary objective of our research and development was to automate student course registration procedure. It has been achieved successfully and the system is tested to be working efficiently. Online application of the whole system helps easy access to the system anywhere. Physical presence of the student is not required. The time taken for process completion is now largely reduced. After registration the database is automatically updated at the end of process completion removing the hassle for department officials who had to enter the data manually. As the database is managed through MySQL, data duplication is eliminated and thereby reducing chances of error. Also data can be now be easily retrieved, edited and printed whenever required. Authentication based access proves to be more secure than manual system. The data is maintained on a central server and is distributed among different departments as per requirement and copies of this database are maintained on backup servers. Also, database access is authorised and cannot be viewed or edited by unauthorised personnel.

So, this automated and computerised system is safe, fast and user friendly. The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity.
- It provides a friendly graphical user interface which proves to be better when compared to the existing system.
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

## **BIBILOGRAPHY**

## **Textbooks:**

- 1. Fundamentals of Database Systems, Ramez Elmasri and Shamkant B Navathe, 7<sup>th</sup> edition, 2017, Pearson.
- 2. Database Management Systems, Ramkrishnan and Gehrke, 3rd Edition, 2014, McGraw Hill.
- 3. Learning PHP,MySQL & JavaScript,4th edition,Robin Nixon.

## Web Links: