SUPERIOR UNIVERSITY LAHORE

Faculty of Computer Science & IT

Final Year Project
PROJECT REPORT (Part-1)

[Title of Project]

Project ID: [write ID here Issued by FYP Manager]

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Project Report

College Management System

Change Record

Author(s)	Version	Date	Notes	Supervisor's Signature
	1.0			

APPROVAL

PROJECT SUPERVISOR

Comments: _____

_____

Name:_____

Date:_____   Signature:_____

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PROJECT MANAGER

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Date:_____   Signature:_____

HEAD OF THE DEPARTMENT

Comments: _____

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Date:_____   Signature:_____

Dedication

We dedicate our this dissertation to our beloved parents, who taught us to achieve the goal in with sincerity, honestly, and hardworking, and provide us the resources to complete this task. We also dedicate this project to our teachers who show us the way to complete the project.

Acknowledgements

In the name of ALLAH, the most kind and most merciful.

First of all, we are grateful to my ALLAH ALMIGHTY, who confer me with health, abilities and guidance to complete my project in a successful manner, and without HIS help we were unable to perform this task.

We are highly thankful to Mr. Ahmed Khaloon from helping me to do this project and gave my complete guidance. We are also highly thankful to my friends who provided me any assistance in what so ever manner in the preparation of this project.

Executive Summary

We are developing a website for college with some outstanding highlights. Website is fully developing on full stack. The website name is College Management System. In this website we provide three dashboards 1st for Admin, 2nd for Teacher and 3rd for students. In this website we gave fully access to admin. Admin can add, delete, update and view data about teacher, student in detail from the database. Teacher can also view his record of attendance, his salary record and also he can view his personal data and he can change his personal information and teacher can also add student exam data of the students and they can change in the short time after some time they cannot change the exam data. Teacher can also add the attendance of the student can also view his record of attendance, his fee record, his exam record and also he can view his personal data and he can change his personal information. Admin, Teacher and Student have different three dashboards where they can play their task. Admin can change the record modify and play everything with the data but teacher and student can just view their record not change anything in the record except their personal information. Personal information they can change.

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Introduction

Chapter 1: Introduction

Management system is a very important and essential part of any educational institute. The Project defines the all management of College System. College management system means it controls all the management tasks and functions. It performs all functions which is require to any Educational Institute. Admin can view and change all record of the college. Teacher can also view their information and they can change personal information. Students can search their result. They can see more information about the college on the college management system software. They can see the time table of the lectures in the college. They can see also their exam data fee data and all personal information. Students can print out their roll no slips with just one click. Student can view rules and regulations for college in details. Students can view his / her Fee details for previous semester and current semester. Student can view his / her all fee package admission details the details of courses completed and pending courses and repeating courses. Students can view academic calendar. Students can fill their course evaluation forms at the end of each semester and can give suggestions to make the program and educational environment better.

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1.1. Background

As the name suggests "College Management System" suggests the application will manage the different functions about the students, teachers and other staff of the college, searching the result of the student, admin can enter, save, search and modify the record of teachers and his salary, students and their fee record, record about the exam. So as to keep the information correct and fast, it will manage all the services correct and fast.

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We aim to manage all the work of college using the College Management System.

The College Management System is the Educational management system.

At the time to run the Educational Institute the education is the basic and main responsibility of the College.

It helps the admin to keep the record, manage and control the entire data of the college.

It helps the admin to access the data easily.

Student can view rules and regulations for college in details. Students can view his / her Fee details for previous semester and current semester.

Student can view his / her all fee package admission details the details of courses completed and pending courses and repeating courses.

Students can view academic calendar. Students can fill their course evaluation forms at the end of each semester and can give suggestions to make the program and educational environment better.

1.2. Motivations and Challenges

We have to face many problems int the old system that is painful for students, teacher and other staff if we want to found any record in old system that was take much more time old college system was a time wasted, facing problem in every field it was difficult to store to a huge amount of data about the college. Then we feel need a system who manage all management system of the college. The system gives a quick response on the request. Then we develop a College Management System website who manage all the management of the system. It contains all record about the teacher. It contains all record about courses. It contains all record about other staff of the college. It contains all record about the student and exam record. It works smoothly. The system gives us a quick and accurate and correct result which we want to search. It is less time consuming software. It helps us in every field of the college. Now everything will be managing easily.

1.3. Goals /Scope/Objectives

The Goals are as follows:

Provide better services through the Web Application software "College Management System" than the old system of college.

Students can search their result. They can see more information about the college on the college management system software. They can see the time table of the lectures in the college. They can see also their exam data fee data and all personal information. Students can print out their roll no slips with just one click. Student can view rules and regulations for college in details. Students can view his / her Fee details for previous semester and current

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The Scope are as follows:

We aim to manage all the work of college using the College Management System.

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The Objectives are as follows:

- o We can add, modify, search and delete data about teachers, student and other staff of the college.
- o It contains the teacher and other staff's personal information.
- o It contains the teacher and other staff's attendance.
- o It saves the data of teachers and other staff's salary.
- o It contains the Personal information.
- o It contains attendance of the student.
- o It manages the fee of students.
- o It manages the exam management system.
- o It contains more information about the college.
- o It contains also the time table of the lectures.
- o Student can view rules and regulations for college in details.

- o Students can view his / her Fee details for previous semester and current semester. Student can view his / her all fee package admission details the details of courses completed and pending courses and repeating courses. Students can view academic calendar.

- o Students can fill their course evaluation forms at the end of each semester and can give suggestions to make the program and educational environment better.

- o Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

- o The main purpose of this site is to save time, save paper working as students can view all of his personal and educational details online. This site will help the management to control the educational systems online more effectively. As everything is online in this site as resultant the coordination between the staff will be strong. This site will help financially to the management as Computer work save time and reduce staff. The work of days can be done in minutes.

- o The students can view all details online so they will not rush at offices to take their fee vouchers and can't ask results from the examination office as it is already updated on the site.

1.4. Literature Review/Existing Solutions

The College Management System has literature review is totally computerized system using this software and the database management system. Now data can be stored in the database not stored in the files or register. Data can be stored for the long time in the database. Data is easily accessible from the database and stored the data into database using this software. Now data can be easily stored, modified, delete and view from the database.

College management System is a very user friendly and reliable. It solves a lot of problems those are facing at the manual management system time. Students can search their result. They can see more information about the college on the college management system software. They can see the time table of the lectures in the college. They can see also their exam data fee data and all personal information. Students can print out their roll no slips with just one click. Student can view rules and regulations for college in details. Students can view his / her Fee details for previous

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1.5. Gap Analysis

The all system of the college depends on the files and registers. Data stored in the files. If files burnt or lost due to any reason, then data will be lost there is a huge problem for the college because the data is very valuable and important for the college. If there is no data, the college does not work its totally stop their work.

But this College Management System software keep and saves the data for the long time. It keeps the data on the different location. If the data will be lost from one place, then we get back up the data form the other one place. It is very reliable and secure to keep the record about the college. It provides the security and keep safely the data.

1.6. Proposed Solution

As we know that the problems of old system to keep the record there were many problems that is why we develop College Management System Website. It keeps the record about, employee, student, salary, fee, exam and all fields of the college in database. There are very minor chances

to loss the data. It secure data from unauthorized person and it will manage easy to save, update, view and delete the record.

1.7. Project Plan

College Management System provide us the facility of electronic media content. Employee and students now they can be check their detail on their electronic devices like phone, tablet and pcs. It saves the time of admin student and also teachers. It is also very cost effective if we compare this system to current system of the college.

1.7.1. Work Breakdown Structure

- o **Front Look:** On the front page of the College Management System contain some important information about the college.
- o **Login System:** It manages the Login of admin, employee and student.
- o **Admin System:** It perform all functions of the admin.
- o **Employee System:** It manages the employee detail.
- o **Student System:** It manages the student's details.
- o **Fee System:** It manages the fee of the students.
- o **Exam System:** It manages the exam system.
- o **Attendance System:** It manages the Attendance System.

1.7.2. Roles & Responsibility Matrix

M Husnain Raza	Saqib Anwaar	Ali Raza
Documentation and Coding	Documentation and Coding	Documentation and Coding

Responsibilitie	Responsibilitie	Responsibilitie
Introduction	Use case	Marketing
System Design	Use case model	Material
Use analysis	Introductions	Visiting card
DFD System	Software	Standee
Architecture	Requirements	Posters
CODING	specifications	Banners
		Designing

1.7.3. **Gantt Chart**

2. CODING

Project Schedule / TASKS	November 2019		December 2019		January 2020		February 2020		March 2020		April 2020				Summary Hours	Percent
Requirements	12	12	12	9											45	22.20%
Design			5	7	12	8									32	14.90%
Code and Unit Test					4	7	4	2	4	5	6	8	8		48	13.20&
Test and Integrate					3	9	9	12	15	15	12	9	6		90	6.60%
User Manual Write										16	12	8	4		40	21.10%
Report Writing				2	4	6	8	10			16	14	12		72	1.90%
Demonstrate														8	8	20.20%
Hours	12	12	17	18	23	30	21	24	19	36	46	39	30	8	335	100.00%

Figure 1.5.2

2.1. Report Outline

- o College Management System takes validate inputs and it doesn't take invalid inputs.

- o Students can view their details online on their portal.

- o Employee can also view their details online on the employee portal.

- o It produces the fee voucher of the student's.

- o It produces the Transcript of the students online.

It Produce the Class time table online students can check their time table of their lectures online

Chapter 2

Software Requirement Specifications

Chapter 2: Software Requirement Specifications

1.1. Introduction

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This site helps the students and all other related staff of the college and all outside visitors on this site to check their required information.

Here students can view his / her attendance regarding each subject for previous and current semesters. Students can also check their results for each subject with all details of marks. If any new result is updated on the CMS so student will get a notification for any new update there is an alarming notification that alerts the students to check update time to time. Students can print out their roll no slips with just one click. Student can view rules and regulations for college in details. Students can view his / her Fee details for previous semester and current semester. Student can view his / her all fee package admission details the details of courses completed and pending courses and repeating courses. Students can view academic calendar. Students can fill their course evaluation forms at the end of each semester and can give suggestions to make the program and educational environment better.

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1.1.1. Purpose

The main purpose of this site is to save time, save paper working as students can view all of his personal and educational details online. This site will help the management to control the educational systems online more effectively. As everything is online in this site as resultant the coordination between the staff will be strong. This site will help financially to the management as Computer work save time and reduce staff. The work of days can be done in minutes.

The students can view all details online so they will not rush at offices to take their fee vouchers and can't ask results from the examination office as it is already updated on the site.

1.1.2. Document Conventions

Stander rule of documentation has been followed in the order of standardized the work. In order to create efficient website in the premises of online college management systems.

1.1.3. Intended Audience and Reading Suggestions

This site is designed for individuals like students, Teachers, venture chief, college management, and database staff designer.

1.1.4. Product Scope

Scope of our project is that students can get easily their required details online at any time.

Teachers can update attendance and results online instead of use paper.

The educational environment become more disciplined as everything is online.

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1.1.5. References

IEEE 830-1998 standard for writing SRS document.

1.2. Overall Description

1.2.1. Product Perspective

This site is to maintain a strategic distance from the pressure and work over-burden of normal educational system including the interaction between students and teachers and other college management. This site is an independent framework to facilitate the students and managements. Management system is a very important and essential part of any educational institute. The Project defines the all management of College System. College management system means it controls all the management tasks and functions. It performs all functions which is require to any Educational Institute. Admin can view and change all record of the college. Teacher can also view their information and they can change personal information. Students can search their result. They can see more information about the college on the college management system software. They can see the time table of the lectures in the college. They can see also their exam data fee data and all personal information. Students can print out their roll no slips with just one click.

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Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

1.2.2. Product Functions

Functions of website:

Account: User can make his / her account on the website.

Login: After creating account user can log into the website.

Update: Specific user can update the related data.

View detail: User can view his / her required details on the website.

Notifications: User can get alert messages.

Roll No slips: User can view and print out his / her roll no slips for each semester.

Attendance %: User can view his / her attendance percentage for each course of current and previous semester.

Evaluation Form: Students can fill his / her evaluation forms for each semester.

View Results: Students can view his / her results details for each course of current and previous semester.

1.2.3. User Classes and Characteristics

This website can be used by the following:

Students:

Registered students can use the website to get their required information.

Teachers:

Teachers can update the related data on the website.

Management:

Management can use the site to handle their related tasks.

Overall population:

Over all population can visit the website to know about college, can view their required information such as admission criteria etc.

1.2.4. Operating Environment

This website can be used on windows 8 and 10;

SQL Server database

An internet connection is required to browse the website.

Any of the following internet browsers can be used to search the website:

Internet Explorer, Google chrome, Opera, and Firefox.

1.2.5. Design and Implementation Constraints

All details of students, teachers, management and other any user will be stored into database.

SQL server database will be utilized as database.

The online website can be used any time during 24 hours a day.

User can open his / her account from any device/ system that meets the requirements to use the website.

After login into the account student can view download or print out his / her required data from the website.

1.2.6.   User Documentation

User should know about the website (access address) and must should know how to use the website. User has internet connection to access the website.

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1.2.7. Assumptions and Dependencies

SQL server database store all database.

ASP.net is used to maintain the website.

1.3. External Interface Requirements

1.3.1. User Interfaces

A Graphical user interface will be given to the client and product do not have any other order line interface.

Screen Name	Description
Login	At this stage user will enter his/her user name and password. If the username or password found incorrect then an error will occur.
Home Page	After login user will find Home page/Student Dashboard. Where student find many links to access different web pages like attendance, results, rules and regulations, students assessment page etc.
Add personal Information	Student can enter / update his / her personal information.
Admission Form	Here student can fill admission form online
Degree application	Here student can apply to get his / her Transcript / Degree
Programs	Student can view his / her required program details/ prospectus/ duration/ Fee structure etc
Administrator User	Admin can delete, update, create, read and modify user and can change password.
Submit data	Data can be viewed, select, or delete at any time.

1.3.2. Hardware Interfaces

Prerequisite equipment requirement for using website will be as follows:

Processor

RAM: 156MB or above

Hard disk: 25GB or above

Basic system with fundamental needs of a personal computer or any device can run the website.

1.3.3. Software Interfaces

Database for the website will be configured using duration/access 2020 – 2027. Database will store Students, Teachers and college management data. This data can be changed and modified or update by the administrator but some data like personal information of student can be changed by the students also. The database includes all the history and information of college and information of students, Teachers etc. The database will include data like students personal information, results, attendance percentage, courses and semester details etc.

1.3.4. Communications Interfaces

The communication between sender and receiver through using either LAN Card or using WAN card to make correspondence.

Sender ←————————————————————————→ Receiver

1.4. System Features

Website features:

Account: User can make his / her account on the website.

Login: After creating account user can log into the website.

Update: Specific user can update the related data.

View detail: User can view his / her required details on the website.

Notifications: User can get alert messages.

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Evaluation Form: Students can fill his / her evaluation forms for each semester.

View Results: Students can view his / her results details for each course of current

And previous semester.

1.4.1.   System Feature 1

Create Account

1.4.1.1. Description and Priority

User can create account on the website and got a login: User name and password, having

the **priority** 5

1.4.1.2. Stimulus/Response Sequences

Key ID	FR-001
Title	User can enter his / her account to access the website.
Requirement	Requirements include User id, Password, Email address, City, Phone number
Restrictions, risk.	User must enter correct data/info, otherwise user can't registered.
Dependency	Pc/Device and server connection
Priority	Secure, time safety

1.4.1.3. Functional Requirements

Use Case 1

Register
Actor
• Unregistered-User
Precondition
• Firstly User open the website
Flow of actions
• At this stage User have to create his / her account on this website.
• User enter his / her required information and registered himself.
Alternative flow
• Without creating an account, User can't use this website.
Post Condition
• User registered successfully.

1.4.2. System Feature 2

Functional Requirement-2

Login Function/Login Page

1.4.2.1. Description and Priority

User can login his / her account to access the website to get his / her required information and it's priority is 5.

1.4.2.2. Stimulus/Response Sequences

Key ID	FR-002
Title	Login Page
Requirement	Requirements include User id, Password.
Restrictions, risk.	User must have to enter his / her correct User id and password
Dependency	Pc/Device and server connection
Priority	Secure, time safety

1.4.2.3. Functional Requirements

Use Case 1

Register
Actor
• Registered-User
Precondition
• User must have to open the login page
Flow of actions
• At this stage User have to enter correct id and password.
Alternative flow
• If user enter wrong id or password, an error message occur.
Post Condition
• User will get his required information.

Other Nonfunctional Requirements

1.4.3.   Performance Requirements

The product is made speedy enough to manage a lot of client's data and activities performed by the user. Server is available 24 hours per day.

1.4.4.   Safety Requirements

All the data included new created accounts, Visitors activities, on the website are under control.

1.4.5.   Security Requirements

The administrator can create, read, delete or update data into the database any time.

1.4.6.   Software Quality Attributes

1- The website is reliable enough that unlimited clients can use the framework at a time(24 hours/7days) Even the low speed personal computer can execute the using of this website.

2- The website system is available 24 hours per day.

3- The website system is maintainable enough that it allows administrators and user to view and go through their data.

4- The portability is that the user can sign into his account on the website at any time.

1.4.7. Business Rules

Two kinds of clients are involved in to utilize the framework e.g.

First is User.

Second is Administrator

Administrator is fully authorized to control the frame work.

Whereas User has been given authority to view their required details.

1.5. Other Requirements

Other requirements are as following:

- The (technical) feasibility, includes the requirement of a server where the User data can be stored. The server check and verify the user name and password and send the required information to the client after query the client request.

- The (economic) Feasibility, includes basic requirements that need to use the website. Any smart phone up to Rs. 25000.00 and an (internet connection of Rs:1500 per month)

- Advantages of the website are: The user can use the product 24 hours / 7 days.

- The (Specification) feasibility is that this website is for windows based users and it's totally free. Specification are required to run the website include Window 7, windows 8, Mobile phone with GPS, Processor (Pentium four) 120GB Hard disk. 2GB RAM.

Chapter 3
Use Case Analysis

Chapter 3: System Analysis

The website is developed keeping in mind the students and management's requirements that how this framework will create smoothness and tension free environment. As student registered on the website He / She can check his / her all record online. Instead to going to the office for asking their results or percentages they can check it on the website. It will really reduce the tension and rush of students towards the office. Teacher can update results attendance for each student and for all semester. Admin can create delete update or read all the data. Admin is full controlled and authorized person and the key of the framework. Students can print out all the documents like fee vouchers results and others online.

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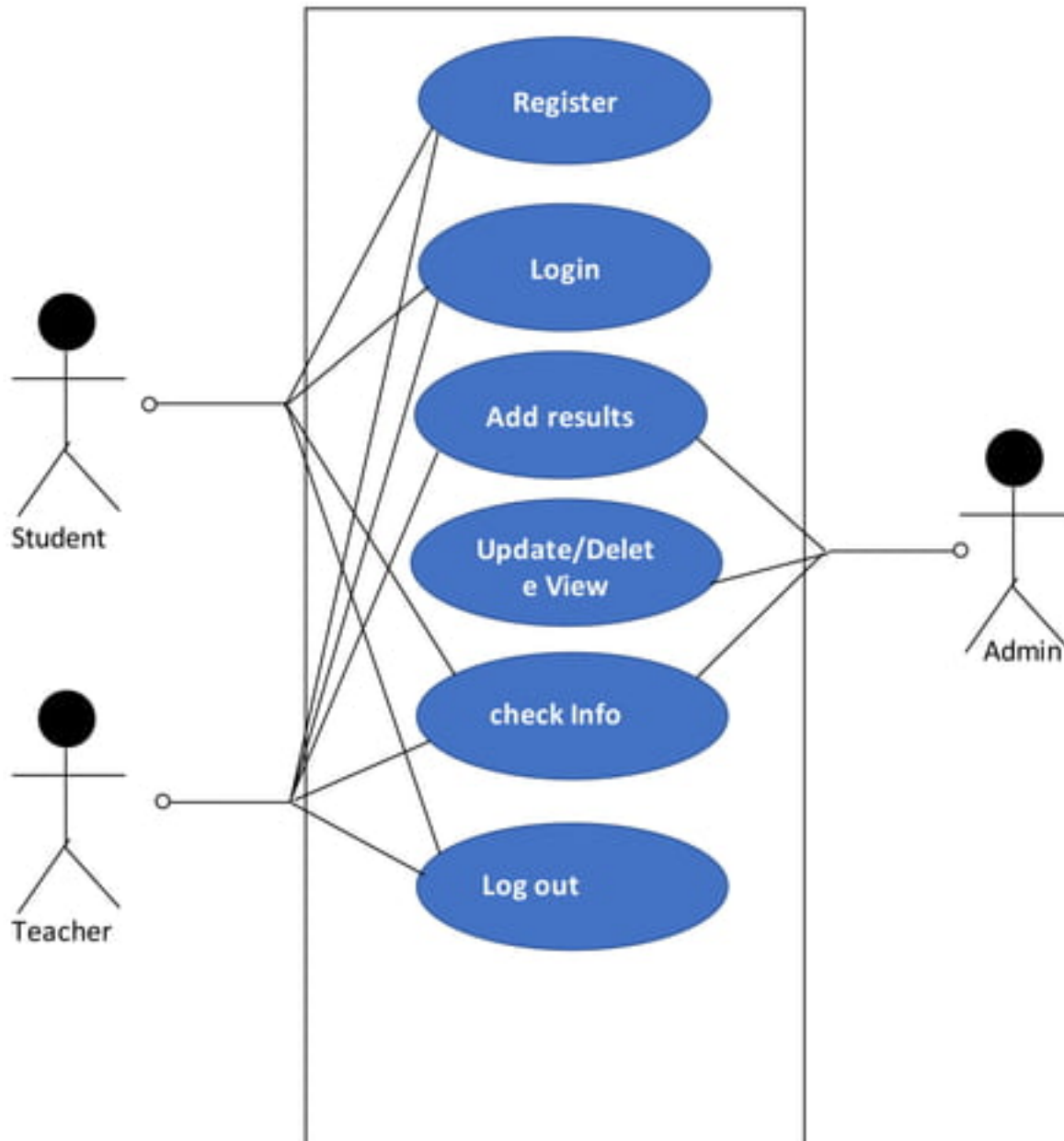
of each semester and can give suggestions to make the program and educational environment better.

Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

3.1. Use Case Model

Here use case model is used to describe the client's requirements their steps and show how the things work on the screen using the steps which will defined below in the use case model.

The use case model helps to understand the requirement and their procedure. And can produce a positive way to describe the required things into a better way.

3.2. Fully Dressed Use Cases

(Test Case # 1 'Registration')

Test Suit ID	S001
Test Case ID	C001
Actor	Unregistered User
Summary of Test Case	It's purpose is to verify that On pressing save button the user registered or not.
Other related requirements if any	Unregistered user must be able to sign up
Perquisite	None
Procedure of Test	1- Open website, press register button. 2- Fill Form: Name, password, city name. 3- Now Click Register button.
Testing Data	In Username input field: Jack, Lincoln, 1245abcdsdd@ourlook.org For Password input field: 12345679, abdcdeffdd, as 12asb&& For City input field: 1224abs, Lahore, Islamabad
Result should be display	If User entered a valid username and password, then the homepage will be opened.
The Actual Result	The actual result is that user login successfully.
Test Status	Test Successfully.
Test Date:	07/03/2020
Created and developed by:	Saqib Anwaar

(Test Case # 2 'Login')

Test Suit ID	S002
Test Case ID	C002
Actor	Registered User
Summary of Test Case	It's purpose is to verify that On pressing login button the login button works correctly.
Other related requirements if any	No other requirement
Perquisite	User must should be registered.
Procedure of Test	1- Open website 2- Enter Username, password. 3- Press Login button.
Testing Data	Login details: 123abc Login details: saqibg3@outlook.org
Result should be display	If User entered a valid username and password, then the homepage will be opened.
The Actual Result	The actual result is that user login successfully.
Test Status	Test Successfully.
Test Date:	07/03/2020
Created and developed by:	Saqib Anwaar

(Test Case # 3 'Logout')

Test Suit ID	S0013
Test Case ID	C0013
Actor	Registered User
Summary of Test Case	It's purpose is to verify that the logout button is working properly or not.
Other related requirements if any	Login user can logout
Perquisite	User must be log in
Procedure of Test	1- User login 2- User can log out if he wants 3- Click on logout button.
Testing Data	In Username input field: Jack, Lincoln, 1245abcdsdd@ourlook.org For Password input field: 12345679, abdcdeffdd, as 12asb&& For City input field: 1224abs, Lahore, Islamabad

Result should be display	For Username:
	If the username is correct then green light should be turn on (accepted).
	If the username is not correct red light should be turn on (rejected).
	   ➤ If the red light turn on the following message should be display.
	"The username is invalid, Please enter correct usemeame".
	   ➤ When user entered incorrect password, the message should display.
	"The password is invalid, Please enter correct password.
	User can log out at any time as he wants.

The Actual Result	User logout
Test Status	Test Successfully.
Test Date:	07/03/2020
Created and developed by:	Husnain Raza

(Test Case # 4 'Add Result')

Test Suit ID	S004
Test Case ID	C004
Actor	Registered User/Teacher
Summary of Test Case	It's purpose is to verify that result add button is working properly or not.
Other related requirements if any	1-User must be login 2-Teacher dashboard is opened.
Perquisite	None
Procedure of Test	1- Open website. 2- User login 3- Teacher dashboard opened. 4- Add result.
Testing Data	Valid result added. Invalid result added.
Result should be display	User can add result
The Actual Result	Result is added
Test Status	Test Successfully.
Test Date:	07/03/2020
Created and developed by:	Ali Raza

(Test Case # 5 'View')

|	
Test Suit ID	S001
Test Case ID	C001
Actor	Registered User
Summary of Test Case	It's purpose is to verify that View button is working correctly.
Other related requirements if any	User can enter information to view that information.
Perquisite	User must be login
Procedure of Test	1- Login 2- User can add information to view details
Testing Data	User can view the details of results, attendance, fee details notifications.
Result should be display	User can view details of selected field.
The Actual Result	User can view details of selected field.
Test Status	Test Successfully.
Test Date:	07/03/2020
Created and developed by:	Husnain Raza

Chapter 4
System Design
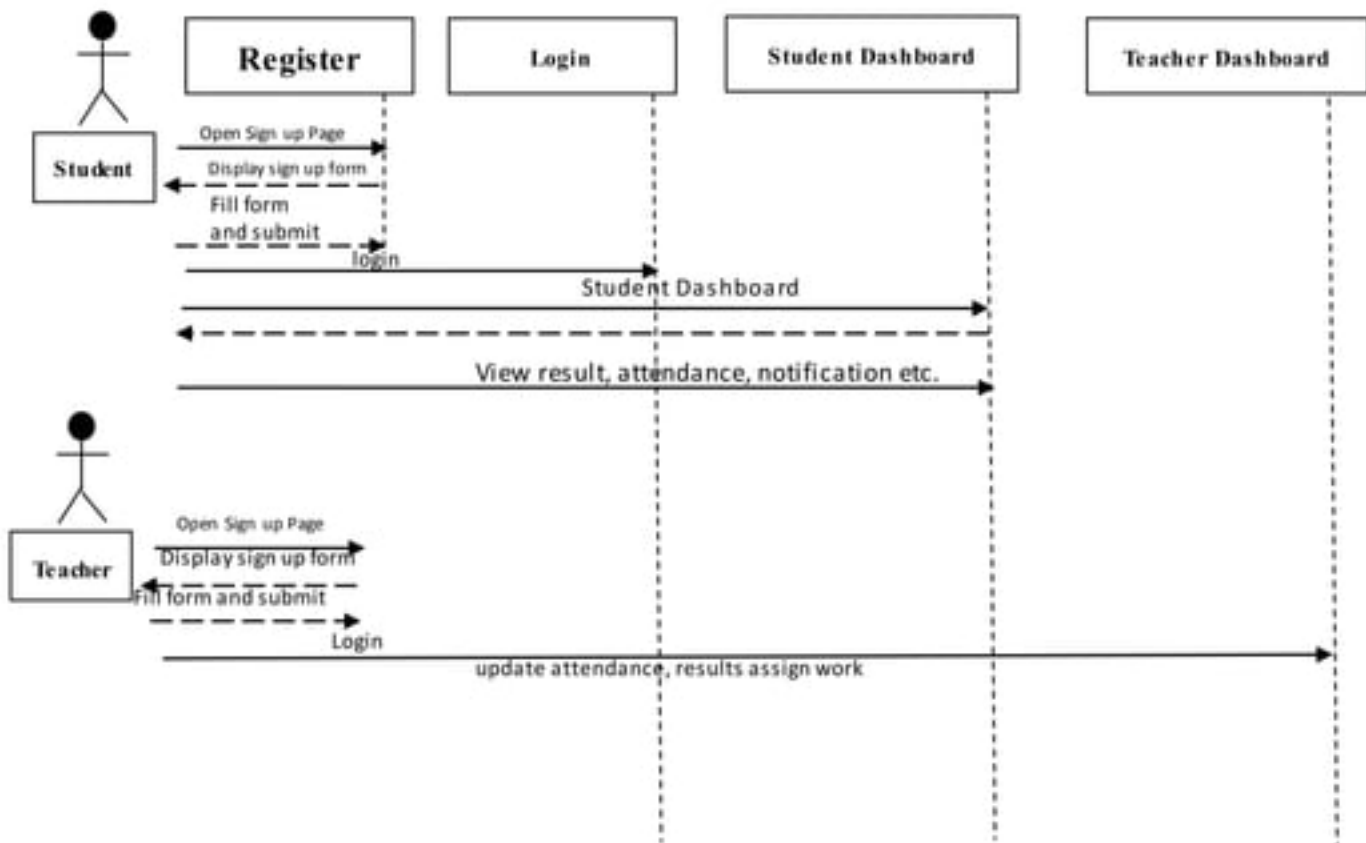
Chapter 4: System Design

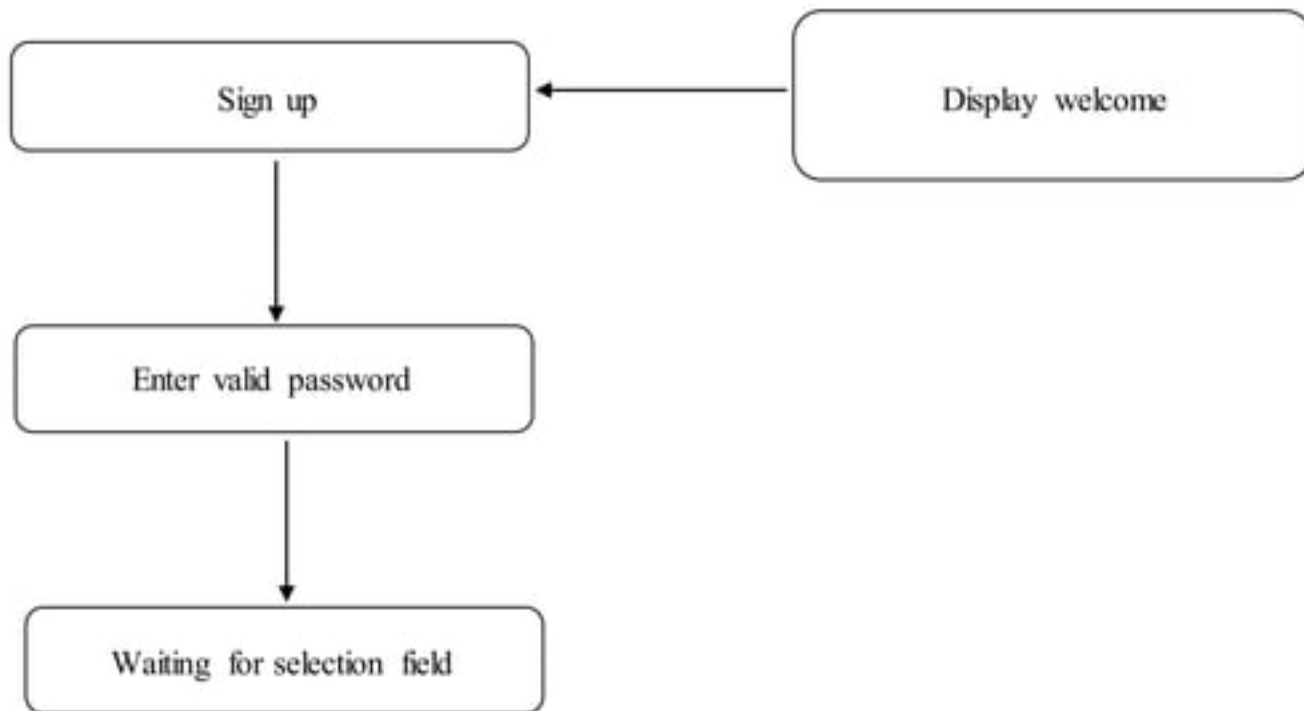## 4.1. Entity Relationship Diagram with data dictionary
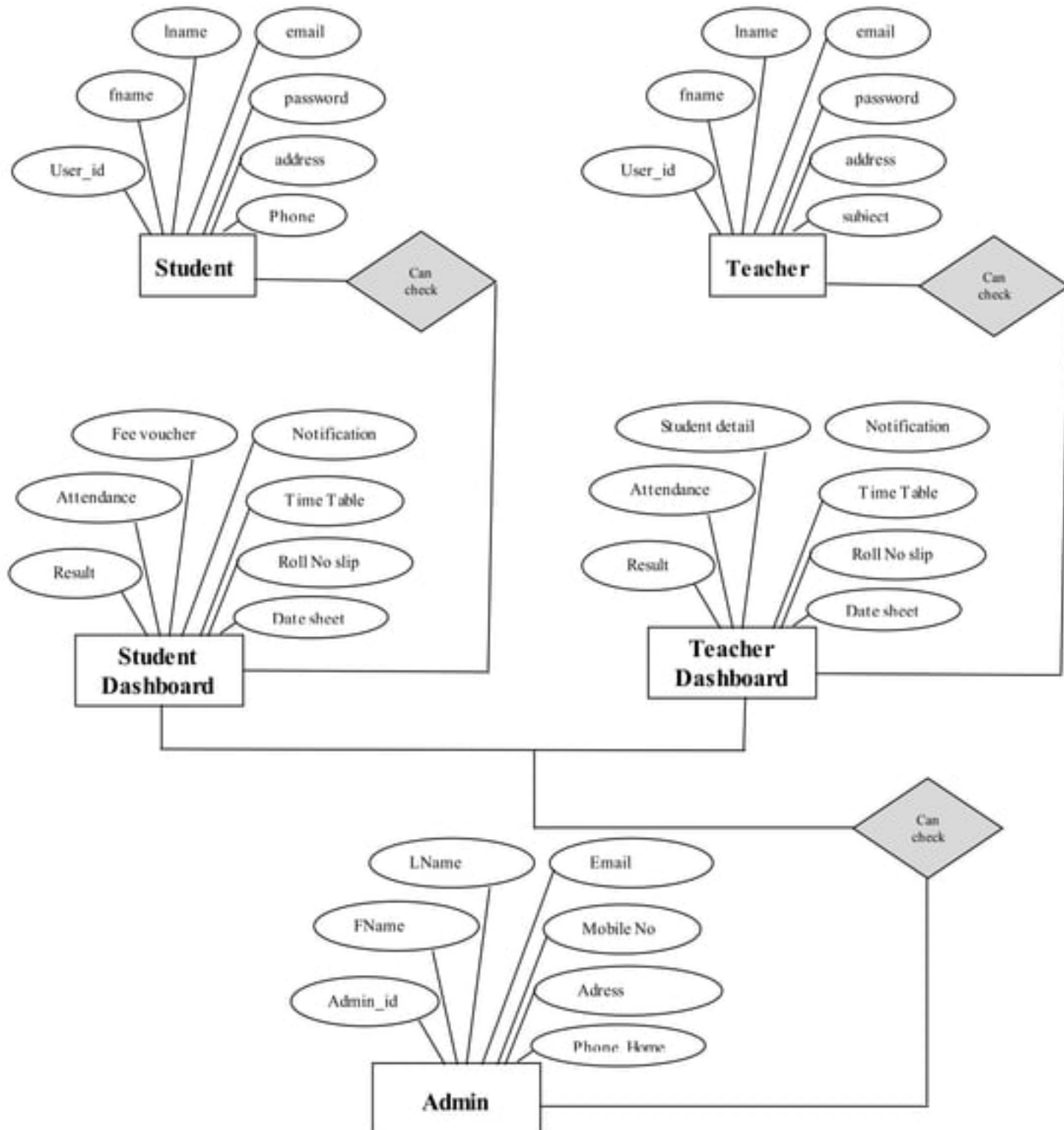
4.2. Class Diagram
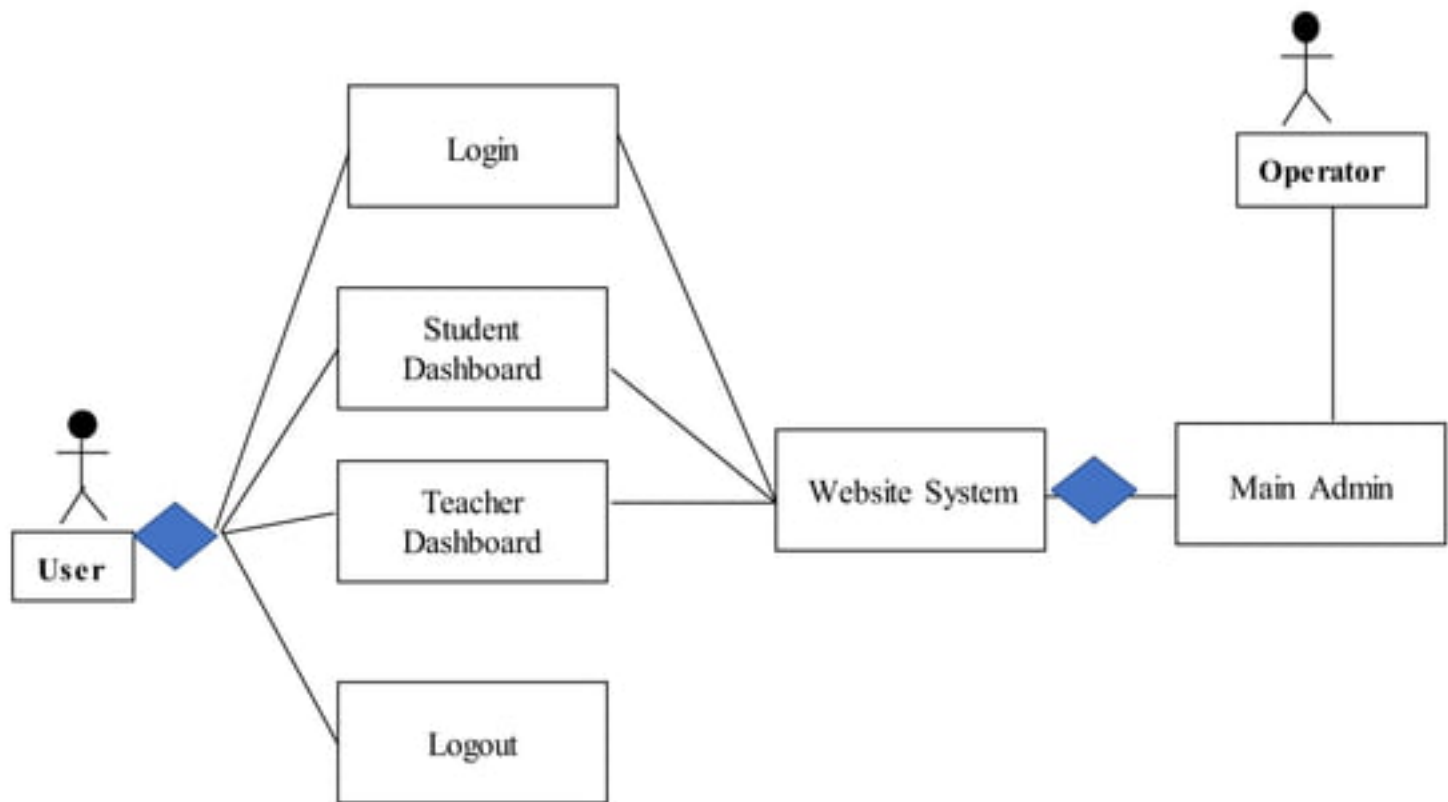
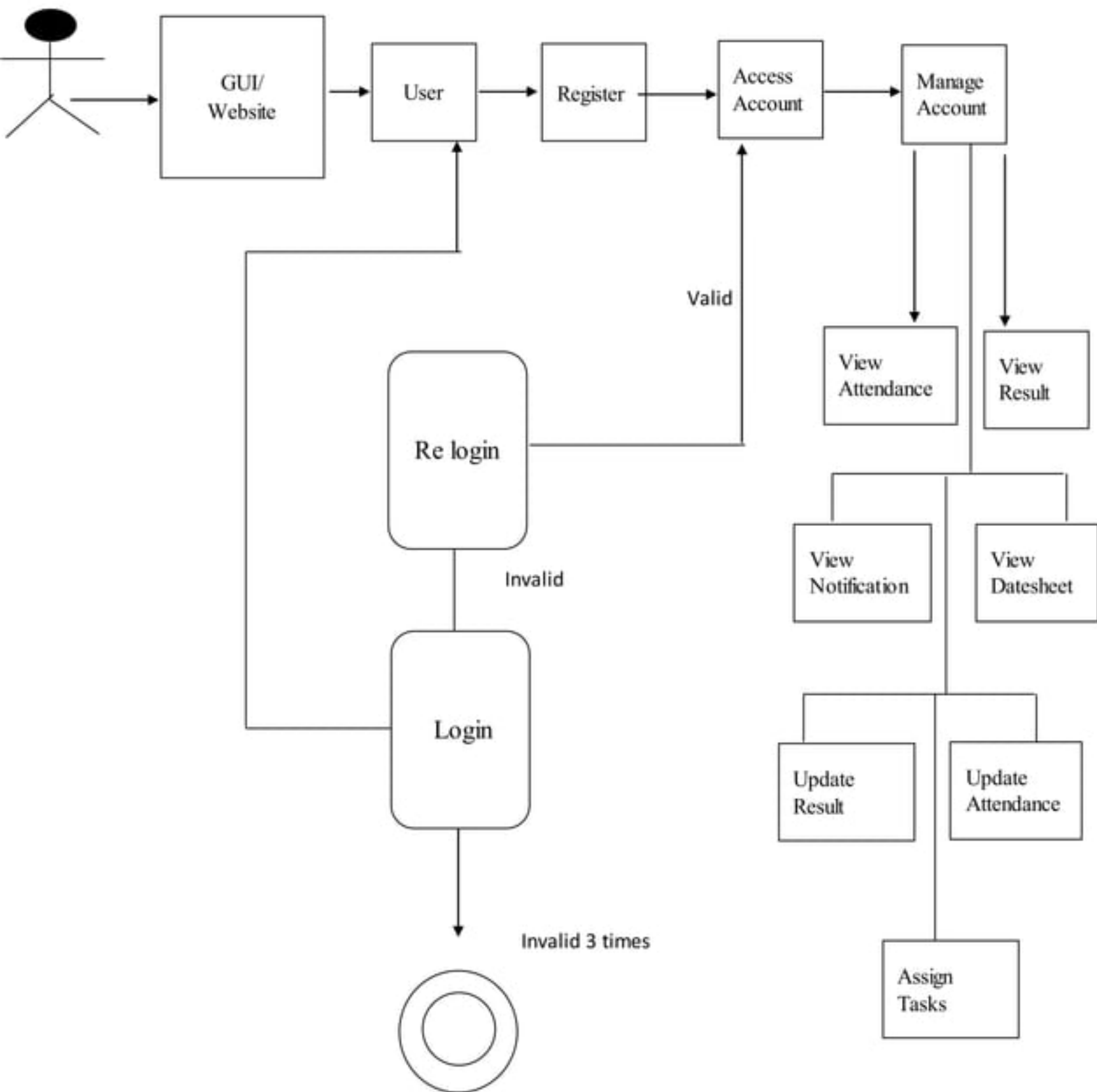## 4.3. Sequence / Collaboration Diagram

4.4. State Transition Diagram

```
┌─────────────────────────┐          ┌─────────────────────────┐
│                         │          │                         │
│        Sign up          │ ◄──────  │    Display welcome      │
│                         │          │                         │
└─────────────────────────┘          └─────────────────────────┘
            │
            │
            ▼
┌─────────────────────────┐
│                         │
│   Enter valid password  │
│                         │
└─────────────────────────┘
            │
            │
            ▼
┌─────────────────────────┐
│                         │
│ Waiting for selection field │
│                         │
└─────────────────────────┘
```

4.5. Component Diagram
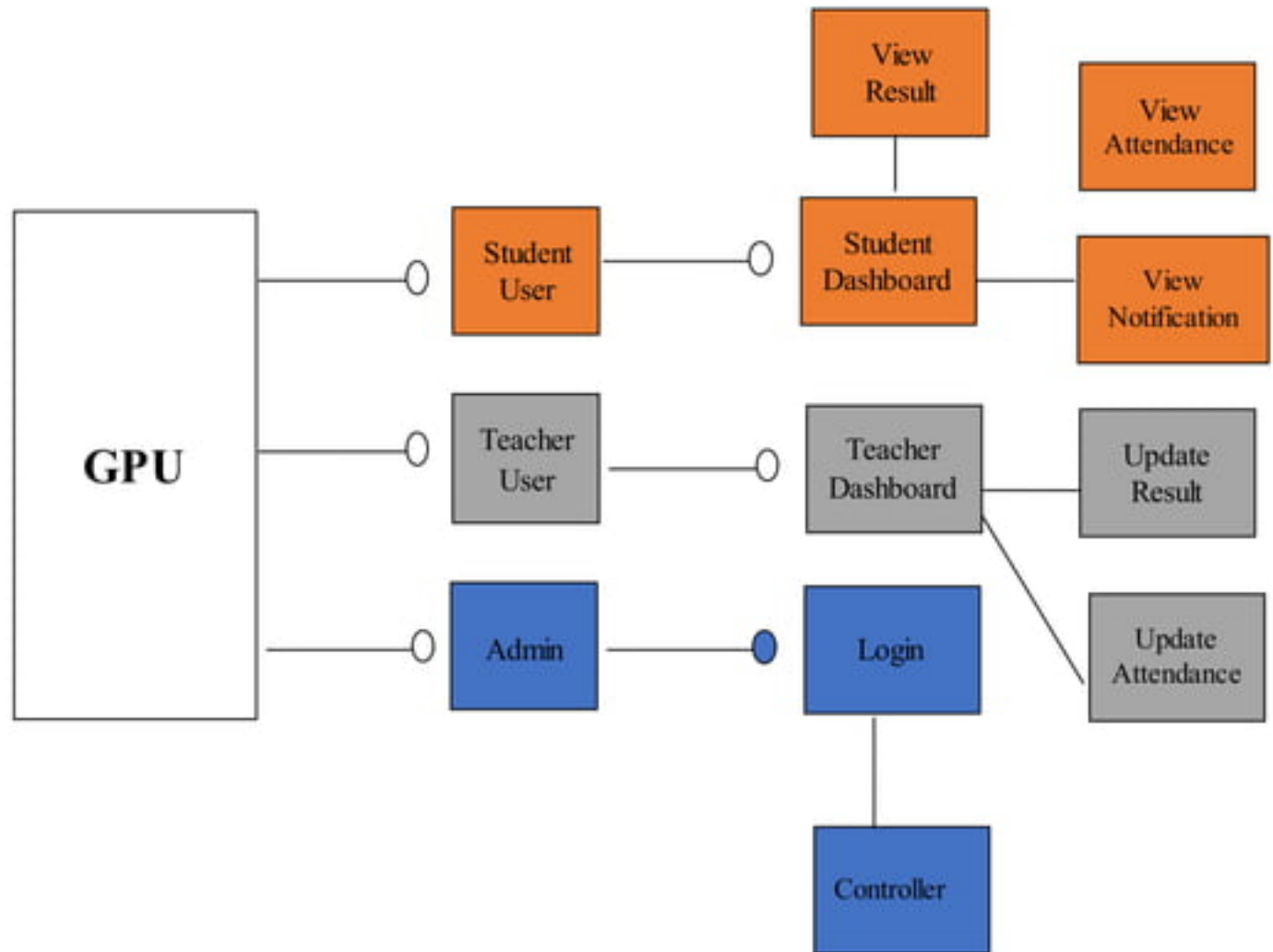
4.6. Deployment Diagram

4.7. Data Flow diagram


```
                            ┌──────────────┐
                            │   Student    │
                            │  Dashboard   │
                            └──────────────┘
```

Student Dashboard

Attendance update | Result update | View student data | View subject | Assign work

Response

College.com Website
Login, logout, register, check record

Student User — Login — Response — College.com Website — Response — Teacher User

Response

Student Dashboard

Attendance view | Result view | Notification | Roll No Slip | Datasheet
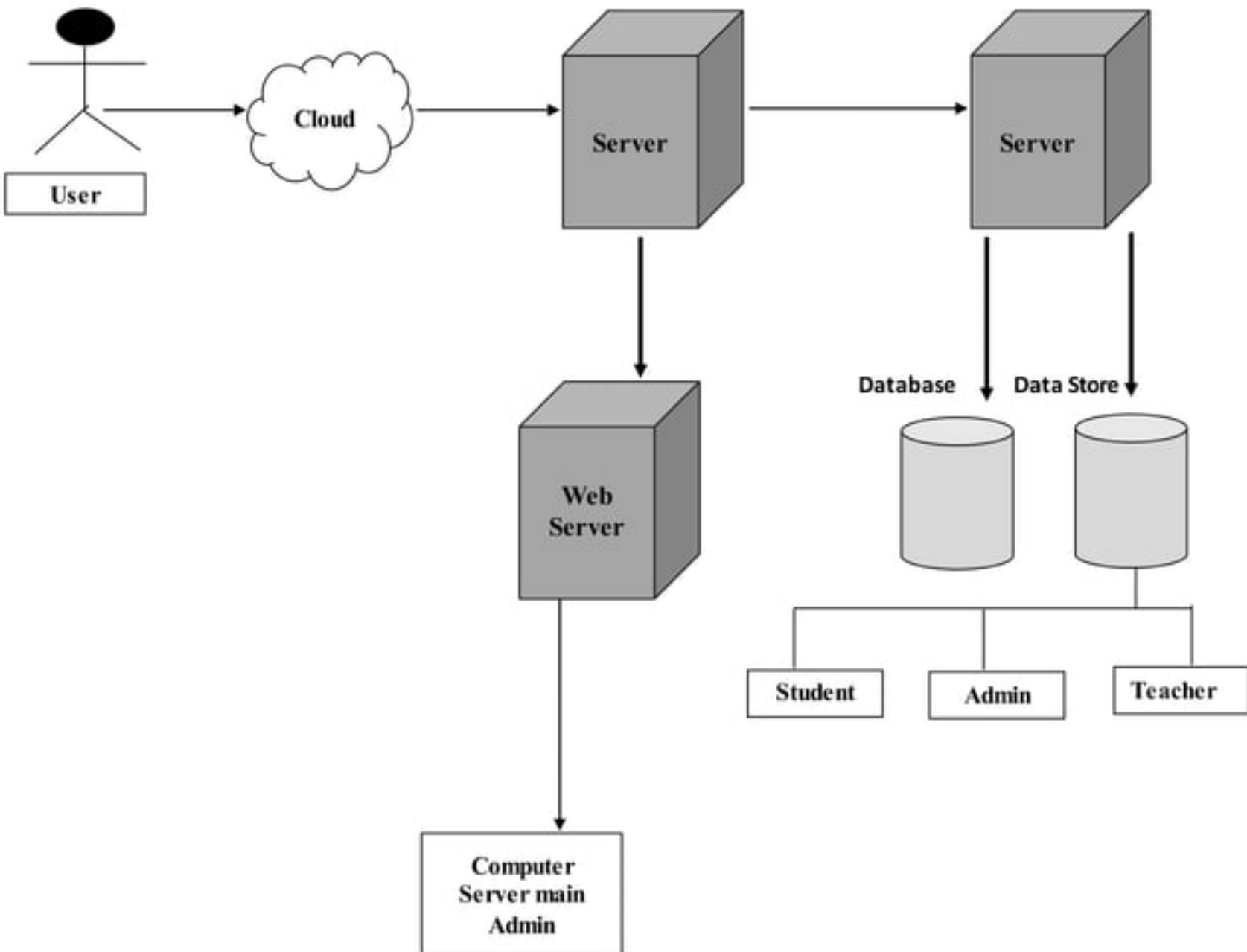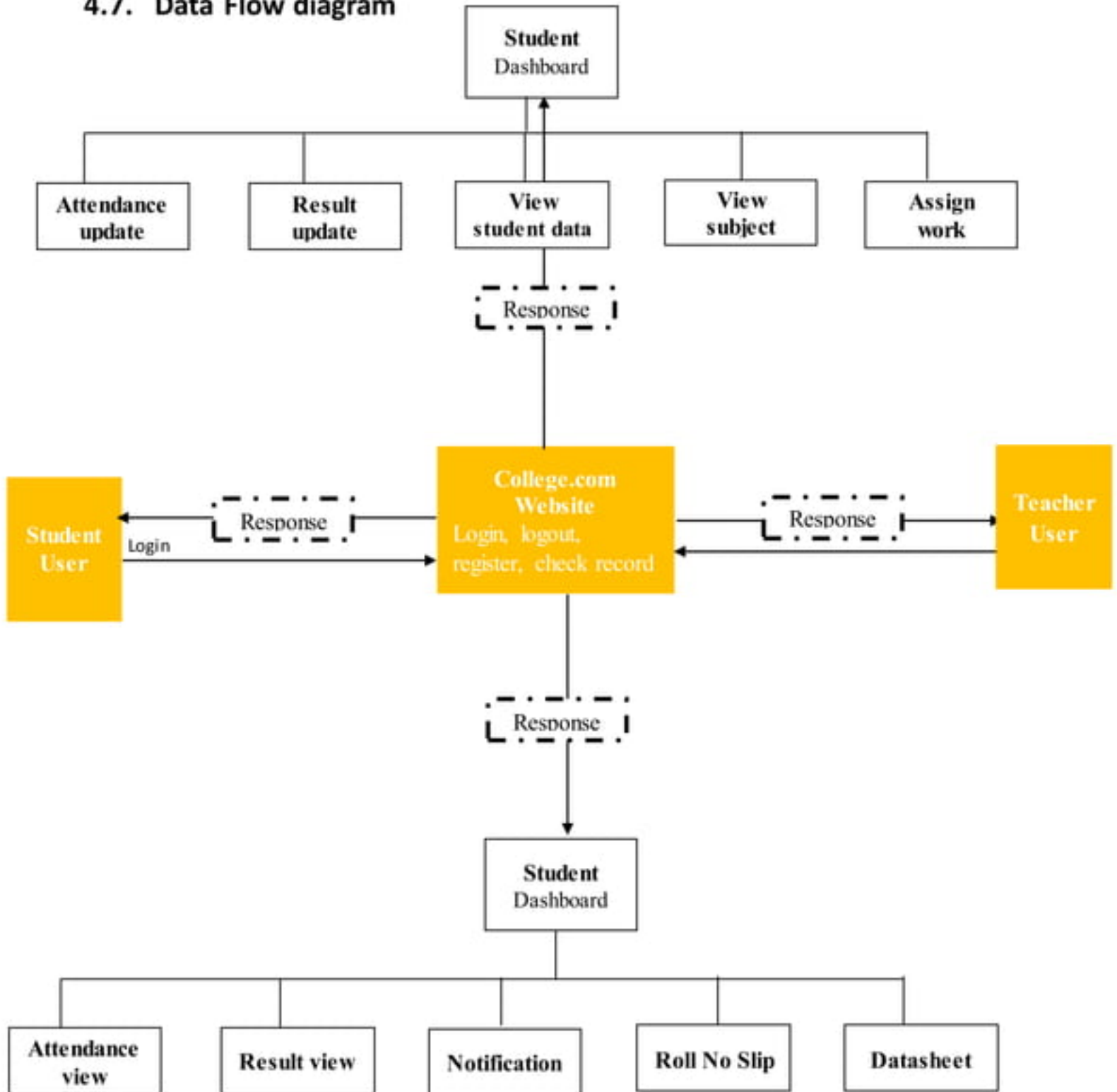
4.8. Activity Diagram
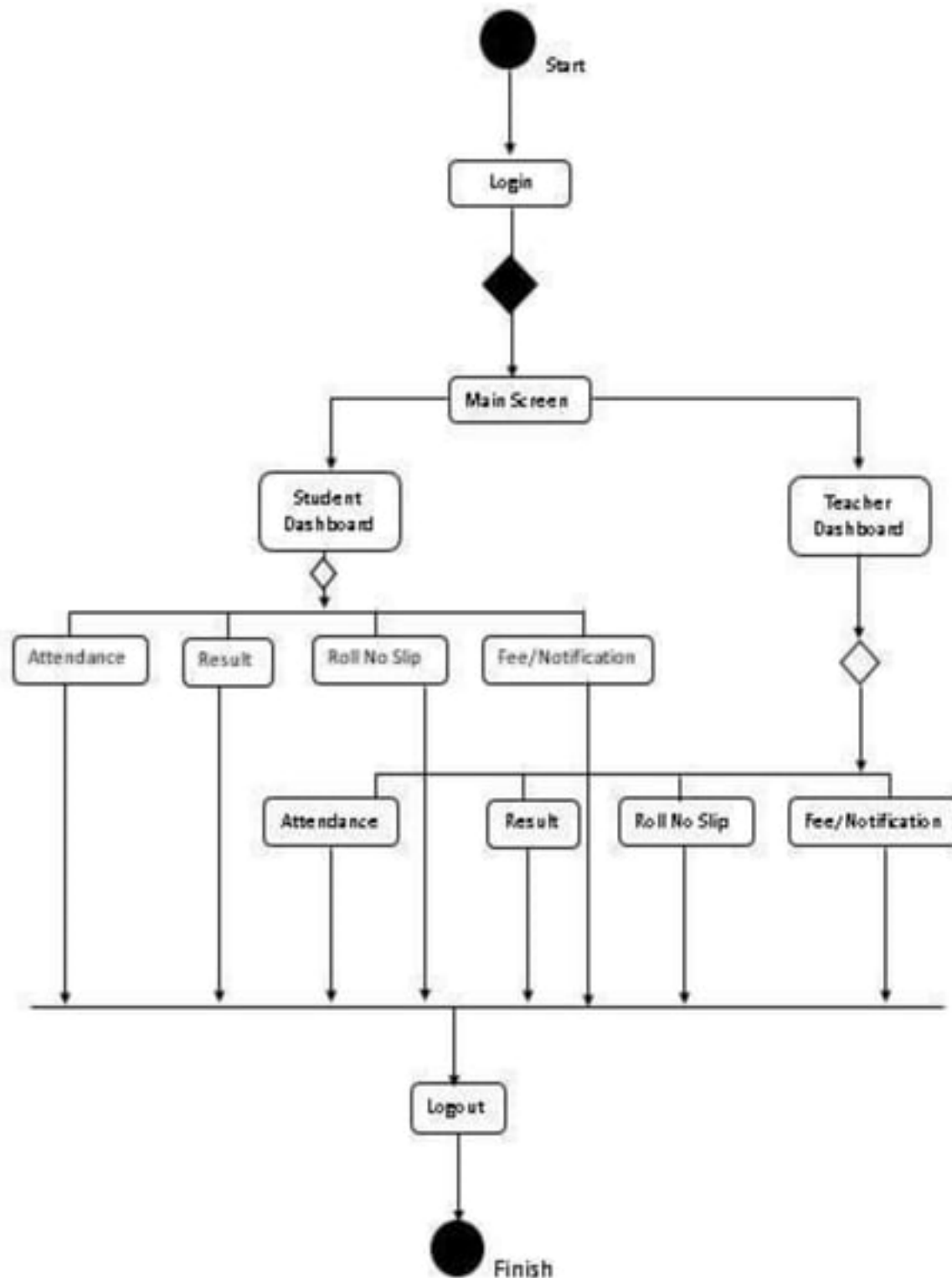
Chapter 5

Implementation

Chapter 5: Implementation

This application is developed to achieve a goal that student can get his / her all required info including view results, attendance percentage, fee voucher, notification, class schedule, Upcoming semesters information etc. Teacher can update results and attendance on daily bases for students. Admin is fully authorized to update, delete, read and insert data at any time. This application helps students to get their required info online instead to visit the offices, It becomes easy to view results online instead to going to office and ask the management to show the results. It will save paper work as the things work online through application. It will be very helpful to control and manipulate data and on just one query the required info will be on our screen. Instead to open files one by one and check manually things and wasting time. This application will saving time.

Management system is a very important and essential part of any educational institute. The Project defines the all management of College System. College management system means it controls all the management tasks and functions. It performs all functions which is require to any Educational Institute. Admin can view and change all record of the college. Teacher can also view their information and they can change personal information. Students can search their result. They can see more information about the college on the college management system software. They can see the time table of the lectures in the college. They can see also their exam data fee data and all personal information. Students can print out their roll no slips with just one click.

This site helps the students and all other related staff of the college and all outside visitors on this site to check their required information.

Here students can view his / her attendance regarding each subject for previous and current semesters. Students can also check their results for each subject with all details of marks. If any new result is updated on the CMS so student will get a notification for any new update there is an alarming notification that alerts the students to check update time to time. Students can print out their roll no slips with just one click. Student can view rules and regulations for college in details. Students can view his / her Fee details for previous semester and current semester. Student can view his / her all fee package admission details the details of courses completed and pending courses and repeating courses. Students can view academic calendar. Students can fill their course evaluation forms at the end

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Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

5.1. Important Flow Control/Pseudo codes

User
Registered

a
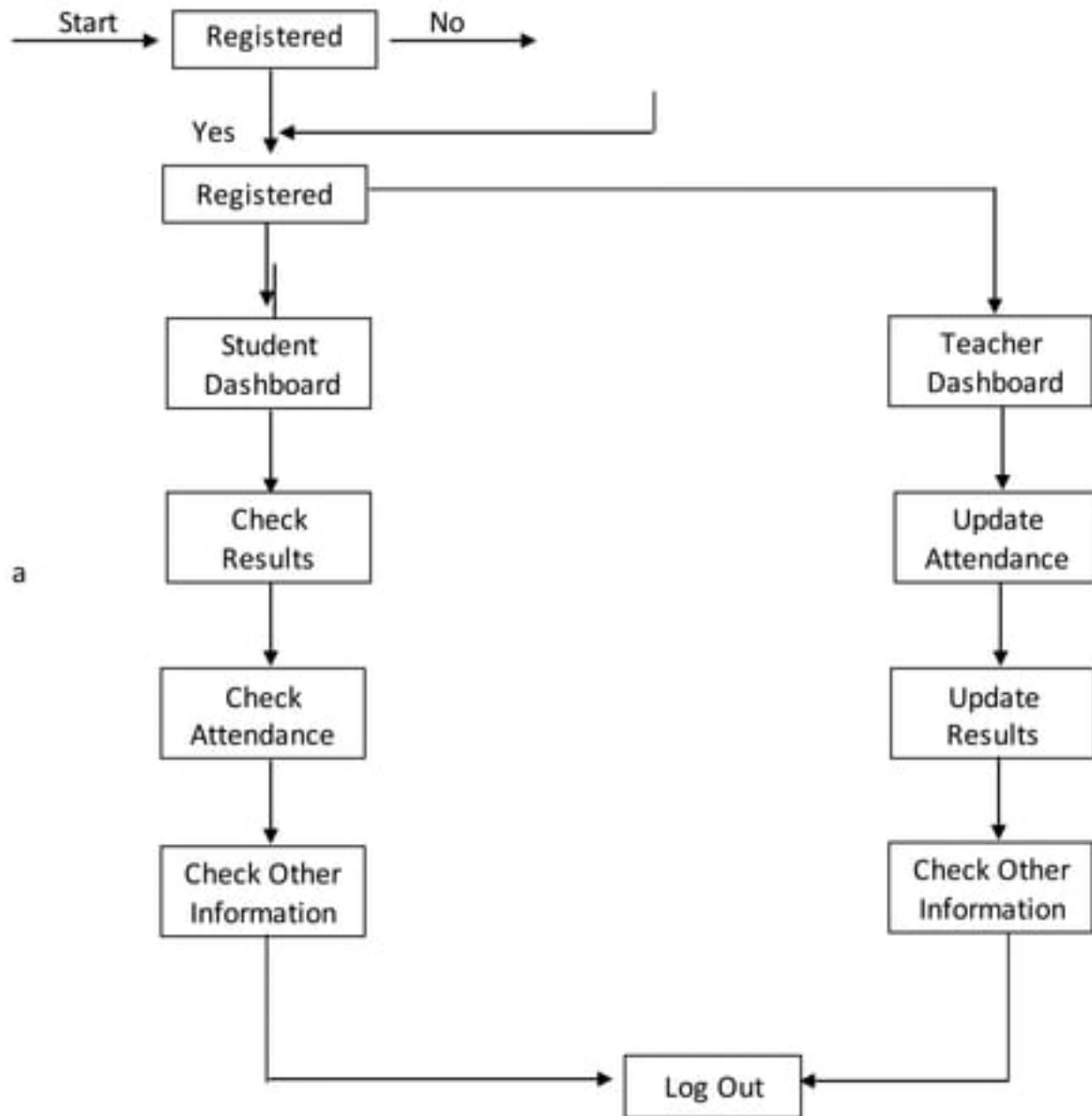
5.2. Components, Libraries, Web Services and stubs

Components

1- Proper Website – User friendly

CMS is a user friendly website. User can easily use this application. If a student want to view his / her result for any subject and also for previous subject / semester, He can check results easily. Student can open this application at any time anywhere in the world. Student can view his / her roll no slips, attendance percentage, fee vouchers, all fee paid and balance record. On just one click student will get his / her required information. Student can view information about the college such as student can download prospectus. Student can check the programs details offered by the college for each semester, current semester and previous semesters. Student can check the information about the faculty. Student can view the college infrastructure and college study environment. Student can view the events details that occurred in the previous semester period time. This application has home page which include all links towards other separate categories.

This application has online admission form filling web page. Student can fill the required information and can upload the related documents with this form and could get online admission. Student can pay fee online on this website. And can get online receipt of fee.

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Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

2- Library

Student can view online libraries including books and all other study material online which will be very helpful for students.

Student can find here all previous course outline and their previous exams details and old question papers.

Teachers can upload here study material related to the student's study.

Students can also view their lectures from library. This library constitutes thousands of online books online lectures.

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3- Mobile friendly use of application

User can also user this application on mobile. And can view his / her required information on his mobile screen. User can use the website on mobile easily and can move other links as navigation on the mobile made easy.

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Teachers have been authorized at this site to update results (including assignments, quiz, midterm and final term marks details), attendance on daily bases. Teacher can view all details of each student of any semester.

4- Web Services

User can check his / her required information easily using the application with out any hurdle. Website has good performance and can bear thousands of users load at once. Many students can update his / her personal information at any time.

➢ 24 hours access

➢ Variety and speed of performance

➢ Privacy home

➢ Can provide huge data

5.3. Deployment Environment

In deployment environment we need a domain where this application exists and thousands of users can get access to the application at any time. Even user can use the application from his / her mobile devices and van view his / her required information. It's all required and administrator who control all this process and can perform other supervision activities as assigned.

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5.4. Tools and Techniques

Techniques, application and tools which will be used when the project will be developed are as follows.

PHP

This language will helps the developer to develop the application with the help of mysqli database. This language provide backend backup and save all student record. Which could be seen and printout as required.

HTML

HTML is the language use to develop the front end of the application. It will show that how would the application be looks like. It will developed many webpage of the application. This language will be used through out the whole application development.

CSS

This language will make the application more attractive and make the application user friendly.

JAVA Script

This language will be used through out the all project development process to give attractive effects to the website.

Microsoft Word

Microsoft word is word processor which will be used for documentation purpose and will be used during the whole project preparation. It include all the details about the project.

Microsoft Excel

It is the spread sheet which will be used for data analysis during the development of whole project.

Microsoft Project

It is the application which provides the project management tools and will be used through out the whole project development process. It includes Gannt charts, resource allocation and project schedules etc.

Draw.io

In Draw. Io we will draw all related diagrams such as class diagram, sequence diagram, DFD, etc.

Project Modelling

Microsoft visio 2013 will be used for data flow diagram, entity relationship diagram and other wired frame development process

Server

A server is required where all the data will be stored. Student and other user will get their required data through the server.

5.5. Best Practices / Coding Standards

- Code repetition is avoided.
- All individual programs units such as function and objects show the expected outputs and giving inputs.

Appendices

Appendix A: To be determined list

We have choosed V model to develop this project. As we need a complete implanted product without any fault. The client has provided us the all requirements. These requirements were tested, ant write its test and after completion of the product we validate that product with those tests.