A PROJECT REPORT

ON

CIMS

Online Coaching Institute Management System

Submitted in fulfillment of the requirements for the award of the degree of

BACHELOR OF ENGINEERING

In

COMPUTER ENGINEERING

Submitted by

ADITYA K. SHAH: 100510107023

Gujarat Technical University

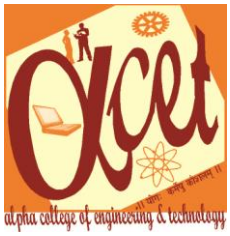
COMPUTER ENGINEERING

ALPHA COLLEGE OF ENGINEERING AND TECHNOLOGY

KHATRAJ,

GANDHINAGAR

May, 2014



Gujarat Technical University

ALPHA COLLEGE OF ENGINEERING & TECHNOLOGY

KHATRAJ, GANDHINAGAR

COMPUTER ENGINEERING

CERTIFICATE

It is certified that project work entitled "**Online Coaching Institute Management System**" is a bonafide work carried out in the 8th semester by **Mr. Aditya K. Shah** in fulfillment for the award of Bachelor of Technology in Computer Engineering from Alpha College of Engineering and Technology during the academic year 2013-2014. Who carried out the project work under the guidance and no part of this work has been submitted earlier for the award of any degree.

HEAD OF THE DEPT.	INTERNAL PROJECT GUIDE
Prof. Sagar Patel	Prof. Shrikant Patel
HOD & Assistant Professor	Assistant Professor
CE/IT Department	Computer Department
ACET	ACET

ASPIRATION
SOFTWARE SOLUTION & CONSULTANCY

Date: 23-4-2014

Certificate of Training

To,
Respected Sir/Madam,
Alpha College of Engineering and Technology,
Khatraj,
Dist. Ghandhinagar.

This is to certify that Aditya K. Shah has trained with the Aspiration Software Solution and Consultancy.

He completed project on "**Online Coaching Institute Management System (OCIMS)**" within duration.

During his tenure here, he worked on ASP.NET(C#) with SQL Server.

Not only is he proficient in designing and developing software systems as required by the clients, he has knack of understanding a problem quickly and being able to solve them with out-of-the-box solutions.

His tenure with has been one of mutual satisfaction and we would like to wish him all the best in his future endeavors.

Sincerely,

Aspiration Software Solutions & Consultancy

GUJARAT TECHNOLOGICAL UNIVERSITY

ONLINE PROJECT REPORT SUBMISSION CERTIFICATE

Date of Receipt: 4/26/2014 4:56:48PM

This is to certify that, GTU has received the project report of ***SHAH ADITYA KIRITKUMAR*** entitled on ***Online Coaching Institute Management System*** from ***Computer Engineering*** of ***Alpha College Of Engineering & Technology***

The Receipt No is: GTU/PT/2014/BE/753

Report
Digital signed

Title: **OCIMS**
Author: **Online Coaching Institute Management System**
Processing date: **Sat, 3.5.2014 13:33:40 CEST**

A total of **366** fragments were analysed. As a result **29** fragments (7.9%) were found in other documents. In the document preview below the fragments are marked light blue and clickable.

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2 fragments were found in a text with the title: "***Rayleigh Distribution Definition***", located on:
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http://dspace.mit.edu/bitstream/handle/1721.1/46263/43379855.pdf?sequence=1

4 fragments were found in a text with the title: "***CONVENTIONAL METHODS FOR SOFTWARE***", located on:
http://datzb.intelectuals.net/newsite/Book/4._part_III.pdf

2 fragments were found in a text with the title: "***Role of Digital Image Processing for Interfacing of Remote Sensing data for Water resource analysis and planning.***", located on:
http://www.mapindia.org/2005/papers/pdf/107.pdf

1 fragment found in a text with the title: "***D-LIB ® MAGAZINE***", located on:
http://www.public.iastate.edu/~gerrymck/NewAge.pdf

1 fragment found in a text with the title: "***Decision /gecco2002.pdf***", located on:
http://cptra.ln.edu.hk/~mlwong/conference/gecco2002.pdf

1 fragment found in a text with the title: "***Acknowledgments /Horv04a.pdf***", located on:
http://scg.unibe.ch/archive/masters/Horv04a.pdf

1 fragment found in a text with the title: "***Object-Oriented Reverse Engineering Coarse-grained, Fine-grained, and Evolutionary Software Visualization***", located on:
http://soft.vub.ac.be/FFSE/Publications/LanzaPhD2003.pdf

1 fragment found in a text with the title: "***NEW DELHI-25 SUBMITTED BY:***", located on:
http://www.cs.uic.edu/~srizvi/BIT_Thesis.pdf

1 fragment found in a text with the title: "***—Anonymous /Automated_Defect_Prevention_Ch1.pdf***", located on:
http://media.techtarget.com/searchSoftwareQuality/downloads/Automated_Defect_Prevention_Ch1.pdf

1 fragment found in a text with the title: "***Rayleigh Distribution Definition***", located on:
http://www.ignoujugaad.com/Project/Synopsis.pdf

1 fragment found in a text with the title: "***Vrije Universiteit Brussel – Belgium Faculty of Sciences In Collaboration with Ecole des Mines de Nantes – France and***", located on:
http://www.emn.fr/z-info/emoose/alumni/thesis/fnogoseke.pdf

1 fragment found in a text with the title: "***Decision /icdm2002.pdf***", located on:
http://cptra.ln.edu.hk/~mlwong/conference/icdm2002.pdf

1 fragment found in a text with the title: "***Employing simulation to evaluate designs: The APEX approach***", located on:
http://mentalmodels.mitre.org/coq_eng/reference_documents/using_simulation_to_evaluate_designs-apex_approach.pdf

1 fragment found in a text with the title: "***3. Objects, Object Factories, and Application***

GTU Innovation Council

Patent Drafting Exercise (PDE)

GIC Patent Drafting Exercise Project Team: 753

FORM 1 **THE PATENTS ACT 1970** **(39 OF 1970)** **&** **THE PATENTS RULES, 2003** **APPLICATION FOR GRANT OF PATENT**	**(FOR OFFICE USE ONLY)** **Application No:** 273 **Filing Date:** **Amount of Fee paid:** **CBR No:**

1. APPLICANT(S)

ID	Name	Nationality	Address	Mobile No.	Email Address
1	Aditya Shah	Indian	8, Vasant Society, Usmanpura, Ahmedabad - 380013	8401557887	aditya.shah7023@gmail.com

2. INVENTOR(S)

ID	Name	Nationality	Address	Mobile No.	Email Address
1	Aditya Shah	Indian	8, Vasant Society, Usmanpura, Ahmedabad - 380013	8401557887	aditya.shah7023@gmail.com

3. TITLE OF INVENTION / PROJECT

Online Coaching Institute Management System

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT/AUTHORIZED PATENT AGENT IN INDIA

Name: Aditya Shah
Address: 8, Vasant Society,
Usmanpura,
Ahmedabad - 380013
Mobile: 8401557887
Email ID: aditya.shah7023@gmail.com

NOTE: This is just a mock Patent Drafting Exercise (PDE) for semester 8, BE students of GTU. These documents are not to be submitted with any patent office.

5. PRIORITY PARTICULARS OF THE APPLICATION(S) FIELD IN CONVENTION COUNTRY

Country	Application No.	Filing Date	Name of the Applicant	Title of the Invention
N/A	*N/A*	*N/A*	*N/A*	*N/A*

6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION

International application number	International filing date as alloted by the receiving office
N/A	*N/A*

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original(First) Application Number	Date of filing of Original (first) application
N/A	*N/A*

8. PARTICULARS FOR FILING PATENT OF ADDITION

Main Application / Patent Number	Date of filing of main application
N/A	*N/A*

9. DECLARATIONS:

(i) Declaration by the inventor(s)

I/We, the above named inventor(s) is/are true & first inventor(s) for this invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

Date: 02-May-2014

Name	**Sign & Date**
1 Aditya Shah	_____

(ii) Declaration by the applicant(s) in the convention country

I/We, the applicant (s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

Not Applicable

NOTE: This is just a mock Patent Drafting Exercise (PDE) for semester 8, BE students of GTU. These documents are not to be submitted with any patent office.

(iii) Declaration by the applicant(s)

I/We, the applicant(s) hereby declare(s) that:-

- [✓] I am/We are in possession of the above mentioned invention.
- [✓] The provisional specification relating to the invention is filed with this application.
- [✘] The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.
- [✓] There is no lawful ground of objection to the grant of the patent to me/us.
- [✓] I am/we are the assignee or the legal representative of true & first inventors.
- [✘] The application or each of the application,particulars of each are given in the para 5 was the first application in the convention country/countries in respect of my/our invention.
- [✘] I/we claim the priority from the above mentioned applications(s) filed in the convention country/countries & state that no application for protection in respect of invention had been made in a convention country before that date by me/us or by any person from which I/we derived the title.
- [✘] My/Our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in para 6.
- [✘] The application is divided out of my/our application(s) particulars of which are given in para 7 and pray that this application may be treated as deemed to have been filed on _____under section 16 of the Act.
- [✘] The said invention is an improvement in or modification of the invention particulars of which are given in para 8.

10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

- [✓] (a) Provisional specification/Complete specification
- [✗] (b) Complete specification(In confirmation with the international application) / as amended before the international.Preliminary Examination Authority(IPEA),as applicable(2 copies),No.of pages.....No.of claims.....
- [✓] (c) Drawings(In confirmation with the international application)/as amended before the international Preliminary Examination Authority(IPEA),as applicable(2 copies),No.of sheets.....
- [✗] (d) Priority documents
- [✗] (e) Translations of priority documents/specification/international search reports
- [✓] (f) Statement and undertaking on Form 3
- [✗] (g) Power of Authority
- [✗] (h) Declaration of inventorship on Form 5
- [✗] (i) Sequence listing in electronic Form

(j) .....

Fees Rs.XXX in Cash/Cheque/Bank Draft bearing No.XXX Date: XXX on XXX Bank.

I/We hereby declare that to the best of my /our knowledge, information and belief the fact and mtters stated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this ..... day of ..... 20.....

Name	**Sign & Date**
1 Aditya Shah	_____

To
The Controller of Patent
The Patent Office, at Mumbai.

NOTE: This is just a mock Patent Drafting Exercise (PDE) for semester 8, BE students of GTU. These documents are not to be submitted with any patent office.

FORM 2
THE PATENTS ACT, 1970
(39 OF 1970)
&
THE PATENTS RULES, 2003
PROVISIONAL SPECIFICATION

1. TITLE OF INVENTION / PROJECT

Online Coaching Institute Management System

2. APPLICANT(S)

Aditya Shah (Indian)
8, Vasant Society, Usmanpura, Ahmedabad - 380013

3. PREAMBLE TO THE DESCRIPTION

The following specification describes the invention.

4. DESCRIPTION

a. Field of Application / Project / Invention

It is an online system which would be used by any organization which can be any coaching Institute.

b. Prior Art / Background of the Invention / References

Present system lacks smart work.All work is done manually and work-load and paper works increases.so maintaining database on paper becomes tiring job.current system lacks easy access and sharing of information between organization and students. Students cannot access any information whenever they want.in present era,this is biggest disadvantage.

c. Summary of the Invention/Project

OCIMS (Online Coaching Institute Management System) is a dynamic website of an institute. The main aim of the OCIMS is to provide internet based administration system which stores all institute's data and maintains its database. This provide better and secure functionality and data can be easily access when required. OCIMS is all about providing efficient way of working to its users.

d. Objects of the Invention/Project

We have four modules i.e objects of inventions.
1]Admin
2]Faculty
3]Students
4]Parents

e. Drawing(s)

f. Description of the Invention

Currently the organization doesn't have any kind of online and dynamic system for students and faculty in which they can easily access all
information dynamically.
For the current system it is very much tedious task to maintain information like keeping track of students data , student and staff attendance ,
different kinds of statistical information ,etc.
In existing system no alerts about student's progress is provided which is very much needed. Here all work is done manually which is again
tiring job.

g. Examples

-

h. Unique Features of the Project

The main purpose of the website is to provide information about institute and to act as intermediate between students and tutors and the institute organizers. The login capability allows the individual to perform user specific tasks. Thus it makes the website dynamic in nature.
It also includes ERP system for the institute which would provide easy data access and data searching. To update respected parents with their ward's regular progress via E-mail.

5. DATE & SIGNATURE

Date: 02-May-2014

	Name	**Sign & Date**
1	Aditya Shah	_____

NOTE: This is just a mock Patent Drafting Exercise (PDE) for semester 8, BE students of GTU. These documents are not to be submitted with any patent office.

6. ABSTRACT OF THE INVENTION

OCIMS (Online Coaching Institute Management System) is a dynamic website of an institute. The main aim of the OCIMS is to provide internet based administration system which stores all institute's data and maintains its database. This provide better and secure functionality and data can be easily access when required. OCIM is all about providing efficient way of working to its users. This system allows faculties to upload important notes at any time. They can fills attendance, apply for leave, and performs many operations on the system so that they can be updated with the information, regarding the institute, at any instance of time. This system also provide easy data access to its students studying there. This system allows students to login and
download various study materials and update themselves of attendance, lectures, exam time-table, holidays, important
notices, etc. This system also allows communication between student and faculty. So students can get answer of their queries at any hour. This system also provides static site for non-members who want to extract functional view of institute. Parents can also login in this system and gets their ward's updates.

NOTE: This is just a mock Patent Drafting Exercise (PDE) for semester 8, BE students of GTU. These documents are not to be submitted with any patent office.

FORM 3

THE PATENTS ACT, 1970
(39 OF 1970)
&
THE PATENTS RULES, 2003
STATEMENT AND UNDERTAKING UNDER SECTION 8

1. Declaration

I/We, Aditya Shah

2. Name, Address and Nationality of the joint Applicant

Aditya Shah (Indian)

8, Vasant Society, Usmanpura, Ahmedabad - 380013

hereby declare:

(i) that I/We have not made any application for the same/substantially the same invention outside India.

(ii) that the right in the application(s) has/have been assigned to,

Name of the Country	Date of Application	Application Number	Status of the Application	Date of Publication	Date of Grant
N/A	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*

(iii) that I/We undertake that up to the date of grant of patent by the Controller, I/We would keep him inform in writing the details regarding corresponding application(s) for patents filed outside India within 3 months from the date of filing of such application.

Dated this _____day of _____ ,20____

3. Signature of Applicants

_____

(Sign and Date)

Aditya Shah

To
The Controller of Patent
The Patent Office, at **Mumbai.**

Acknowledgement

Experience is the best teacher. I wish to express my heartfelt appreciation to all those who have contributed to this project work, both explicitly and implicitly, without the co-operation of whom, it would not have been possible to complete this project work.

I would like to express my sincere thanks to Head of Department **Prof. Sagar Patel** and Project Coordinator **Prof. Ajay Shah,** who gave me an opportunity to undertake such a great challenging and innovative work. We are grateful to them for their guidance, encouragement, understanding and insightful support in the development process.

I am indebted and thankful to **Prof. Shrikant Patel** (Internal Project Guide) & **Mr. Shyam Chawda** (External Project Guide) for their keen interest, untiring perseverance and unceasing motivation during the course of my project work despite of their busy schedule.

I am also thankful to all the other faculties who directly or indirectly supported us in making our project successful by sharing their ideas and knowledge.

Last but not the least I would like to thank my family members and friends for their constant encouragement and support.

With sincere regards,

ADITYA SHAH

100510107023

List of Figures

List of Tables

List of Screenshots

List of Abbreviation

Name/Symbol	*Abbreviation*
OCIMS	Online Coaching Institute Management System
SMS	Short Message Service
ASP	Active Server Pages
CLR	Common Language Runtime
GUI	Graphical User Interface
DFD	Data Flow Diagram

Table of Contents

Abstract

In today's era of technology, everything has gone online, reason may be varied that is for marketing or better access to large division of people or for flexibility, etc. So it is very necessary to have a system that serves multiple purposes and have easy and flexible access.

OCIMS (Online Coaching Institute Management System**)** is a dynamic website of an institute. The main aim of the OCIMS is to provide internet based administration system which stores all institute's data and maintains its database. This provide better and secure functionality and data can be easily access when required. OCIM is all about providing efficient way of working to its users.

This system allows faculties to upload important notes at any time. They can fills attendance, apply for leave, and performs many operations on the system so that they can be updated with the information, regarding the institute, at any instance of time.

This system also provide easy data access to its students studying there. This system allows students to login and download various study materials and update themselves of attendance, lectures, exam time-table, holidays, important notices, etc.

This system also allows communication between student and faculty. So students can get answer of their queries at any hour.

This system also provides static site for non-members who want to extract functional view of institute. Parents can also login in this system and gets their ward's updates.

Chapter 1
Introduction

1.1 Project Summary

- Dynamic website which would help students to access information about updates of their coaching institute and allow them to download materials, ask queries to their respected faculties at any hour. Parents would also be alerted by email/SMS about their ward's updates. This project would also include management of institute's database and managing their employees.

1.2 Objective

- To provide students with easy and fast access of information whenever they required.
- Parents can also access student's account and check their updates.
- Parents would be alerted their ward's updates through email/ SMS.
- Students can message their queries to faculties at any time.
- Reduces paper work of Institute by having well defined database.
- Employee's details are managed easily and can be easily accessed whenever needed.

1.3 Scope

- This website is available for everyone. But login is restricted only for members, students, faculties, employees of the respected institute.
- The study materials and documents related to updates of various events, exams in institute is viewed only by members.
- As per client, faculties and admin can upload necessary documents on the website.

- Students can post queries.
- Non-member visitors can only view the website with restricted content.

1.4 Technology Used

Front End: Microsoft ASP.NET with C#

Back End: Microsoft SQL Server

About ASP.NET :

- .NET is a revolutionary platform, built on open internet protocols and standards with tools and services that meld computing and communication in new ways.

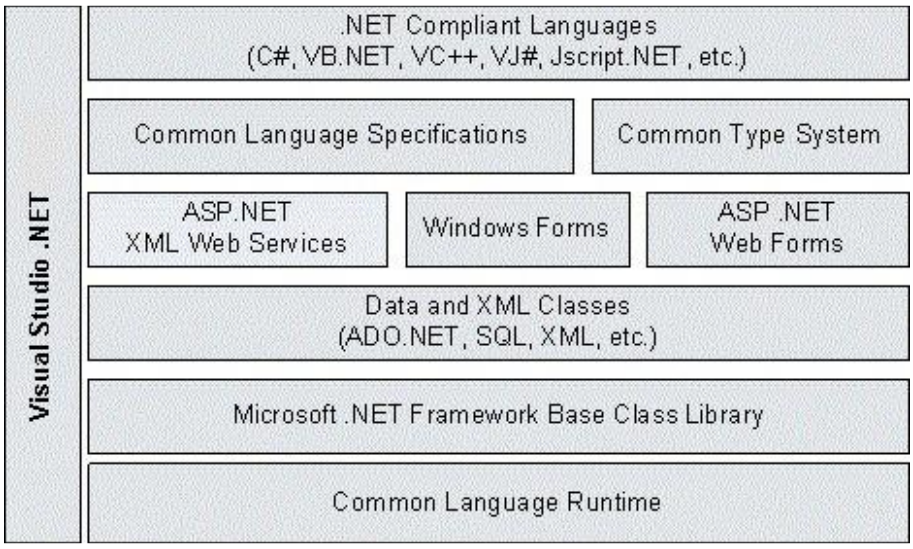

Figure 1.1 .NET Framework Architecture

- The .NET Framework is just part of Microsoft's overall .NET platform strategy. The framework is made up of the Common Language Runtime environment, Base Class Library, and higher-level frameworks such as ASP.NET and Windows Forms as shown in Figure 1.1.

.Net Framework

- The common language runtime (CLR) is the foundation that sits on top of the Windows operating system.
- The base class library is a set of hundreds of classes that are provided as part of the framework to help us build applications that will execute in the CLR.
- To make building applications even easier Microsoft provides some higher level frameworks like ASP.NET and Windows Forms that utilize and extend the functionality provided by the Base Class Library.
- ASP.NET greatly simplifies the building of Internet applications by using Web Forms and Web Services.
- Windows forms provide the ability to develop for the rich environment that the Windows platform provides.

SQL SERVER 2008

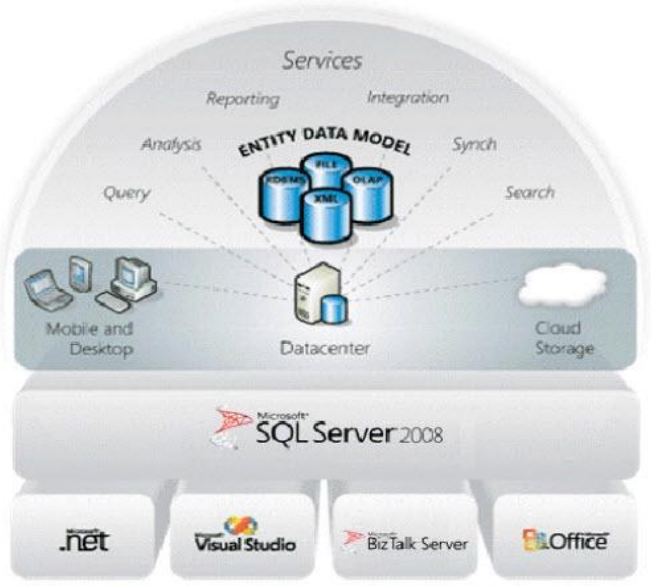

Figure 1.2 SQL Server 2008

- Microsoft SQL Server is a relational database server, developed by Microsoft: It is a software product whose primary function is to store and retrieve data as requested by other software applications, be it those on the same computer or those running on another computer across a network (including the Internet).
- There are at least a dozen deferent editions of Microsoft SQL Server aimed at deferent audiences and for deferent workloads (ranging from small applications that store and retrieve data on the same computer, to millions of users and computers that access huge amounts of data from the Internet at the same time).
- True to its namesake, Microsoft SQL Server's primary query languages are T-SQL and ANSI SQL.
- Manage any data, any place, anytime.
- Store data from structured, semi-structured and unstructured documents, such as images and rich media, directly within the database.
- SQL Server 2008 delivers a rich set of integrated services that enable you to do more with your data such as query, search, synchronize, report, and analyze.

1.5 Hardware and Software Used

Specification at Server side:

Table 1.1 Server Side Specification

Hardware	**Software**
• **2.0 GHz Processor** • **2 GB RAM** • **5 GB Storage Space**	• **Front End : ASP.NET with C#** • **Back End : SQL Server 2008**

Specification at Client side:

Table 1.2 Client Side Specification

Hardware	**Software**
• **1.3 GHz Processor** • **1 GB RAM**	• **Windows XP onwards** • **Web browser (IE, Chrome, FireFox)**

Chapter: 2

System Analysis

2.1 Study of Current System

- Currently the organization doesn't have any kind of online and dynamic system for students and faculty in which they can easily access all information dynamically.
- For the current system it is very much tedious task to maintain information like keeping track of student data, student and staff attendance, different kinds of statistical information etc.
- In existing system no alerts about student's progress is provided which is very much needed. Here all work is done manually which is again tiring job.
- Students cannot access tutorials, question papers and other materials at any time. This is biggest drawback of current system.
- Whole working of institution is difficult to handle through hand-made files.
- Current system also deprives any website, which is not appreciated. Asin today's era its must to have wide perspective.

2.2 Problem and Weaknesses of Current System

- For the current system it is very much tedious task to maintain information like keeping track of student data, student and staff attendance, different kinds of statistical information etc.
- Students cannot communicate with faculties at any hour.
- In current system, faculties cannot answer queries being outside of institute. This is biggest weakness.
- Current system maintains hand-made records of its students and employees. Any damage to these hand-made copies would cause great damage to institute.

- Accessing required information whenever needed is a tedious and time consuming task.

2.3 Requirement of New System

- The main goal of the proposed system is to reduce the tedious organization's task and to reduce paper work.
- System will also store the student information with his/her photo identification proof along with providing his/her a unique identity number.
- The system will have the facility to maintain the track of the attendance and timetable like Exam, lab and Lecture.
- Students can easily post his/her query on website related to the subject, any student or faculty can answer it.
- Faculty can upload Notes, Question papers, assignments for students.
- This system helps students to view and download question papers, software links, syllabus, eBooks, and assignments.
- Alerts would be sent to students and their respective parents regarding results.

2.4 Feasibility Study

- The purpose of the feasibility study activity is to determine whether it would be financially and technically feasible to develop the product.
- The feasibility study activity involves the analysis of the problem and collection of all relevant information relating to the product such as the different data items which would be input to the system, the processing required to be carried out on these data, the output data required to be produced by the system, as well as various constraints on the behavior of the system.
- Feasibility studies are used as a basis for deciding whether to proceed with, postpone or cancel the project.
- The purpose of feasibility study is to determine whether the requested project is successfully realizable. It includes following aspects :

2.4.1 Technical Feasibility :

- It is basically used to see existing computer, hardware and software etc, weather it is sufficient or additional equipment are required?
- Minimum System Requirement is such that it can be affordable by of the user who is having computer. All the user requires is compatible browser and Visual Studio 2010, SQL Server 2008 installed so our system is fully technical feasible.

2.4.2 Economic Feasibility :

- Economic Feasibility study is the most frequently used method for evaluating the effectiveness of a new system. Cost-benefit analysis is performed to determine the benefits and savings that are expected from the new system and compare them with costs.
- Hardware procurement: No additional hardware needs to be procured for development and implementation.
- Man power cost (zero in our case), Traveling and miscellaneous cost, Technical Manual's cost.
- By considering above cases, our project is economically feasible because it requires only some software installation which is economic and acquirable by college authority who wants to build, implement this project and they are responsible to provide enough resources for the required task.

2.4.3 Operational Feasibility :

- Operational Feasibility is concerned with human and organizational (here institutions/colleges) aspects. It covers two aspects : Technical performance includes issues such as determining whether the system can provide the right information for the lancers and client, and whether the system can provide the right information at the right place at the right time. Acceptance within an institution includes the general attitude and job skills of existing personnel any such restructuring of jobs will be acceptable to current users.

- By considering above, our project is operationally feasible because it supports technical performance and acceptance within an institution with no resistance.

2.4.4 Implementation Feasibility Study :

- Under the study of implementation feasibility, we have got to the certain issues, like:
  - It is possible to install the software within the given government?
  - Will institution management and users support for the installation of the software?
  - Will proposed system cause any harm to the operations of the institution?
- People with a basic knowledge of computers would be able to use our system very effectively and easily, as the system would have and intuitive GUI.
- The owners have a working knowledge of computers so understanding the working of the system and using it would be easy from the decision maker's point of view.
- All the required resources for implementation and operating this system are already present in the institute.

Chapter: 3

Project Planning

3.1 Project Planning and Scheduling

3.1.1 Project Development Approach

- Iterative Waterfall Model has been adopted as an approach for development of project.
- Most of the requirements of the project are fixed and already thought of very less functionality updation is expected in future. So Waterfall model is the right approach for our project.
- As Iterative waterfall model is used for project whose requirements and functionalities are already known and less updation will take place as our project falls in this category we have chosen waterfall model as an approach to develop our project.

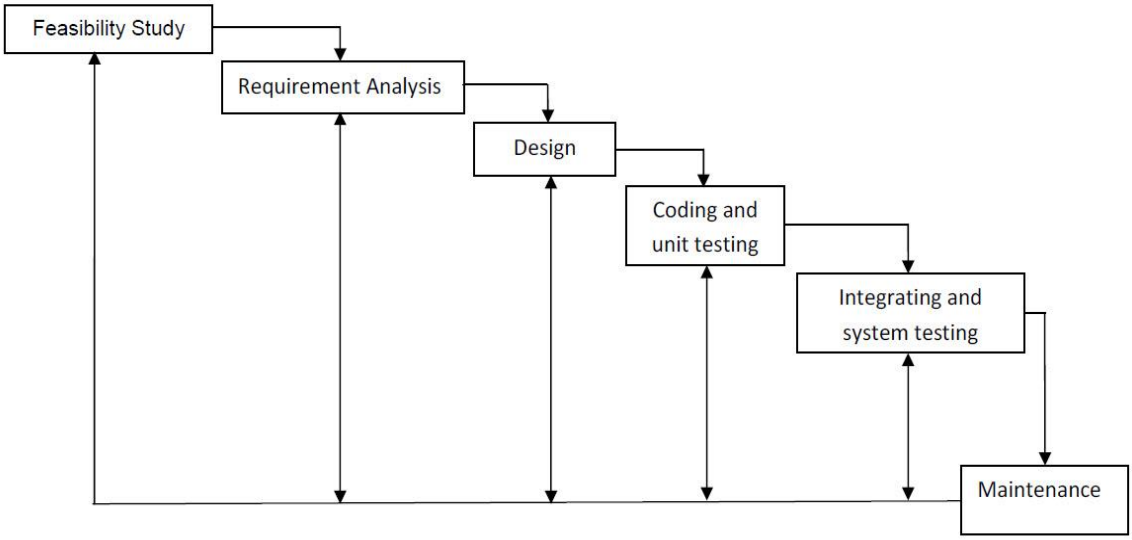

Figure 3.1 Iterative Waterfall Model

3.1.2 Project Plan

- Group dependencies
  - Module Leaders will report the progress of work in their respective modules to the Project Guide on a considerable gap of 15 days. Also The Project Members will in turn submit weekly status reports to the concerned Project Guide. The status report will contain:
    - Activities completed since last report
    - Activities planned until the next report
    - Progress against plan
  - The Project Guide will monitor the progress of the activities against the plan and prepare a consolidated Monthly Report according to project members' deliverables. This report will cover the project status and deviations against plan.
- Milestones and Deliverables
  - Milestones are identified in order to complete the entire project in the time duration. Milestones are identified for every module of whole project.
  - To define the milestones and deliverables create the list of things that needs to be delivered to meet the defined goals and for that break up the project into discrete chunks that specifies the overview of the tasks to be done.
  - Following are the basic milestones and deliverable that we will achieve:
    - Understanding the project requirement and its scope
    - Identifying problems in existing systems
    - Identifying modules
    - Designing models
    - Prepare the database of the system
    - UI Design
    - Construction of application (Coding, Database connection)
    - Time to time Documentation and Presentation

3.1.3Schedule Representation

- Software project scheduling is an activity that distributes estimated efforts across the planned duration by allocating the effort to specific software engineering tasks. Proper Scheduling required:
- All tasks appear in the organization. Effort and timing are intelligently allocated to each task. Interdependencies between tasks are properly indicated. Resources are allocated for the work to be done. Though there are many reasons for completion of project, following are the prominent ones that are the roots of late completion. Unrealistic deadline estimation changing user requirements that are not reflected in schedule changes. Conceptual change in requirement during the course of the project. Human/Natural problems that cannot be predicted.

3.2 Risk Management

3.2.1 Risk Identification

- There are three main categories of risks which can affect a software project:
  - Project Risks
  - Technical Risks
  - Business Risks
- Project Risk:
  - Project risks concern various forms of budgetary, schedule, personnel, resource and customer related problems.
    1. Miscommunication: It leads to misunderstanding, delay, frustration, lack of coordination amongst the team members.
    2. Time shortage: It leads to delay in the delivery of the system.
    3. Personal conflicts between team members: It leads to unnecessary delay in each and every phase of software cycle and loss of direction.
    4. Personal conflicts between team members: Absence of a team member increases the load of the project on other team members.

5. Lack of Knowledge: Lack of knowledge in some areas leads to insignificant delay.
6. Technical Advisor not available when needed: Due to the absence of a technical advisor there was a delay in understanding the database.

- Technical Risk
  - Technical risks concern potential design, implementation, interfacing, and testing and maintenance problems.
    1. Too many planned features lead to infeasible design
    2. Design errors: Due to lack of experience design errors are bound to happen.
    3. The institution changes the requirements: The scope of our project keeps changing as per requirements.
    4. The institution disapproves of the prototype: The institution may find the developed prototype unsuitable to his requirements.
    5. Unavailability of customer

- Business Risk
  - Business risks threaten the viability of the software to be built. Business risks often jeopardize the project or the product.
    1. Market risk: Building an excellent product or system that no one really wants
    2. Strategic risk: Building a product that no longer fits into the overall business strategy for the company
    3. Management risk: Losing the support of senior management due to a change in focus or a change in people
    4. Product is not put in service

3.2.2 Risk Analysis

- **Personnel Shortfalls:**

- They may cause the developmental delays and would cause a change in the working strategy due to developmental dependencies of the functional modules.

- **Unrealistic Schedule:**
  - It may cause the developers to give unrealistic commitments to the users and so lose their faith when the deliverables are not produced as per schedule.
- **Developing wrong Software functions:**
  - It can be caused due to wrong requirement analysis or wrong programming method used to automate the requirements. It may cause the system to fail and not be implemented at all.

3.2.3 Risk Planning

- The three identified Risk types, Technical, Project, and Business all have different mitigation strategies that can be used to reduce or eliminate their impact or probability of occurrence. In the following sections, the general outline for each case is discussed.
  - Project Risk: In general, project risks will be minimized by realistic planning and close surveillance.
  - Technical Risk: Clear and concise specifications and implementation of QA provisions will minimize technical risk. Technical risks can be further minimized by exploiting previous experience to the greatest extent possible. Making deliberately conservative design choices, where possible, where new technologies are involved has minimized technical risk throughout the Project.
  - Business Risk: Business risks can be minimized by studying the feasibility of the project and the requirement specification closely.

Chapter: 4

System Modeling

4.1 Data Flow Diagram

- *A data flow diagram is a graphical representation that depicts information flow and the transforms that are applied as data move from input to output.*
- The *data flow diagram* (DFD) serves two purposes:
  1. To provide an indication of how data are transformed as they move through the system
  2. To depict the functions (and sub functions) that transform the data flow.
- The DFD provides additional information that is used during the analysis of the information domain and serves as a basis for the modeling of function.

4.1.1 Context Level Diagram

- A level 0 DFD, also called a *fundamental system model* or a *context model*, represents the entire software element as a single bubble with input and output data indicated by incoming and outgoing arrows, respectively.

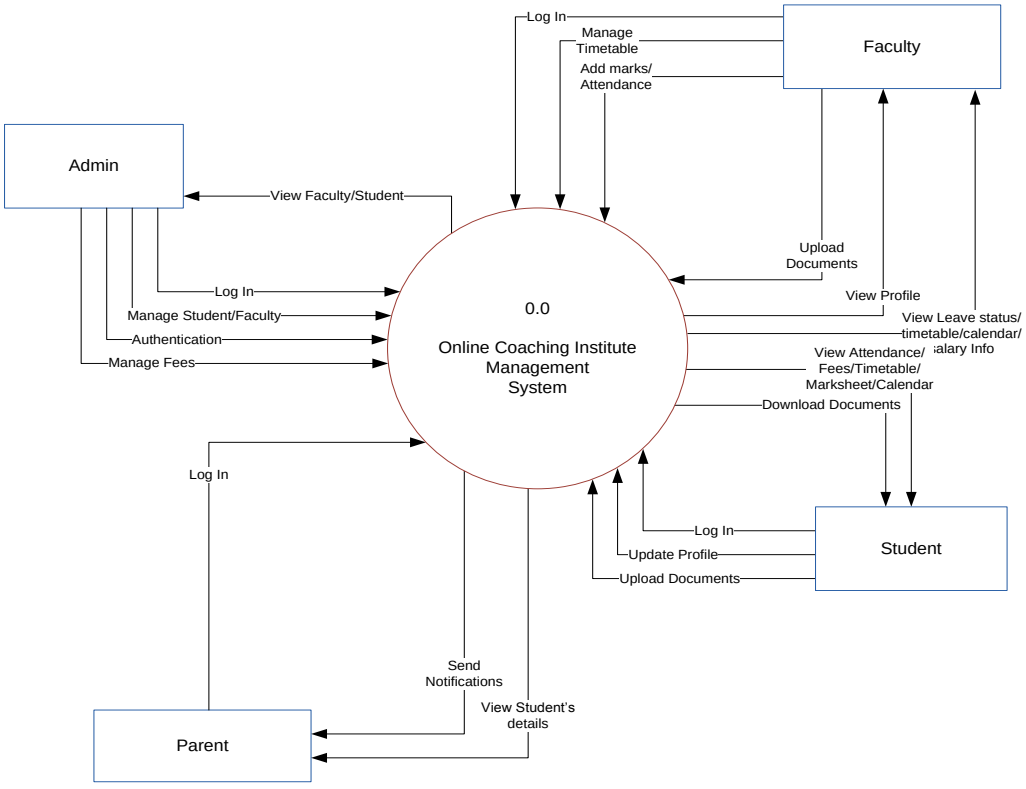

Figure 4.1 Context Level Diagram

4.1.2 Level-1 DFD :

- A level 1 DFD might contain five or six bubbles with interconnecting arrows. Each of the processes represented at level 1 is a sub function of the overall system depicted in the context model.

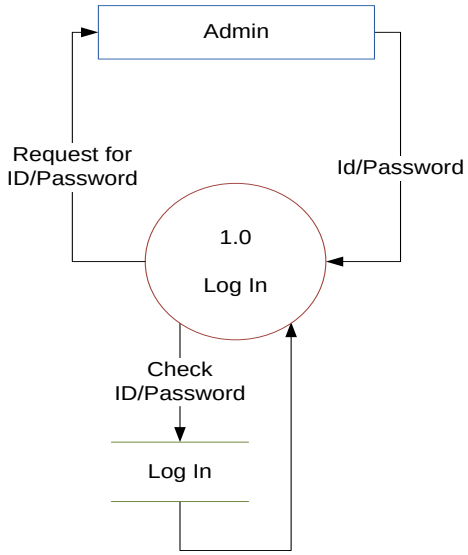

Figure 4.2 Level 1 Diagram for ADMIN

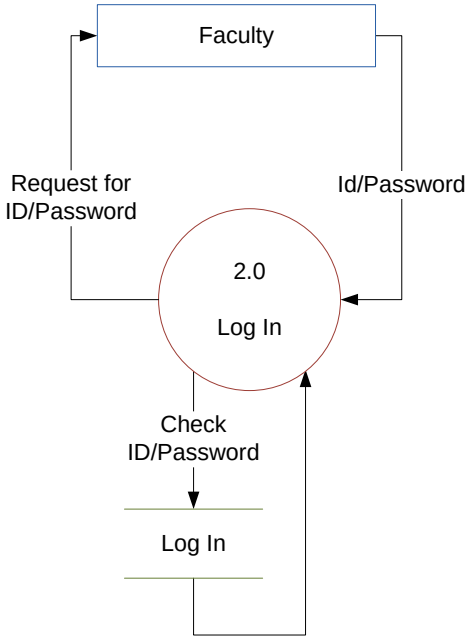

Figure 4.3 Level 1 Diagram for FACULTY

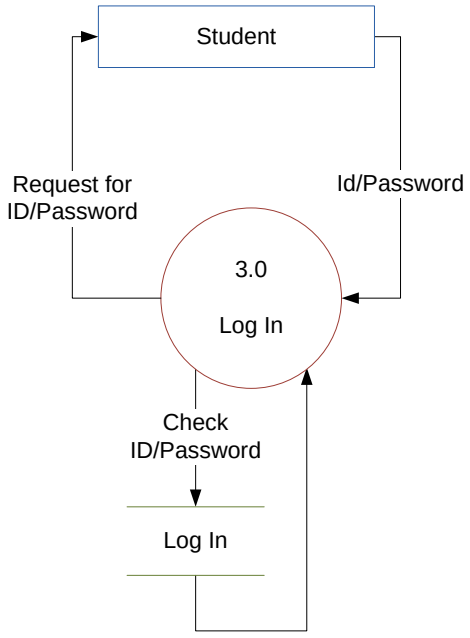

Figure 4.4 Level 1 Diagram for STUDENT

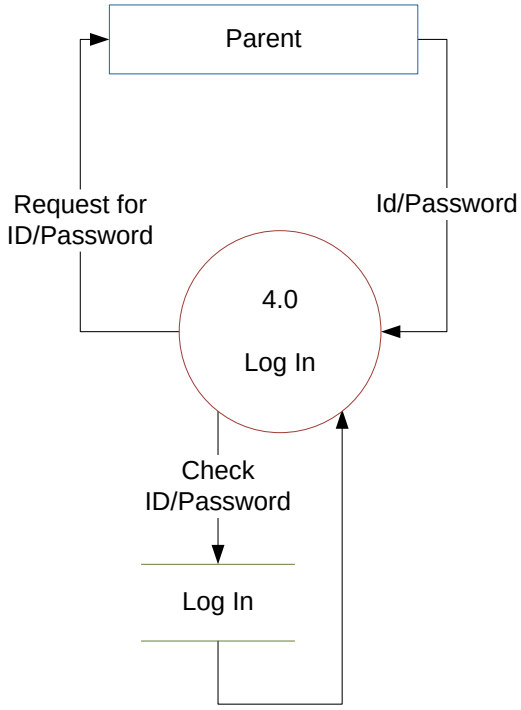

Figure 4.5 Level 1 Diagram for PARENT

4.1.3 Level-2 DFD :

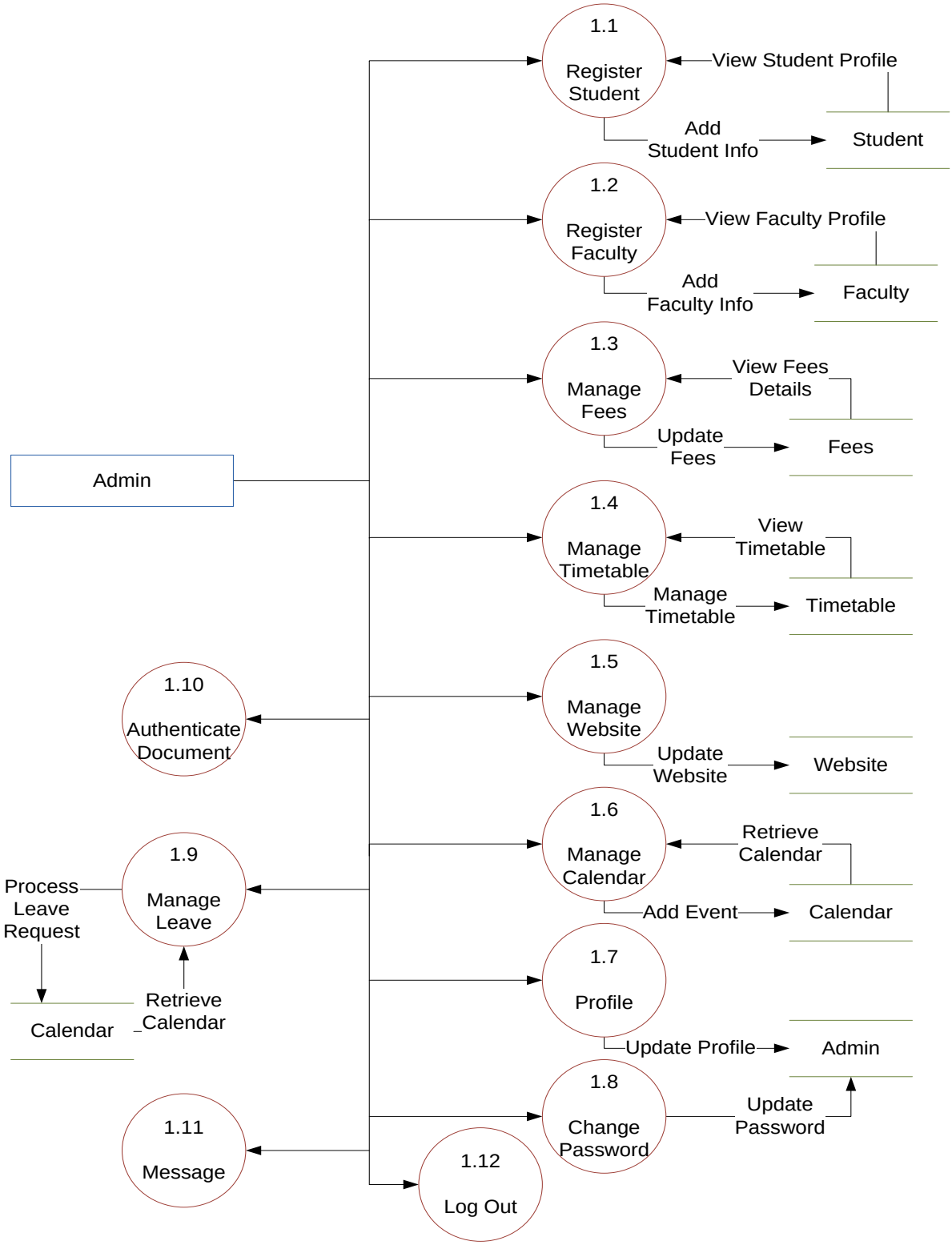

Figure 4.6 Level 2 Diagram for ADMIN

Figure 4.7 Level 2 Diagram for FACULTY


Student
3.1
Change Password
3.2
Profile
Retrieve Profile
Update Profile
Students
3.3
Attendance
View Attendance
Attendance
3.4
Documents
Download Document
Add/Update Documents
Documents
3.5
Timetable
View Timetable
Timetable
3.6
Marksheet
View Marksheet
Marksheet
3.7
Calendar
View Calendar
Calendar
3.8
Message
3.9
Log Out

Figure 4.8 Level 2 Diagram for STUDENT

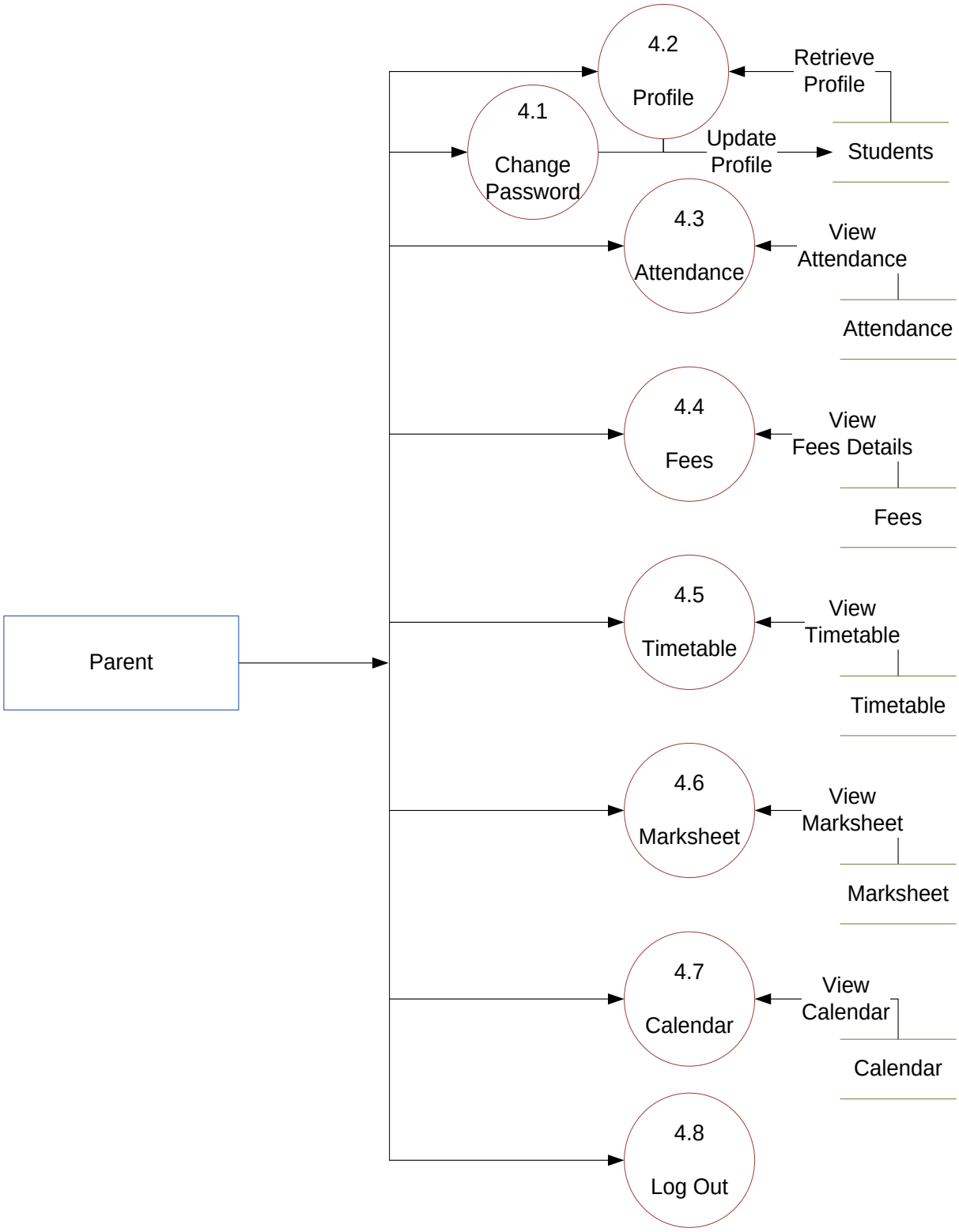

Figure 4.9 Level 2 Diagram for PARENT

4.1.4 Level-3 DFD :

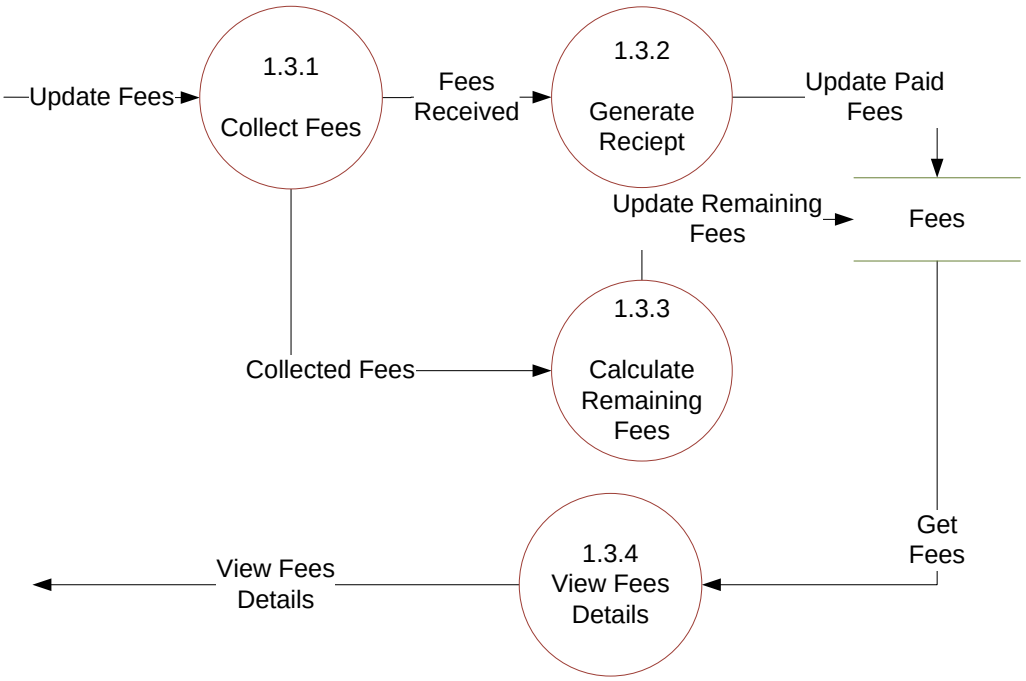

Figure 4.10 Level 3 Diagram for Manage Fees (Process 1.3) of ADMIN

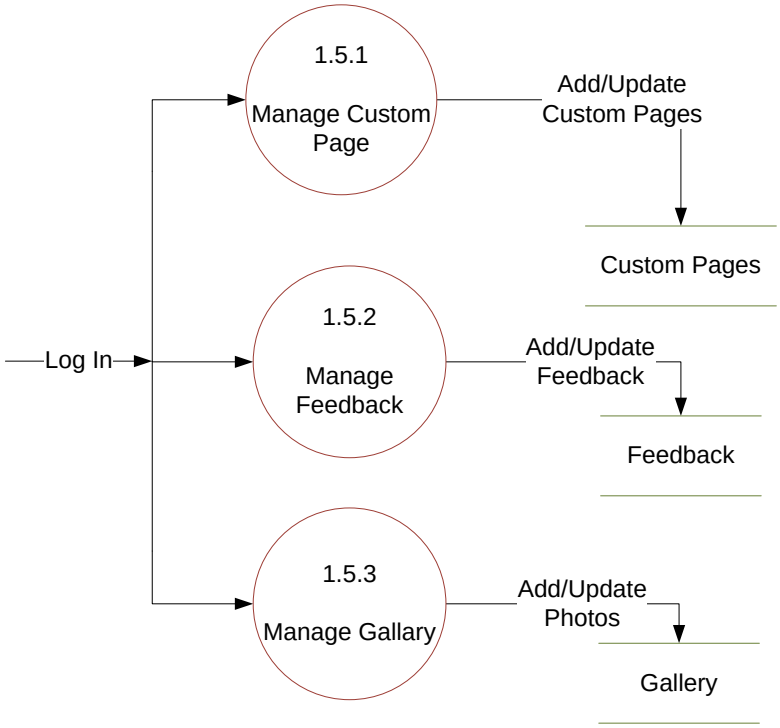

Figure 4.11 Level 3 Diagram for Manage Website (Process 1.5) of ADMIN

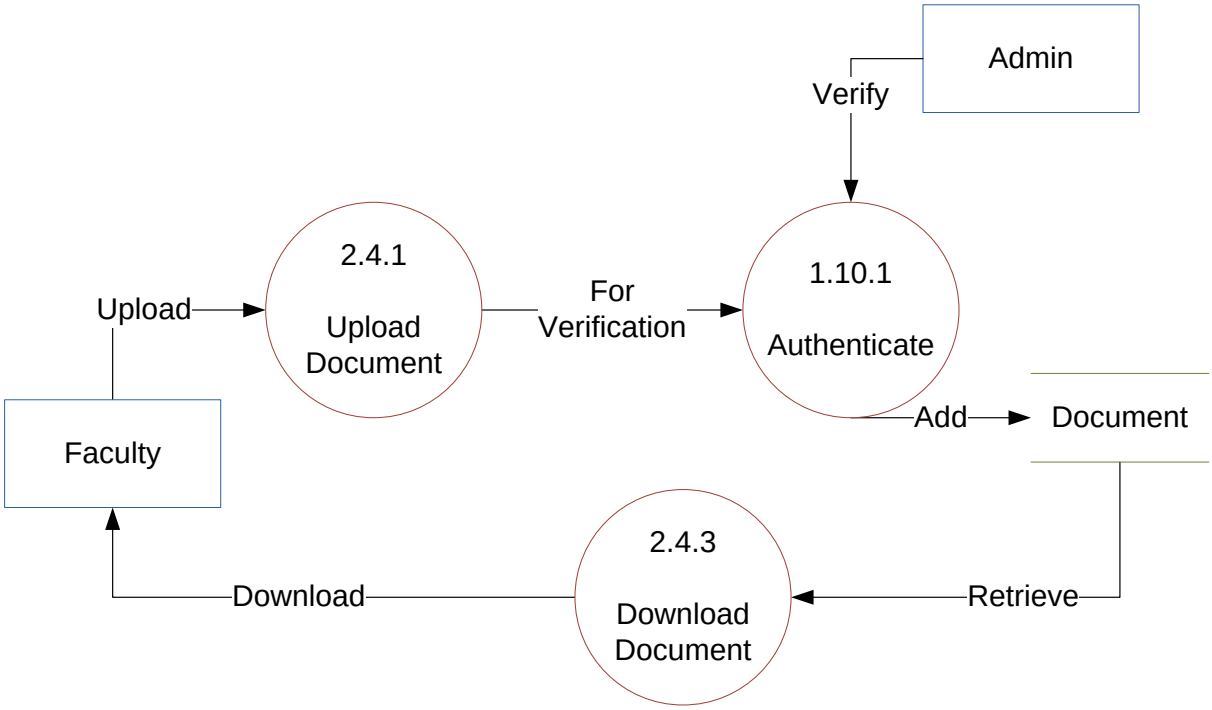

Figure 4.12 Level 3 Diagram for Document (Process 2.4) of FACULTY

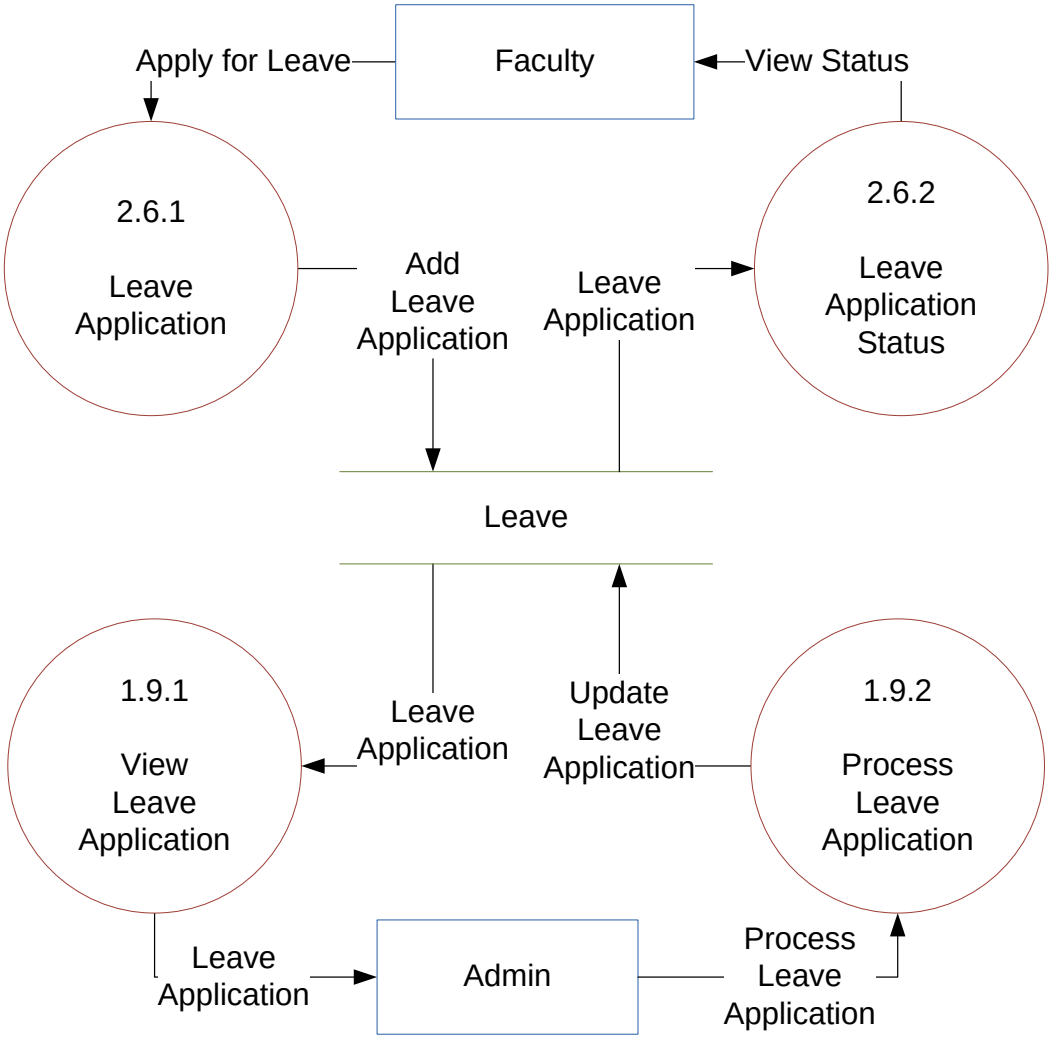

Figure 4.13 Level 3 Diagram for Manage Leave (Process 2.6) of Faculty and (Process 1.9) of ADMIN

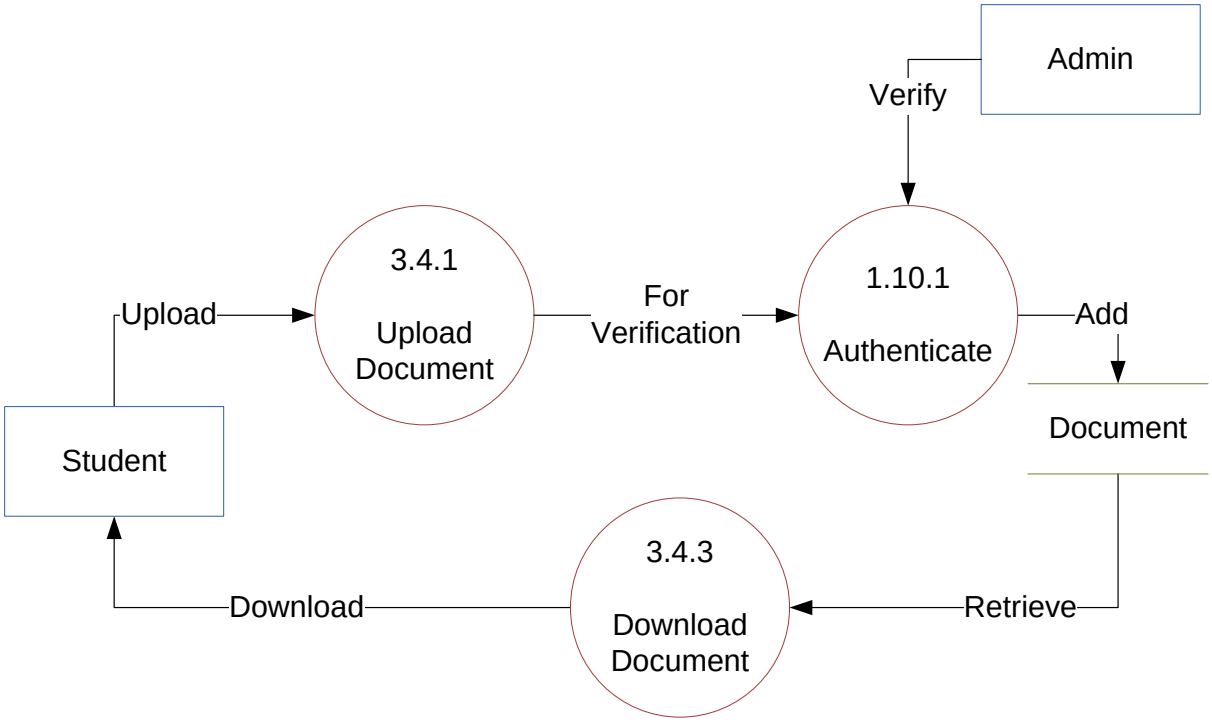

Figure 4.14 Level 3 Diagram for Document (Process 3.4) of STUDENT

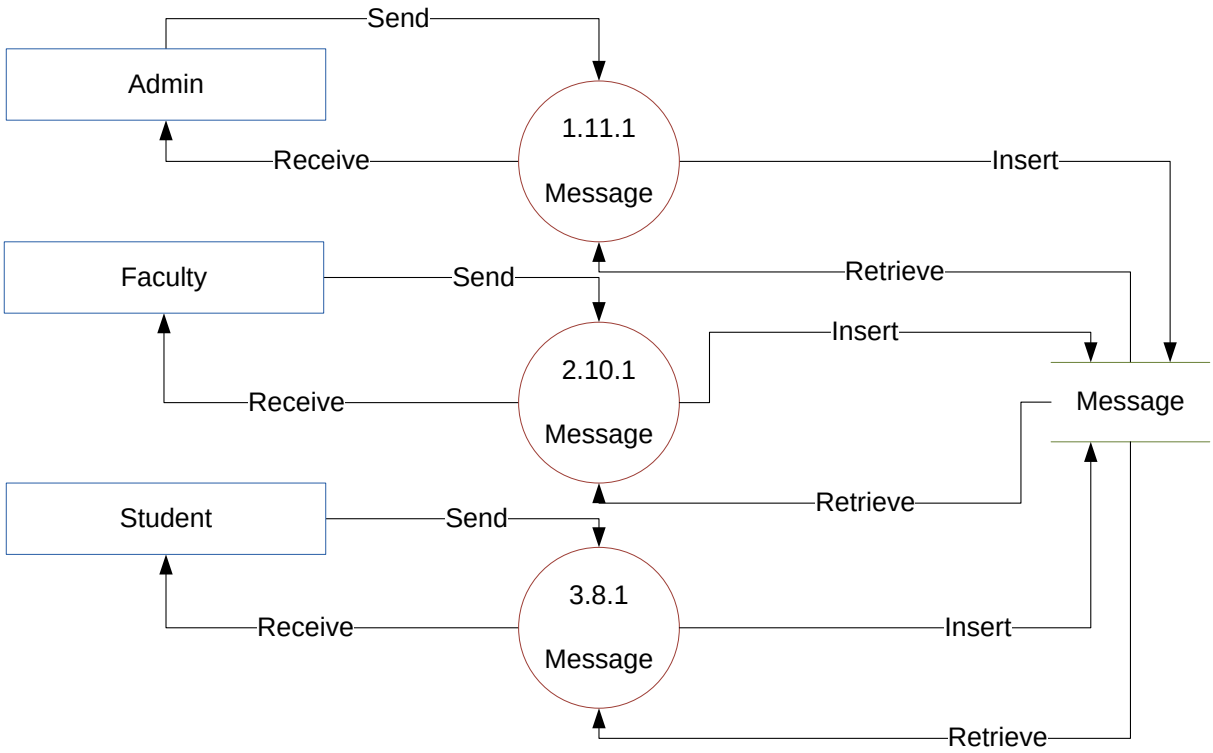

Figure 4.15 Level 3 Diagram for MESSAGE of ADMIN, FACULTY and STUDENT

4.2 Use case Diagram

- A use-case is a scenario that describes how software is to be used in a given situation.
- Use-cases are defined from an actor's point of view. An actor is a role that people (users) or devices play as they interact with the software.
- In general, a use-case is simply a written narrative that describes the role of an actor as interaction with the system occurs.

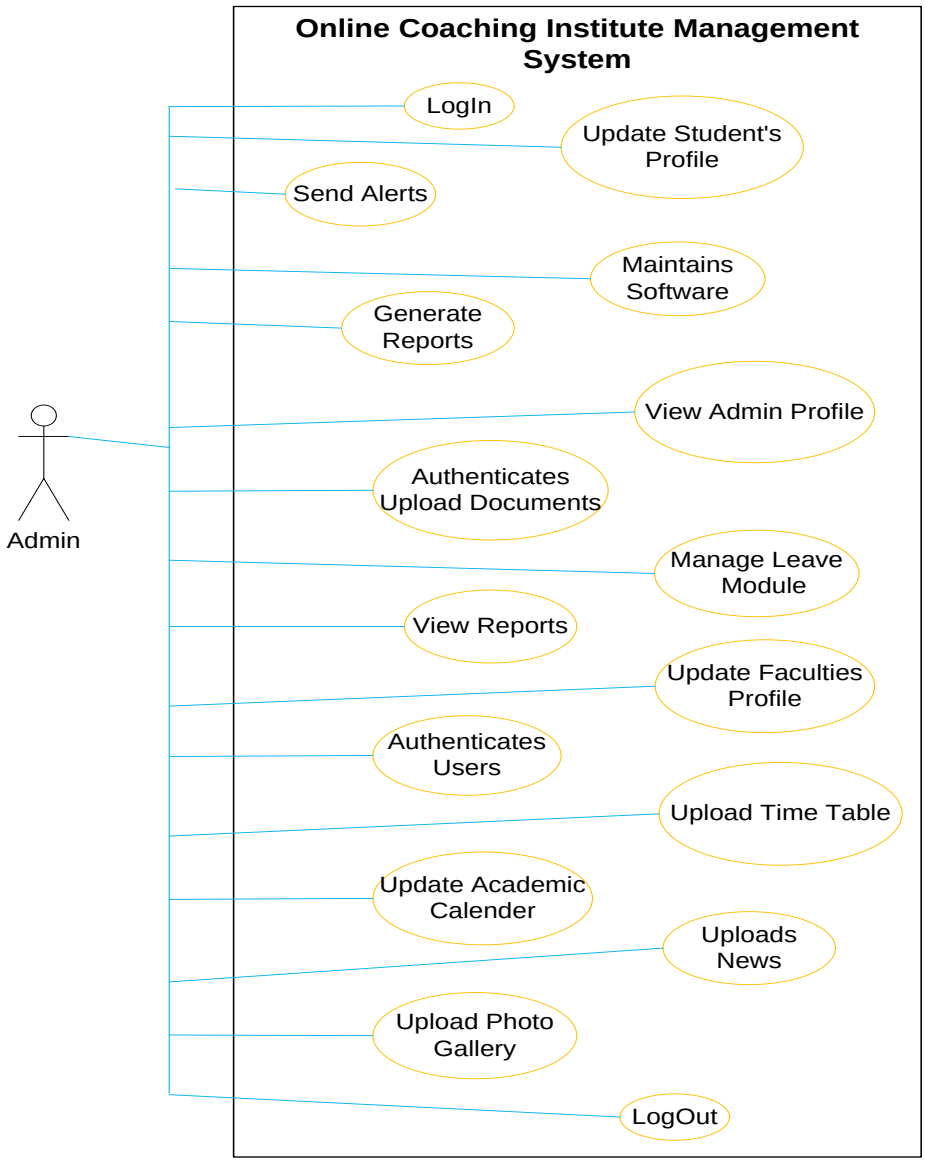

Figure 4.16 Use case Diagram of ADMIN

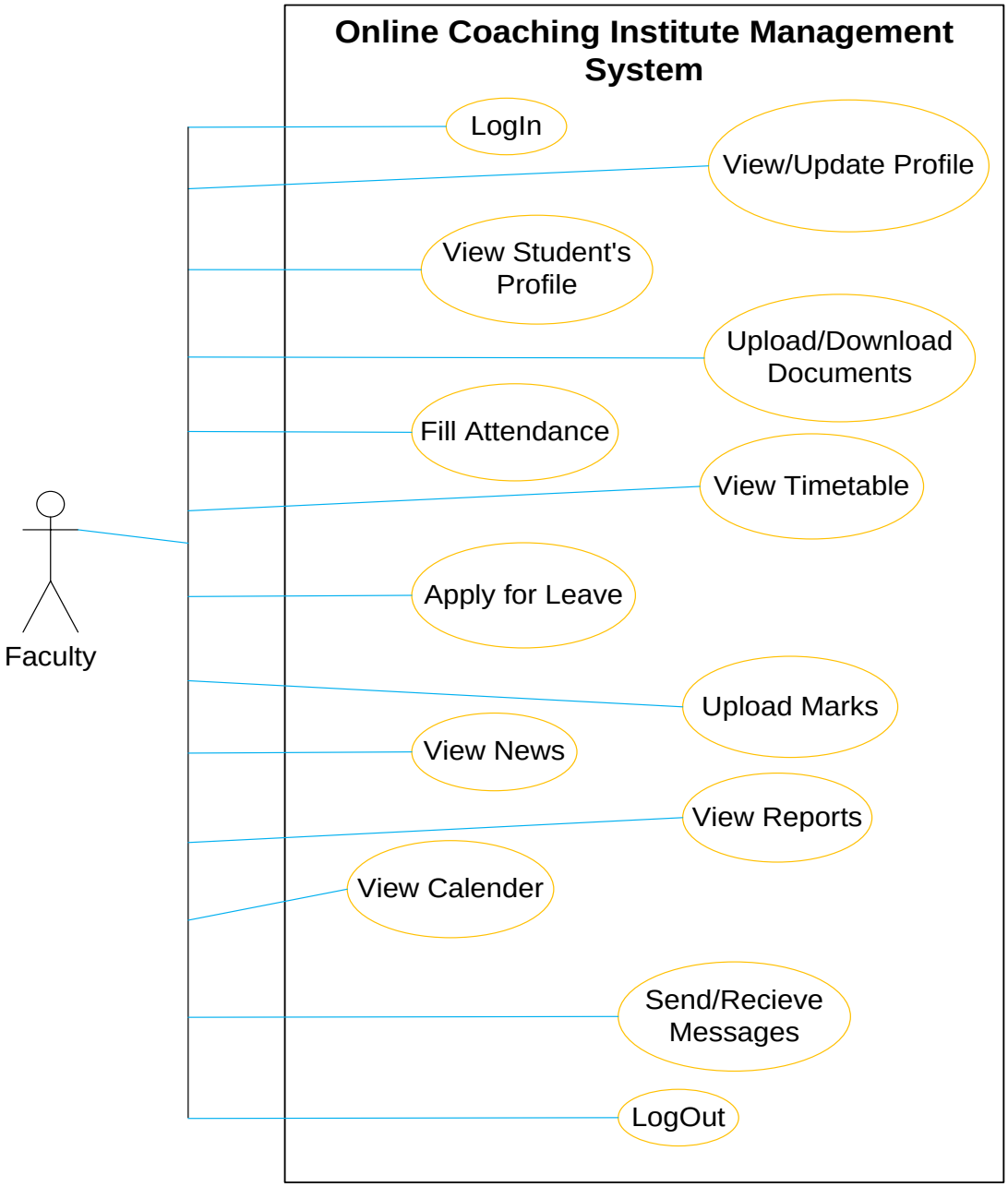

Figure 4.17Use case Diagram of FACULTY

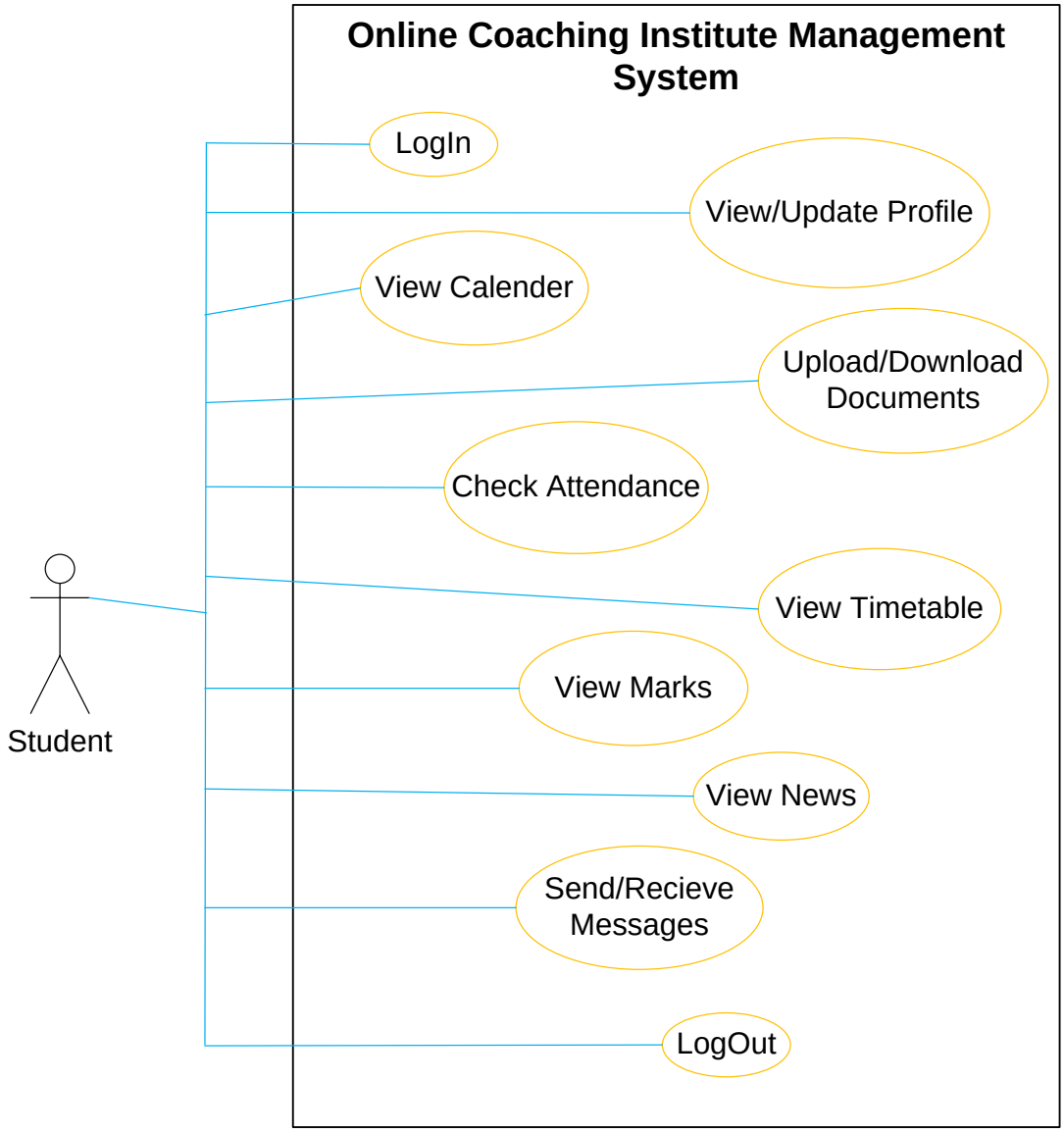

Figure 4.18 Use case Diagram of STUDENT

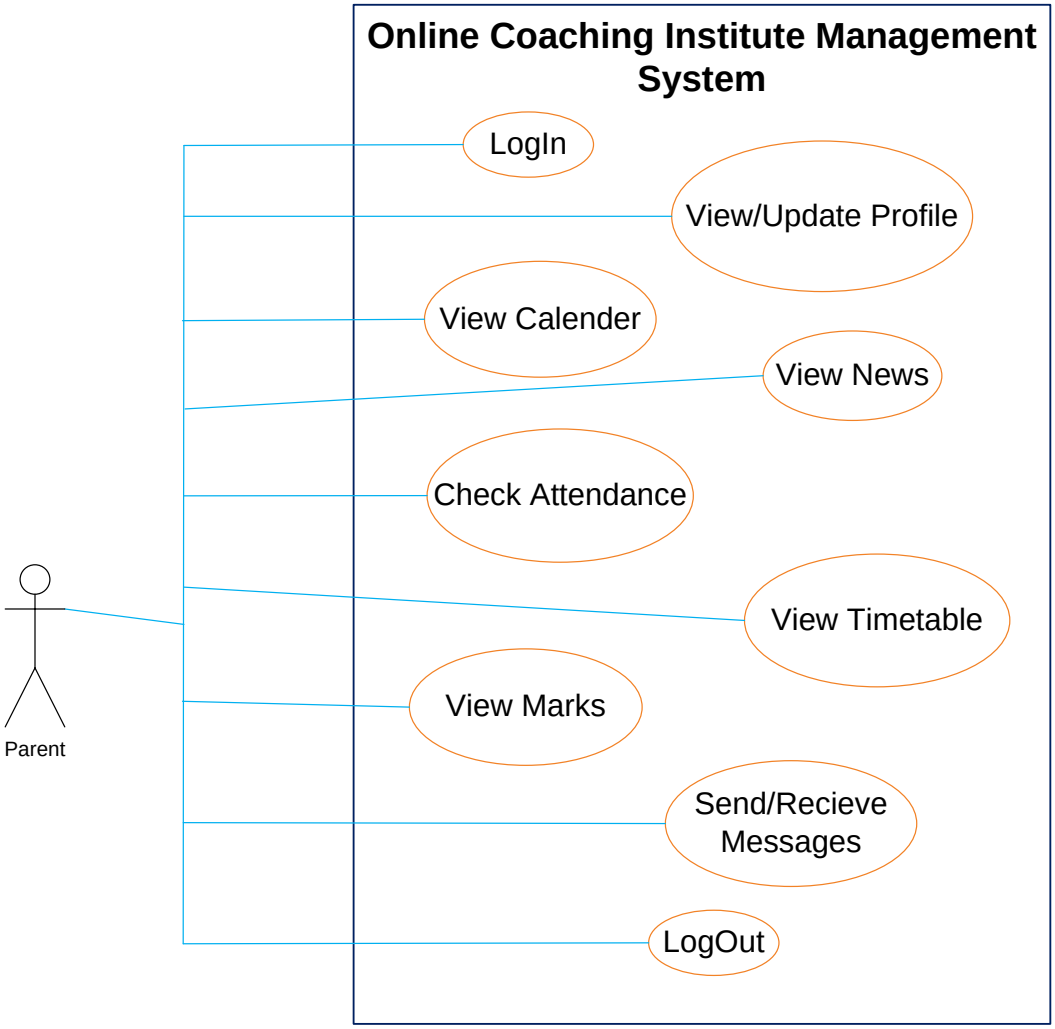

Figure 4.19Use case Diagram of PARENT

4.3 Activity Diagram

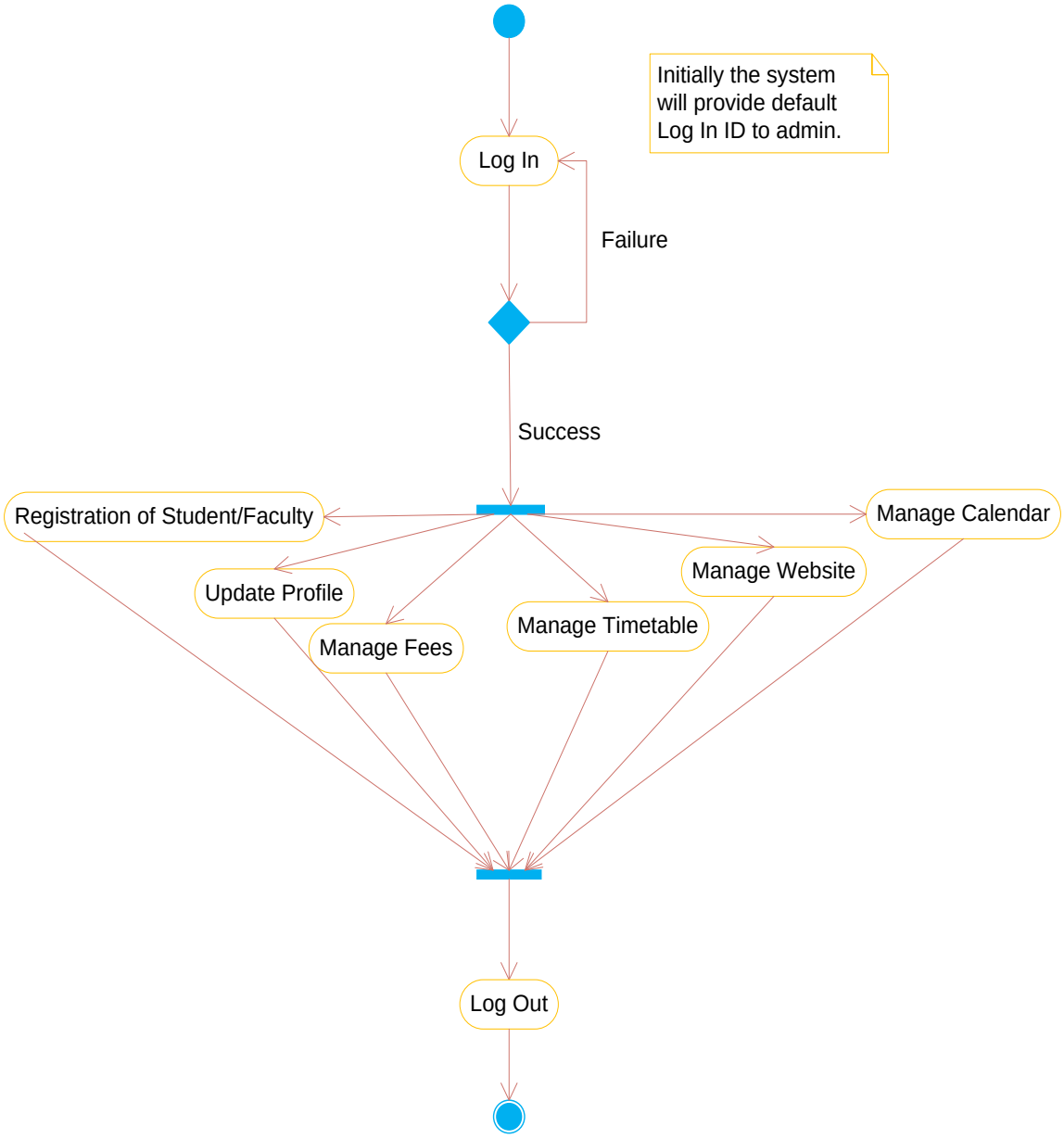

Figure 4.20 Activity Diagram of ADMIN

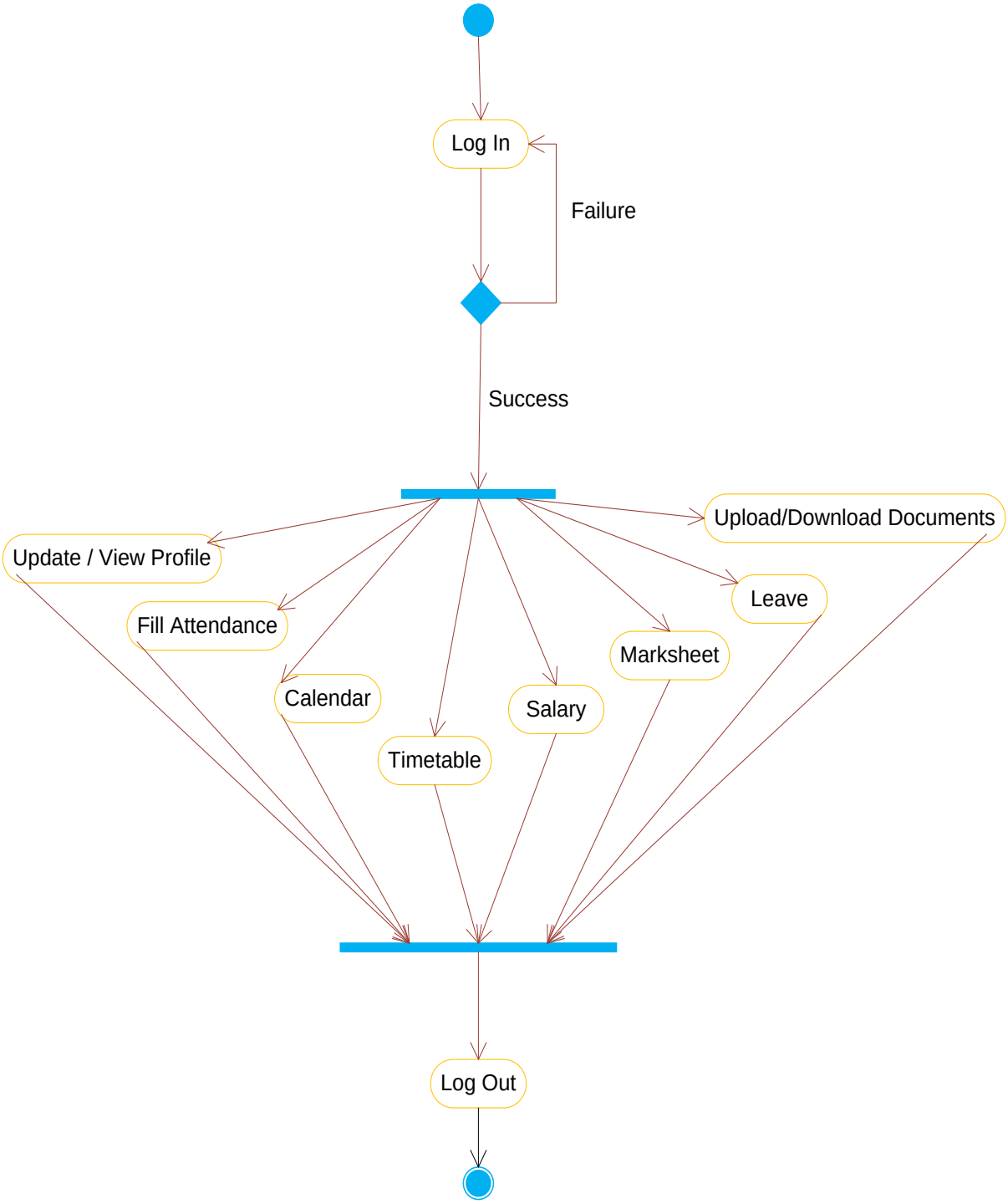

Figure 4.21 Activity Diagram of FACULTY

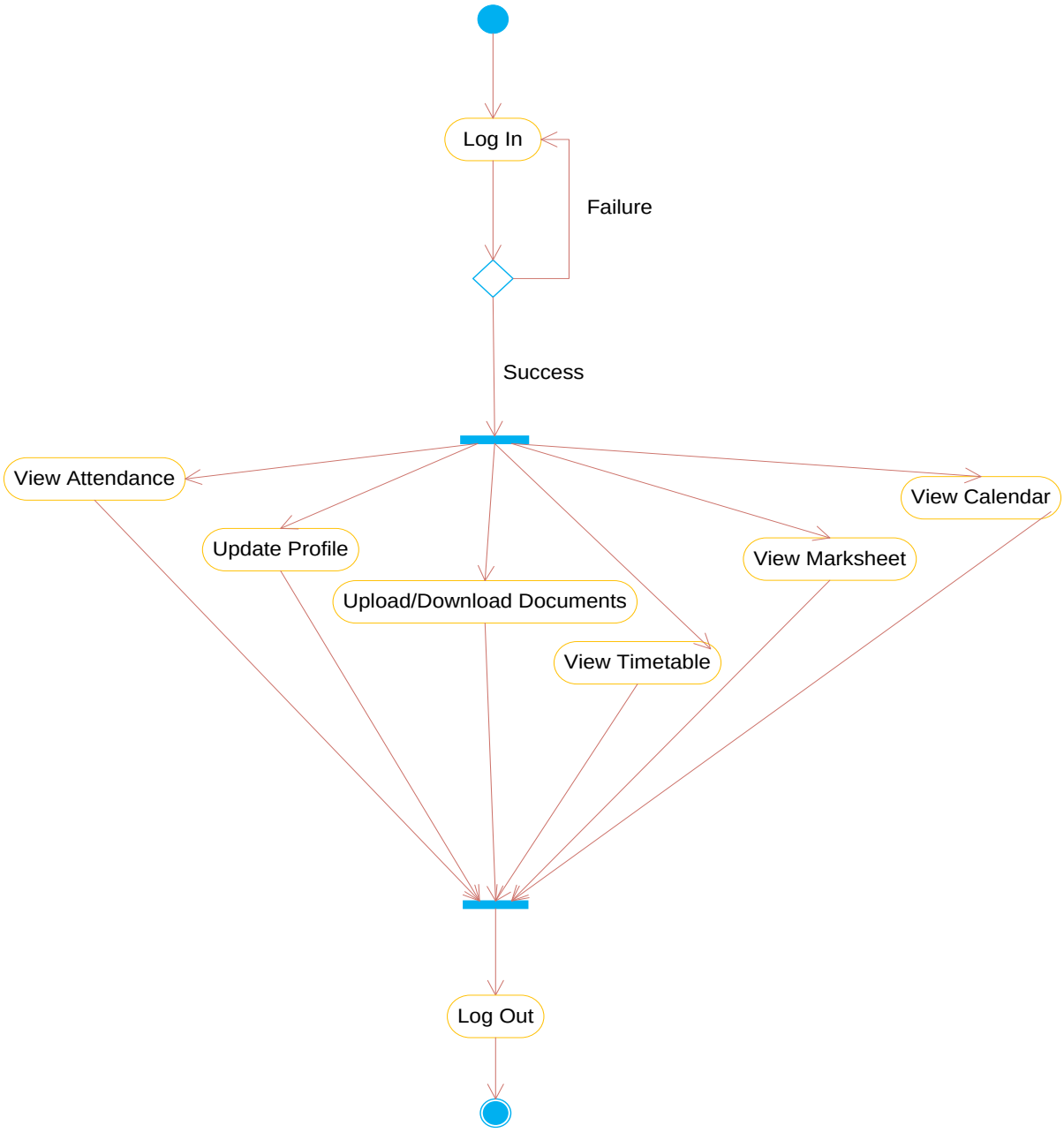

Figure 4.22 Activity Diagram of STUDENT

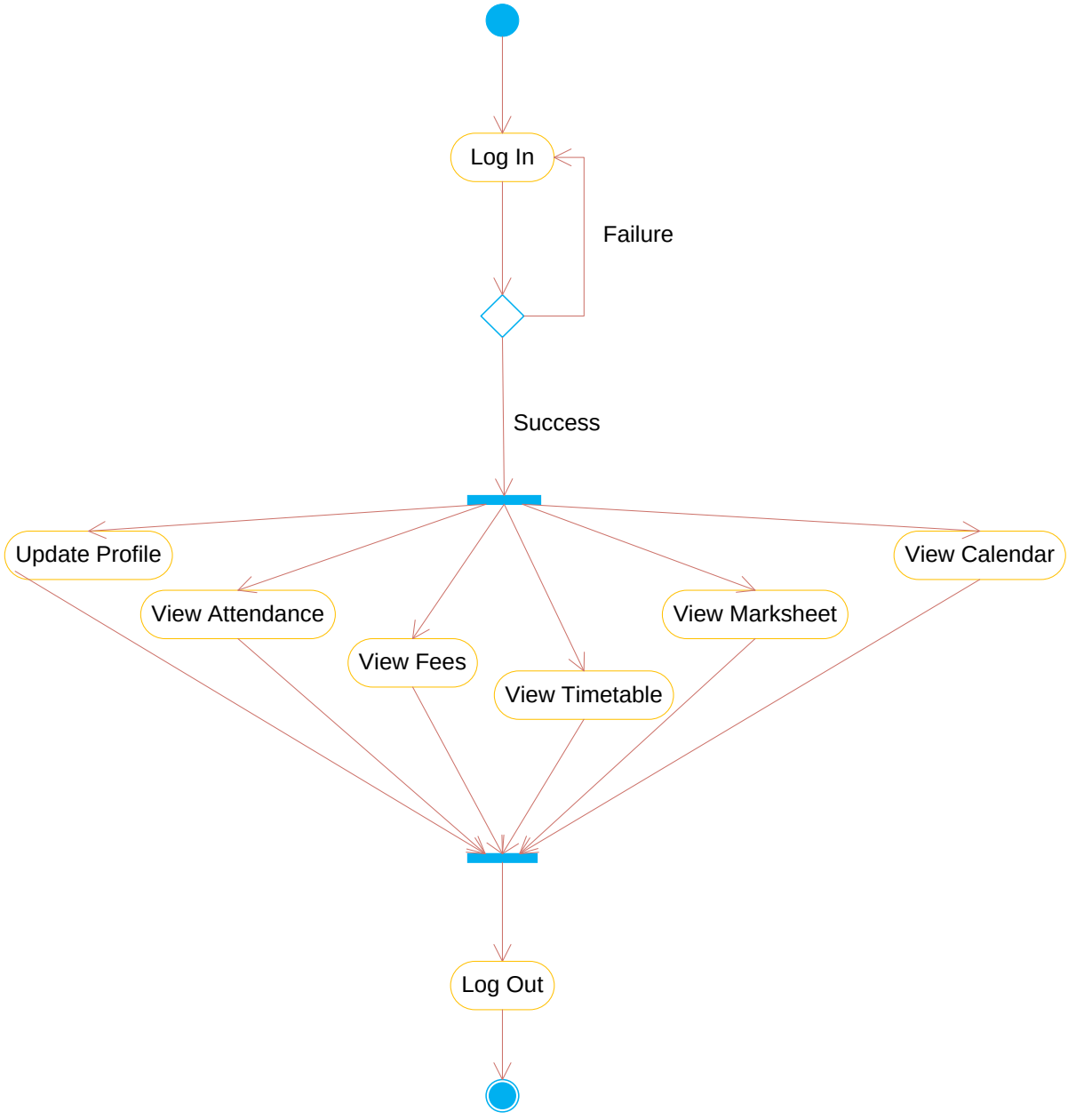

Figure 4.23 Activity Diagram of PARENT

4.4 Sequence Diagram

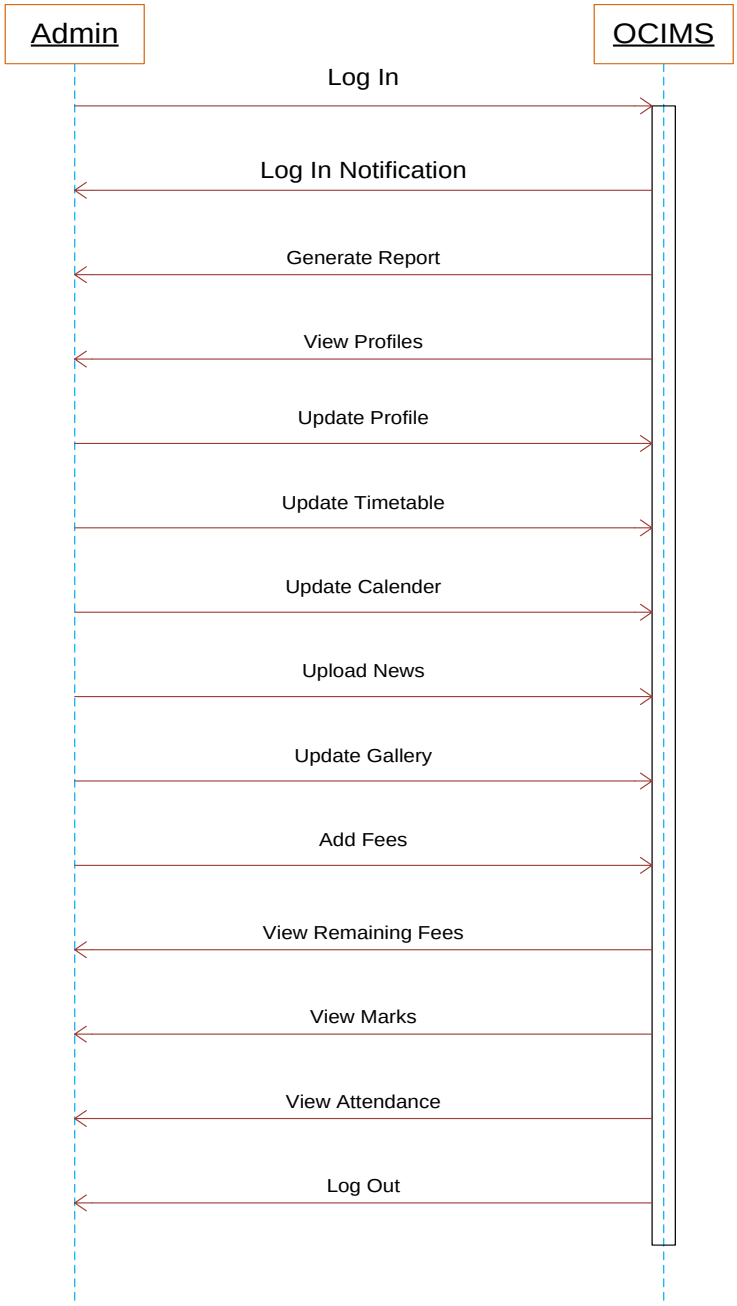

Figure 4.24 Sequence Diagram for ADMIN

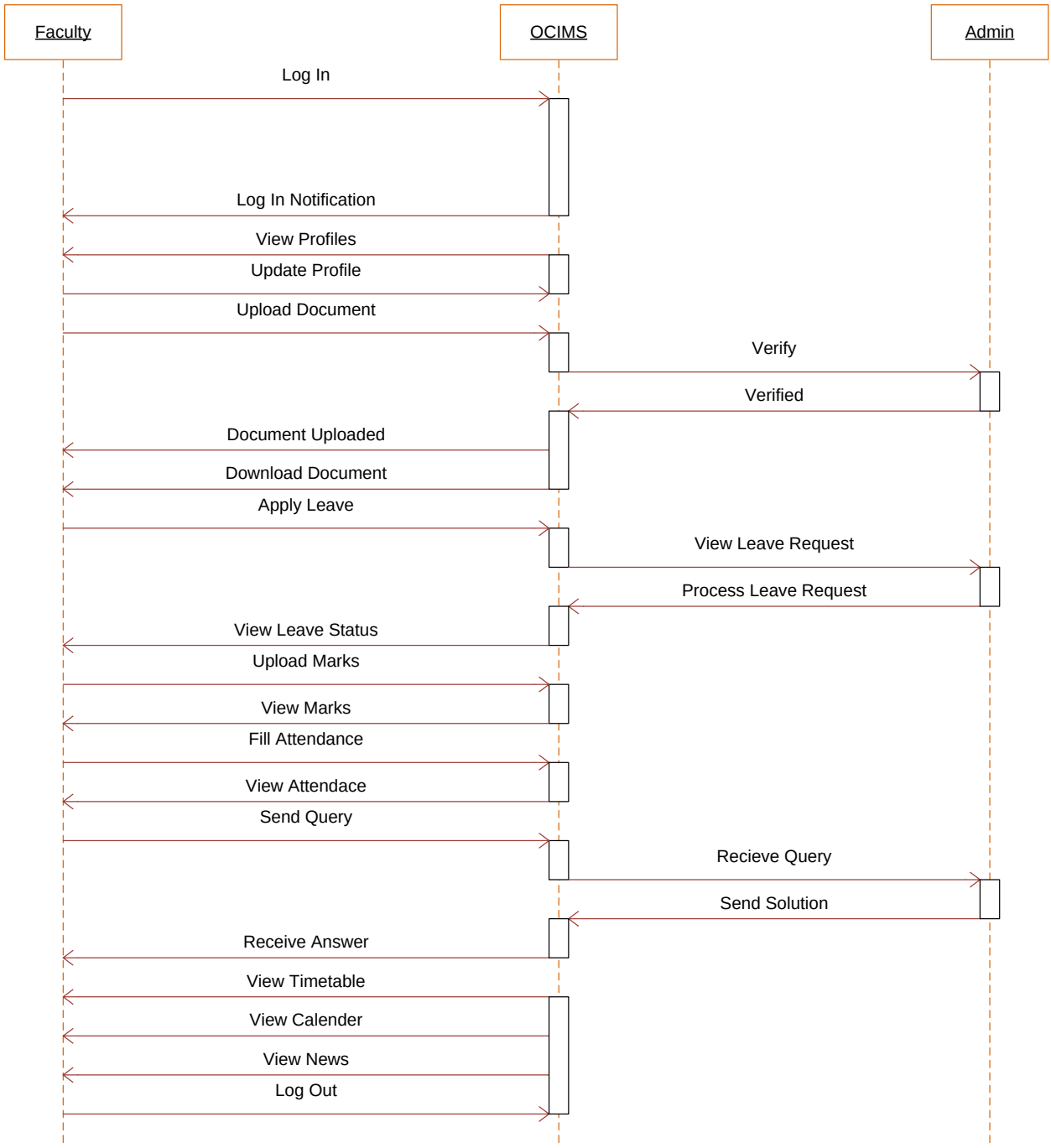

Figure 4.25 Sequence Diagram for FACULTY

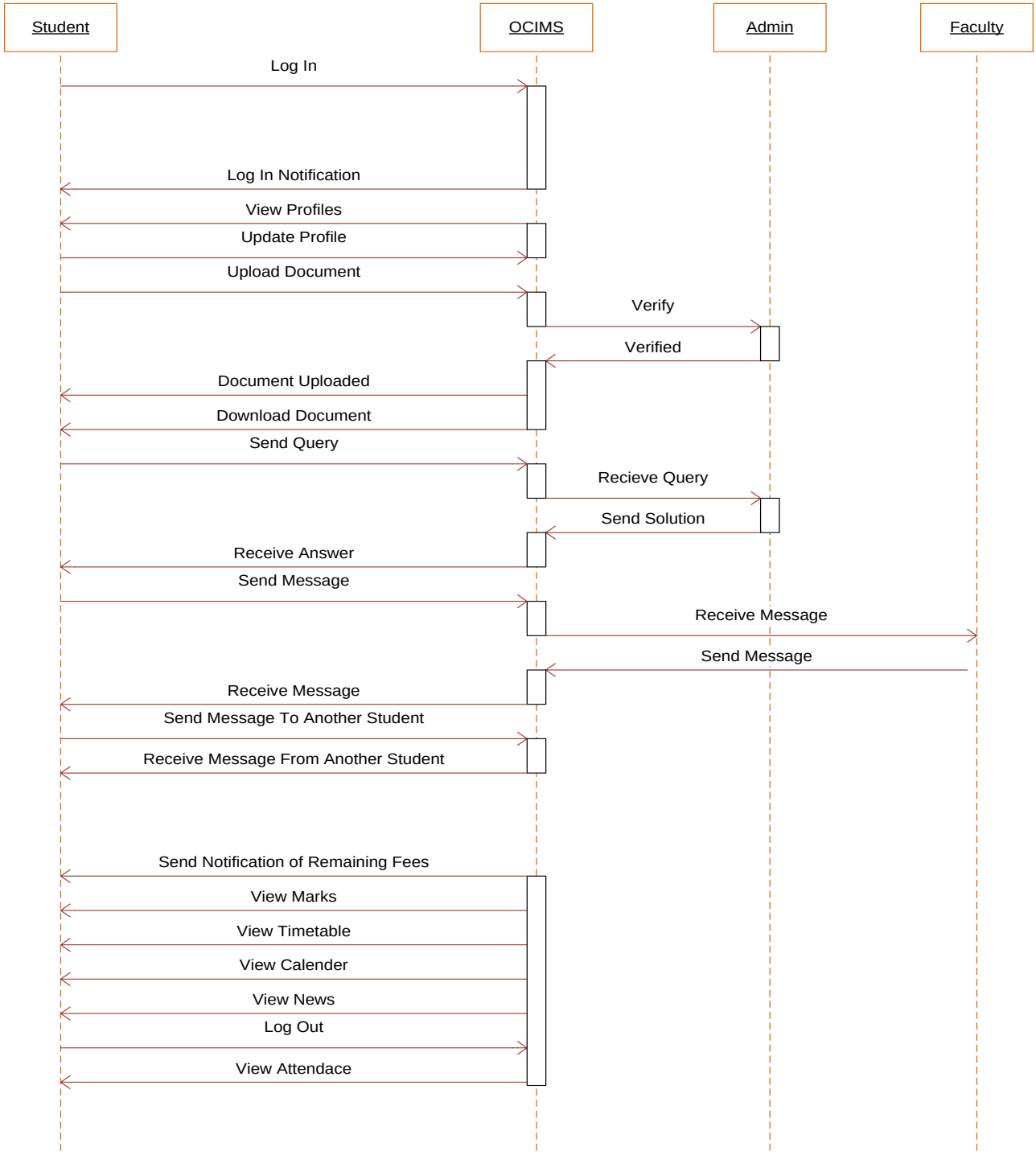

Figure 4.26 Sequence Diagram for STUDENT

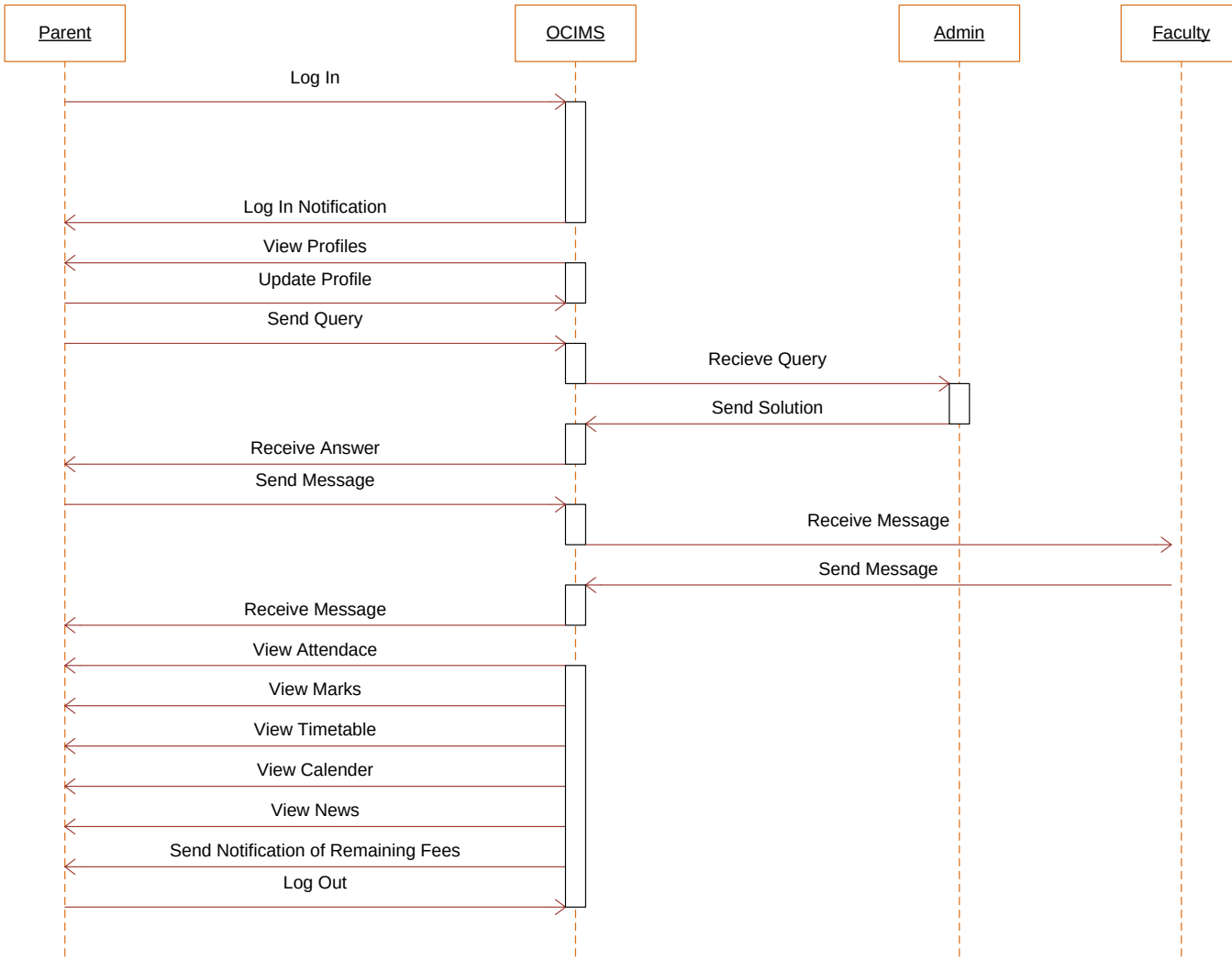

Figure 4.27 Sequence Diagram for PARENT

4.5 Class Diagram

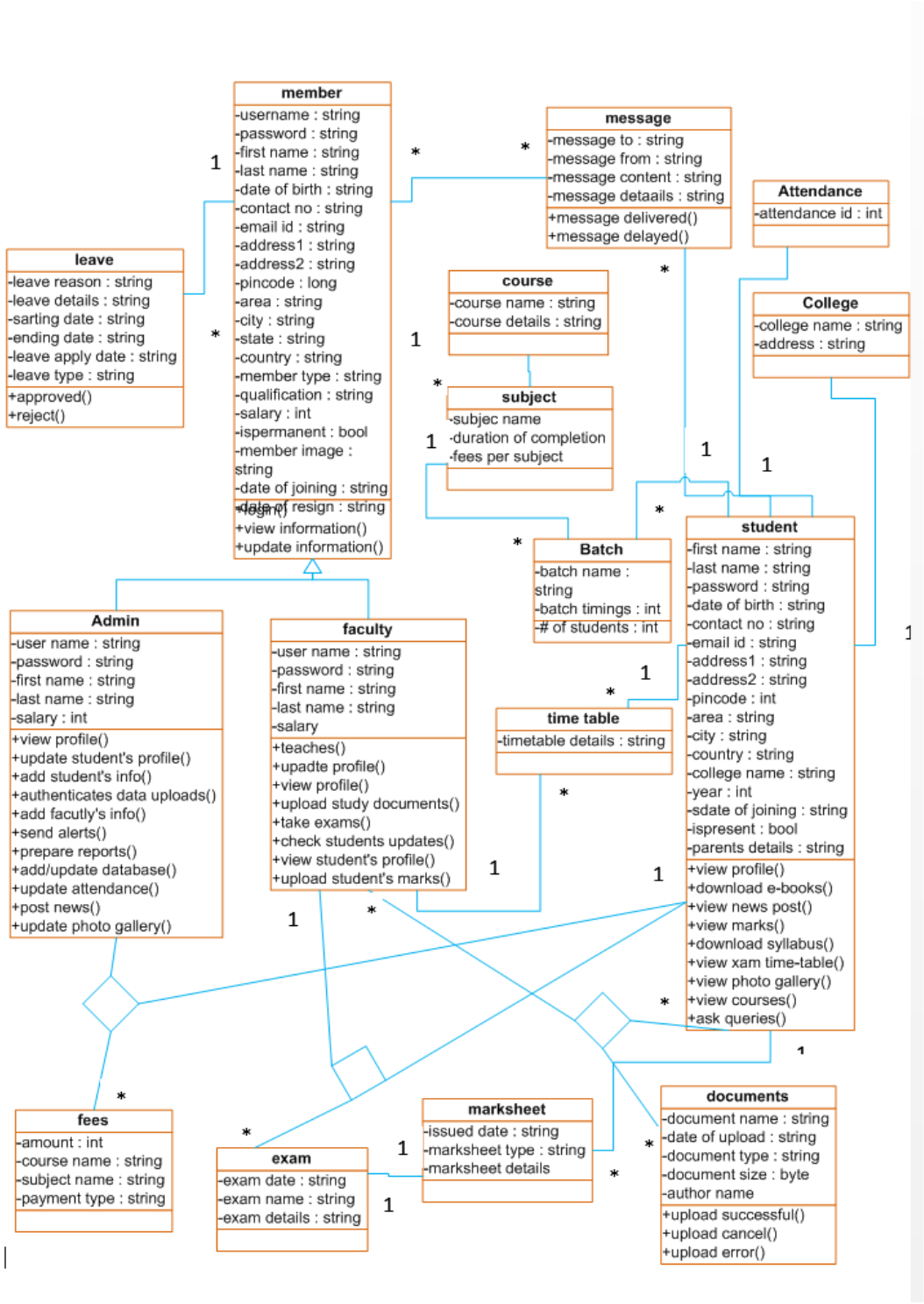

Figure 2.28 Class Diagram

Chapter: 5

Data Modeling and Design

5.1 Data Dictionary

Table5.1 : Member

Table Name = Member			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	User_Id	Int	
	User name	Varchar(50)	LogIn username
	Password	Varchar(50)	Password for logIn
	First name	Varchar(50)	Member's first name
	Last name	Varchar(50)	Member's last name
	DOB	Date	Birth date
	Contact no	varchar(50)	Member's contact no.
	Email-id	Varchar(50)	
	Address-1	Varchar(50)	Address of member
	Address-2	Varchar(50)	Alternate address of member
	Pincode	Int	
	Area	Varchar(100)	
	City	Varchar(50)	
	State	Varchar(50)	
	Country	Varchar(50)	
F.K	Member_Type_ID	Int	Type of User
	Qualification	Varchar(50)	
	Salary	Int	
F.K	Salary_Id	Int	Salary Details
	IsPermanent	Bit	Member is Permanent or not
	Member_Img	Varchar(50)	Photo of Member
	DOJ	Date	Date of joining
	DOR	Date	Date of resign

Table 5.2 :Member_Type

Table Name = Member_Type			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Member_Type_ID	int	ID of mamber type
	Member_Type_Name	Varchar(50)	Name of member

Table 5.3 : Faculty-Subject Transaction

Table Name = Faculty-Subject Transaction			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	FS_ID	Int	
F.K	Faculty_ID	Int	ID of member who is teaching
F.K	Subject_ID	Int	ID of Subject

Table 5.4 : Salary

Table Name = Salary			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Salary_ID	Int	
F.K	Member_ID	Int	ID of member
	DOS	Date	Date of Start
	DOE	Date	Date of end

Table 5.5 :Exam_Type

Table Name = Exam_Type			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Exam_Type_ID	Int	
	Exam_Type_Name	Varchar(50)	Name of exam type

Table 5.6 : Exam

Table Name = Exam			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Exam_ID	Int	ID of exam
	Exam_Name	Varchar(50)	Name of exam
	Exam_Details	Varchar(200)	Details of exam
	Exam_Date	Date	Date of exam
F.K	Subject_ID	Int	ID of subject
F.K	Exam_Type_ID	Int	Type of exam

Table 5.7 :Staff_Leave

Table Name = Staff_Leave			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Staff_Leave_ID	Int	
F.K	Member_ID	Int	ID of Member
	Leave_Description	Varchar(100)	Description for leave
	DOA	Date	Date of application
	DOS	Date	Date of start
	DOE	Date	Date of end
	IsApproved	Bit	Leave is approved or not
F.K	Leave_Type_ID	Int	Type of leave

Table 5.8 :Staff_Attendance

Table Name = Staff Attendance			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Staff_Attendance_ID	int	
F.K	Faculty_ID	int	ID of Member
F.K	Timetable_ID	int	ID of Timetable
	IsPresent	Bit	

Table 5.9 :Leave_Type

Table Name = Leave Type			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Leave_Type_ID	int	
	Leave_Type_name	Varchar(50)	

Table 5.10 :Student_Info

Table Name = Student_Info			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	S_ID	int	LogIn username
	First name	Varchar(50)	Student's first name
	Last name	Varchar(50)	Student's last name
	Password	Varchar(50)	Password for logIn
	DOB	Date	Birth date
	Contact no	Varchar(50)	Student's contact no.
	Email_ID	Varchar(50)	
	Address_1	Varchar(50)	Address of student
	Address_2	Varchar(50)	Address of student
	Pincode	int	
	Area	Varchar(100)	
	City	Varchar(50)	
	State	Varchar(50)	
	Country	Varchar(50)	
F.K	College_ID	int	Name of college
	Semester/Year	int	
F.K	Course_ID	int	Name of course
	Student_Img	Varchar(50)	Photo of student
	DOJ	Date	Date of joining
F.K	Batch_ID	int	Batch number
	IsPresent	Bit	Current status
	Parent_Name	Varchar(50)	Name of parent
	Parent_Contact_no	Varchar(50)	
	Parent_Email	Varchar(50)	

Table 5.11 :Student_Attendance

Table Name = Student Attendance			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Attendance_ID	int	
F.K	Student_ID	int	ID of student
F.K	Timetable_ID	int	ID of timetable
	IsPresent	Bit	

Table 5.12 : College

Table Name = College			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	College_ID	Int	
	College_Name	Varchar(50)	Name of college

Table 5.13 :Marksheet

Table Name = Marksheet			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Marksheet_ID	Int	
F.K	Student_ID	Int	ID of student
F.K	Exam_ID	Int	ID of exam
	Marks	Int	Marks obtained
	Remarks	Varchar(100)	Remark

Table 5.14 : Course

Table Name = Course			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Course_ID	Int	ID of course
	Course_name	Varchar(50)	Name of Course
	Course_Details	Varchar(100)	Details of course

Table 5.15 : Subject

Table Name = Subject			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Subject_ID	Int	ID of subject
	Subject_Name	Varchar(50)	Name of subject
	Subject_Duration	Numeric(10,0)	Duration of subject
F.K	Course_ID	Int	ID of course
	Subject_Fees	Int	Fees for subject
	Description	Varchar(100)	Desrciption of subject

Table 5.16 : Subject-Student Transaction

Table Name = Subject-Student Transaction			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	SS_ID	Int	
F.K	Subject_ID	Int	ID of subject
F.K	Student_ID	Int	ID of student
	Discount	Int	

Table 5.17 : Batch

Table Name = Batch			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Batch_ID	Int	ID of batch
	Batch_Name	Varchar(50)	Name of batch
F.K	Subject_ID	Int	ID of Subject
	Batch_Year	Date	Year of batch

Table 5.18 : Time-Table

Table Name = Time-Table			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Timetable_ID	Int	ID of timetable
F.K	FS_ID	Int	
F.K	Batch_ID	Int	ID of batch
	Remarks	Varchar(100)	Description

Table 5.19 : Fees

Table Name = Fees			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Fees_ID	Int	
F.K	Student_ID	Int	ID of student
	Amount	Int	Total payable amount
	DOG	Date	Date of given
F.K	Payment_Type_ID	Int	
	Cheque_No	Int	Number of cheque
	Cheque_Date	Date	Date on cheque
	IsSubmitted	Bit	

Table 5.20 :Payment_Type

Table Name = Payment_Type			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Payment_Type_ID	int	ID of payment type
	Payment_Type_Name	Varchar(50)	Name of payment

Table 5.21 : Student-Extra Hours

Table Name = Student-Extra Hours			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	SE_ID	int	
F.K	Student_ID	int	ID of student
F.K	FS_ID	int	
F.K	Attendance_ID	int	
	IsPresent	Bit	

Table 5.22: Acadamic_Calender

Table Name = AcadamicCalender			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Calender_ID	int	
	Acadamic_Date	Date	
	Event_Name	Varchar(50)	Name of event
	Description	Varchar(100)	Description

Table 5.23 : Documents

Table Name = Documents			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Doc_ID	int	ID of document
	Doc_Name	Varchar(50)	Name of document
F.K	Doc_Type_ID	int	ID for Type of document
	DOU	Date	Date of upload
F.K	Subject_ID	int	ID of subject
	File_Path	Varchar(50)	path of file
	Remarks	Varchar(50)	Remarks

Table 5.24 :Document_Type

Table Name = Document_Type			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Doc_Type_ID	int	ID of payment type
	Doc_Type_Name	Varchar(50)	Name of document

Table 5.25 : Message

Table Name = Message			
Key	**Field_Name**	**Data-Type**	**Description**
P.K	Message_ID	int	ID of message
F.K	To_ID	int	ID of receiver
F.K	From_ID	int	ID of sender
	Message	Varchar(250)	Message
	DOM	Date	Date of message
	IsDisplayTo	Bit	Display in To's inbox
	IsDisplayFrom	Bit	Display in From's inbox

5.2 Entity Relationship Diagram

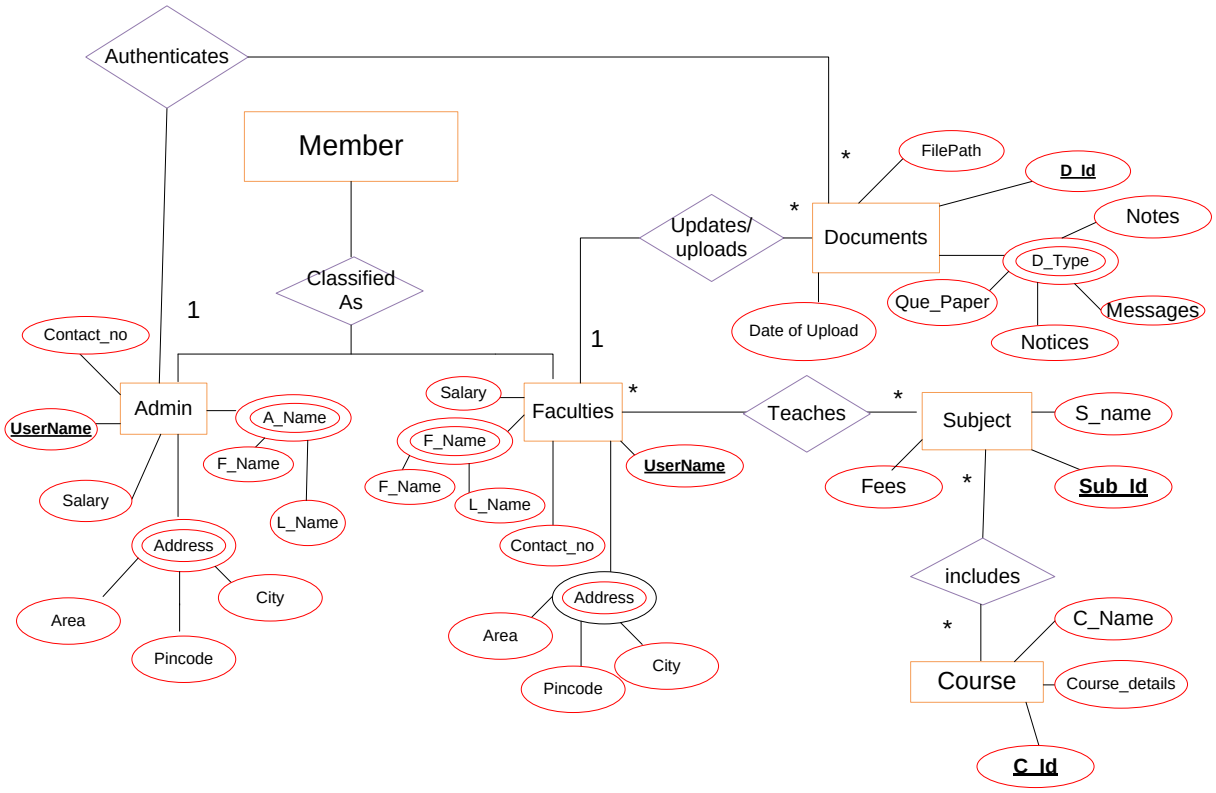

Figure 5.1 ER Diagram Part 1

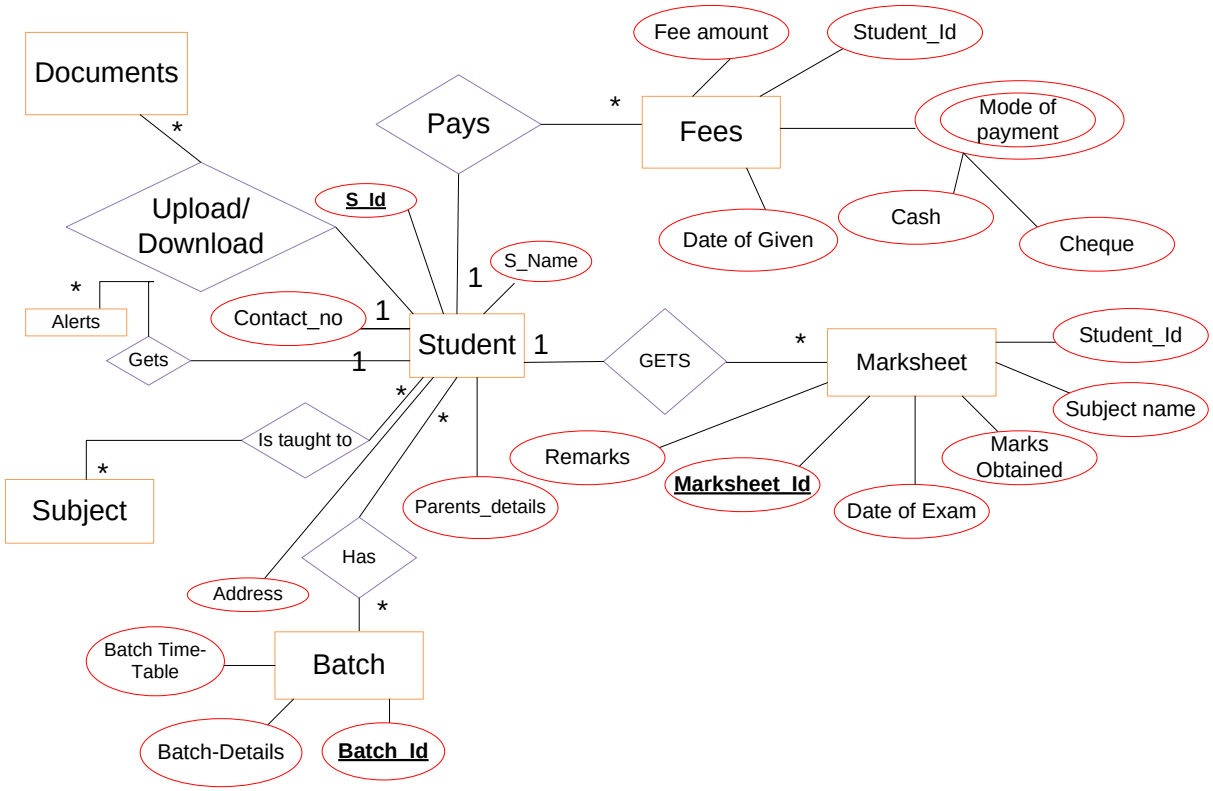

Figure 5.2 ER Diagram Part 2

Chapter: 6

Implementation Planning

6.1 Implementation Environment

- The implementation view of software requirement presents the real world manifestation of processing functions and information structures. This computerized system is specified in a manner that dictates accommodation of certain implementation details.
- The implementation environment of the developed system facilitates multiple users to use this system simultaneously. The user interfaces are designed keeping in mind that the users of this system are familiar to using GUI-based systems. Thus, we have restricted ourselves to developing a GUI-based system so that it becomes easier for the end user to get acquainted to the developed system.
- We have also followed the web based 3-tier architecture as the implementation architecture which is as follows:

1) Presentation layer

- This is the topmost level of the application. The presentation tier displays information related to such services as browsing merchandise, purchasing and shopping cart contents. It communicates with other tiers by which it puts out the results to the browser/client tier and all other tiers in the network. (In simple terms it is a layer which users can access directly such as a web page, or an operating systems GUI)

2) Application tier (business logic, logic tier, or middle tier)

- The logical tier is pulled out from the presentation tier and, as its own layer; it controls an application's functionality by performing detailed processing.

3) Data tier

- The data tier includes the data persistence mechanisms (database servers, file shares, etc.) and the data access layer that encapsulates the persistence mechanisms and exposes the data. The data access layer should provide an API to the application tier that exposes methods of managing the stored data without exposing or creating dependencies on the data storage mechanisms. Avoiding dependencies on the storage mechanisms allows them to be updated or changed without the application tier clients being affected by or even aware of the change. As with the separation of any tier, there are costs for implementation and often costs to performance in exchange for improved scalability and maintainability.

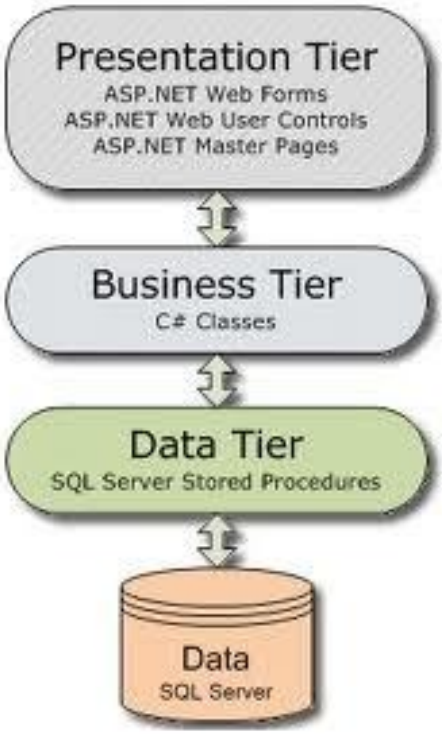

Fig. 6.1 Three tier architecture

6.2 Coding Standards

- **Objects**
  - The following are the naming conventions for the design element used in the form.

ASP.NET Control	Abbreviation
Standard Controls	
Button	btn
CheckBox	cbx
CheckBoxList	cbxl
DropDownList	ddl
FileUpload	fu
Hyperlink	lnk
Image	img
ImageButton	ibtn
Label	lbl
LinkButton	lbtn
ListBox	lb
Panel	pnl
RadioButton	rbo
TextBox	txt
Data Controls	
DataList	dtl
DetailsView	dtv
GridView	gv
ListView	lv
Repeater	rpt
SqlDataSource	sds

Validation Controls	
CompareValidator	cpv
CustomValidator	ctv
RangeValidator	rv
RegularExpressionValidator	rev
RequiredFieldValidator	rfv

Table 6.1 Naming Convention Table

Chapter 7
TESTING

7.1 TESTING PLAN

The main objective of testing is finding performance of the developed application. Testing is the key to find errors and limitations of the software developed. A test plan describes how testing will be accomplished on a software product, together with the resources and schedule needed. A test plan basically consists of the level of achieving milestones. Following are the testing principles used for the current application:

- All tests should be traceable to customer requirements.
- Tests should be planned long before testing begins.
- Testing should begin in small and process towards testing in large.
- Exhaustive testing is not possible.
- To be most effective, testing should be conducted by an independent third party.

7.2 TESTING STRATEGY

A software product goes through three levels of testing:

1) Unit Testing: In unit testing the analyst test the program i.e. modules making up a system. For this reason, unit testing is sometimes called programs testing, in contrast to System testing. Each module is tested for varieties of input test conditions. The various features tested in Unit Testing are as follows:
    - GUI Tests: Done for checking consistency in labels, layouts, buttons, appearance etc.
    - Security Tests: Done for checking whether enabling or disabling of options based on security requirements function properly or not.
    - Code walkthrough Tests: Done for checking code for standards and optimality.

- Validation Testing: The presented system is tested using validation testing. In this we tested each of validation criteria of the system.

2) Integration Testing: The main objective of integration testing is to test the module interfaces in order to ensure that there are no errors in the parameter passing, when one module invokes another module.

   - Top – Down: Combine test and debug top-leveled routines that become the integration test that harms for lower-level units.
   - Bottom – Up: Combine test low-level routines into progressively larger modules and subsystems.

3) System Testing: System testing is done when the software is functioning as a whole, or when well-defined subsets of its behavior are implemented. There are essentially three main kinds of system testing:
   - Alpha testing: Alpha testing refers to the system testing carried out by the test team within the developing organization. This mode of testing is mainly done by experts of the organization to check the efficiency of developed software.
   - Beta testing: Beta testing is the system testing performed by a selected group of friendly customers. Its main aim is to verify whether the developed system satisfy the need of customers.
   - Acceptance testing: Acceptance testing is the system testing performed by the customer to determine whether to accept or reject the delivery of the system.

7.3 TESTING METHODS

There are mainly two methods for testing.

1. White Box Testing: In white box testing independent parts of modules and loops which are the corner stones of the program are tested thoroughly. There are five different classes of loops which can be defined as follows:
   - Simple loops
   - Nested loops
   - Concatenated loops
   - Unstructured loops
   - Continuous loops

2. Black Box Testing: Black Box testing attempts to find errors in the following categories:
   - Incorrect or missing function
   - Interface errors
   - Errors in fetching external data
   - Behavior or performance errors
   - Initialization and termination errors

The basic procedure we adopted is again modularity approach that we started with individual modules, went into deep and check for its proper functioning. After checking all the modules for desired results by giving almost all ranges of inputs, we move towards high level modules, i.e. which call and use other modules. Similarly we keep moving up towards level finally reaching to package itself.

7.4 TEST CASES

Table 7.1 Test Cases

Purpose	Required Inputs	Expected Output
Invalid Login Check	Invalid (or absence of) Username & Password	Error Message
Valid Login Check	Valid Username & Password	Redirection to Database Selection Form
Incomplete Selections and/or Invalid Values Check in Database Selection Form	Null Values and/or Invalid values in one or more of the required options	Error Message
Valid Values Check in Database Selection Form	Valid values in all of the required options	Redirection to Controls Selection Form
Incomplete Selections and/or Invalid Values Check in Controls Selection Form	Null Values and/or Invalid values in one or more of the required options	Error Message
Valid Values Check in Controls Selection Form	Valid values in all of the required options	Redirection to File and Language Selection Form
Incomplete Selections and/or Invalid Values Check in File and Language Selection Form	Null Values and/or Invalid values in one or more of the required options	Error Message
Valid Values Check in File & Language Selection Form	Valid values in all of the required options	Redirection to Operations Selection Form
Incomplete Selections and/or Invalid Values Check in Operations Selection Form	Null Values and/or Invalid values in one or more of the required options	Error Message
Valid Values Check in Operations Selection Form	Valid values in all of the required options	Redirection to Summary Form

Chapter: 8

Screenshots & GUI

8.1 Admin Side

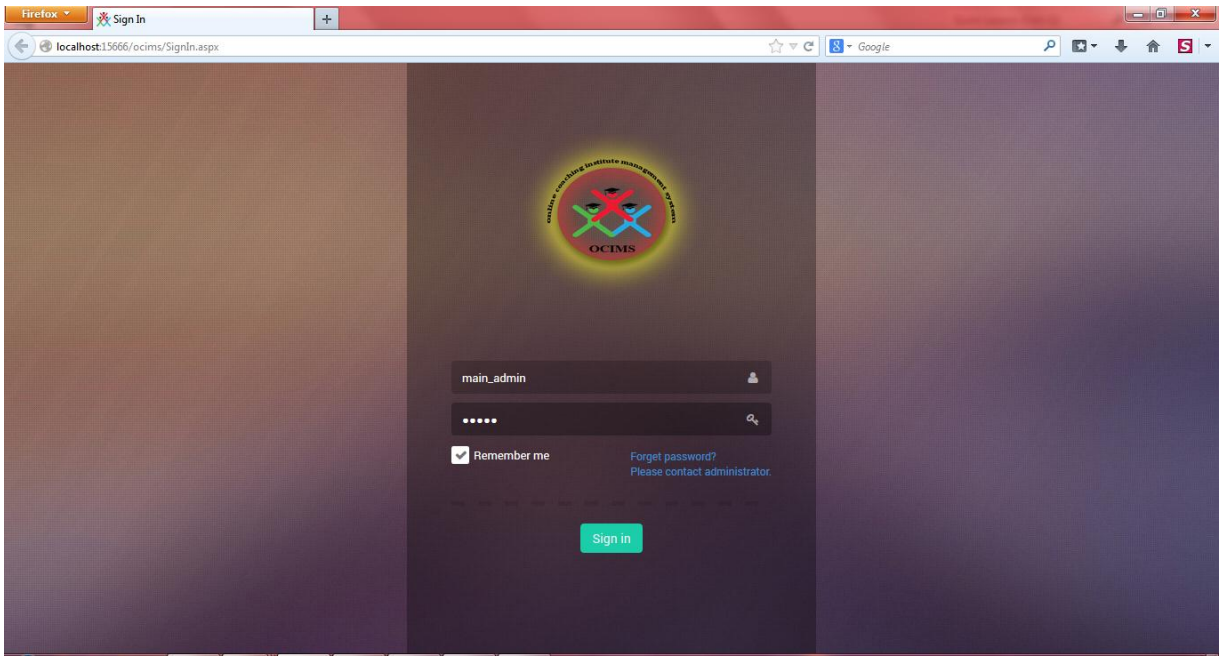

Figure 8. 1 Screenshot showing Login Page

- This is common login page for admin, faculties & student. The above screenshot shows login of admin.
- First field shows the login name of the user and second field shows the password of respective user.
- If the remember me checkbox is checked then it remembers the user for future logins.
- Sign in button will lead you to the reset password page if the user is logging in for the first time.

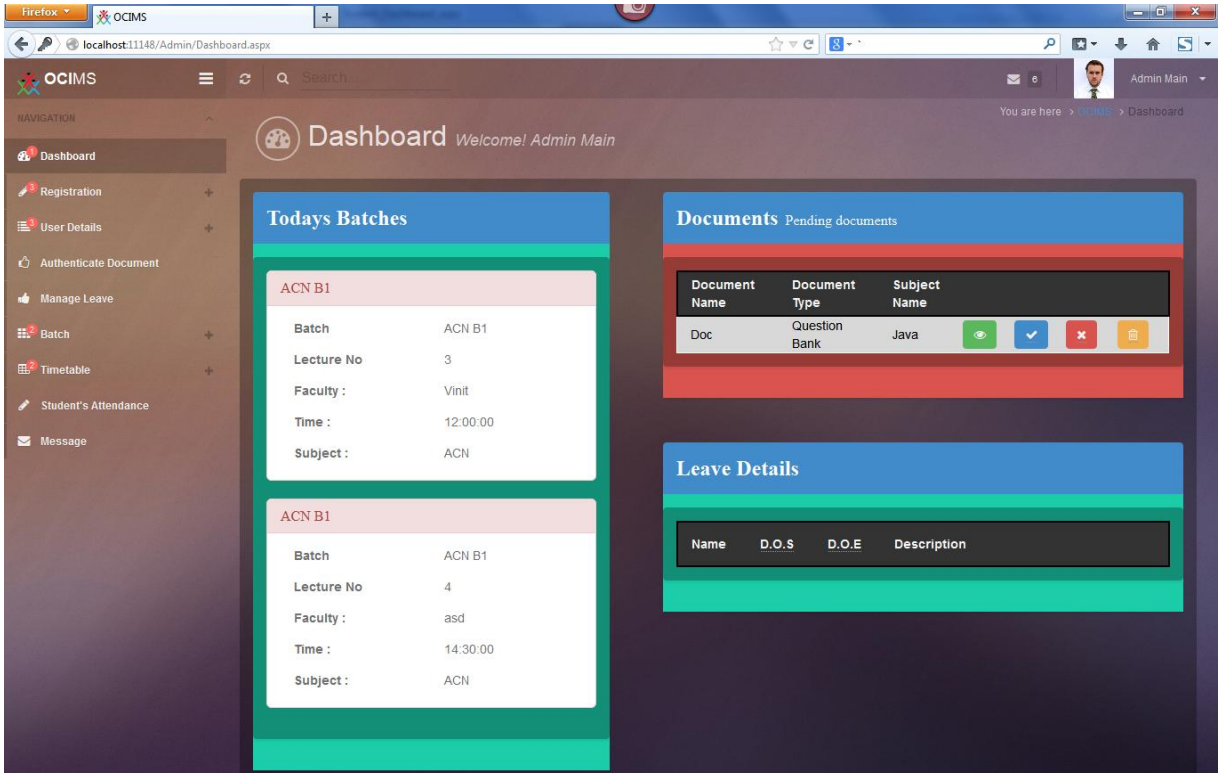

Figure 8. 2 Screenshot showing Dashboard

- The above screenshot shows the dashboard of Admin-side.
- It displays three major information:
  - Today's batches.
  - List of documents which are yet to be approved by admin.
  - Leave requests.

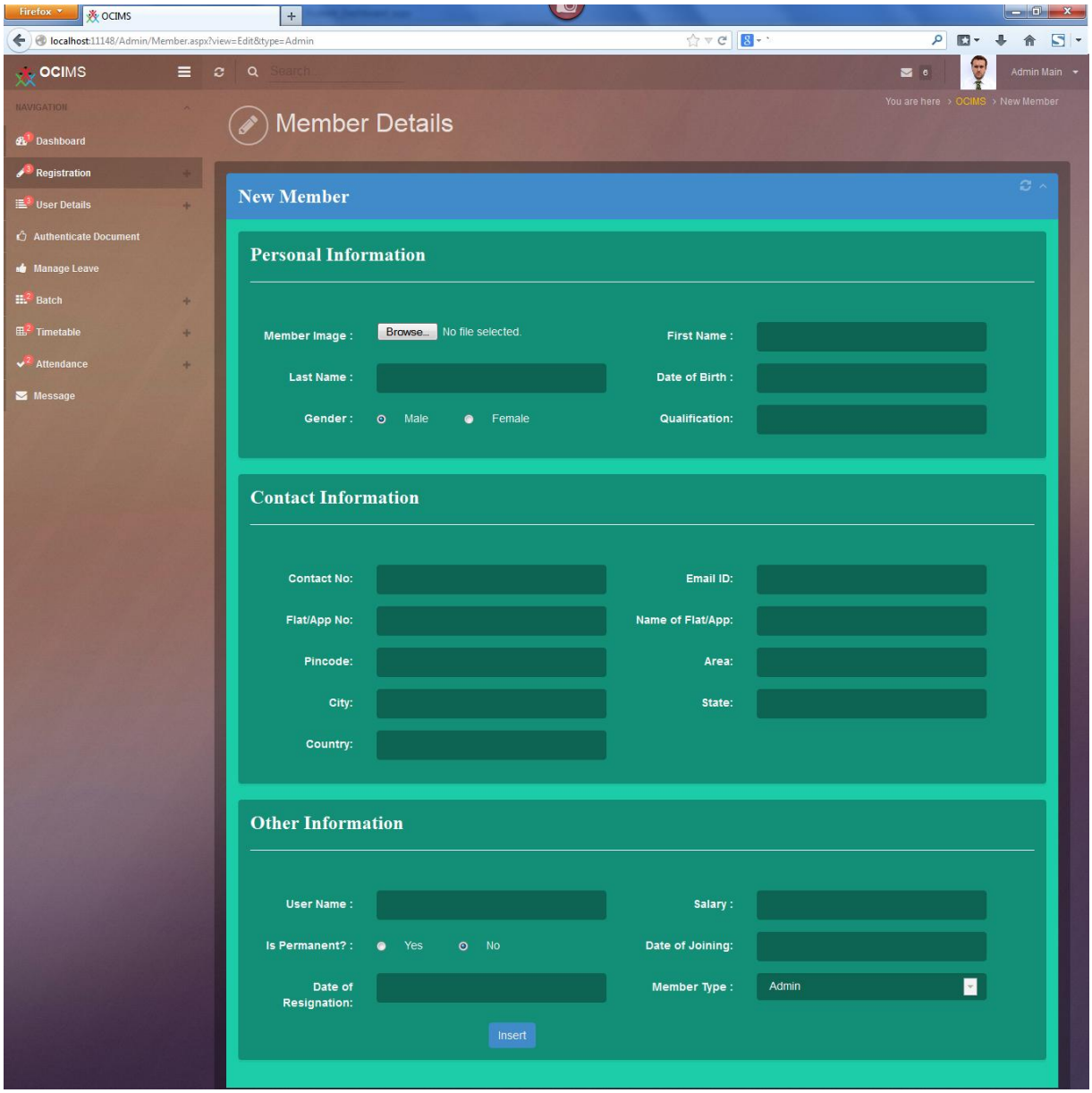

Figure 8. 3 Screenshot showing registration page for new admin

- The above screenshot shows registration page for registering admins.
- It has three sections personal information, contact information and other information.
- On clicking insert button the data will be inserted into the database.

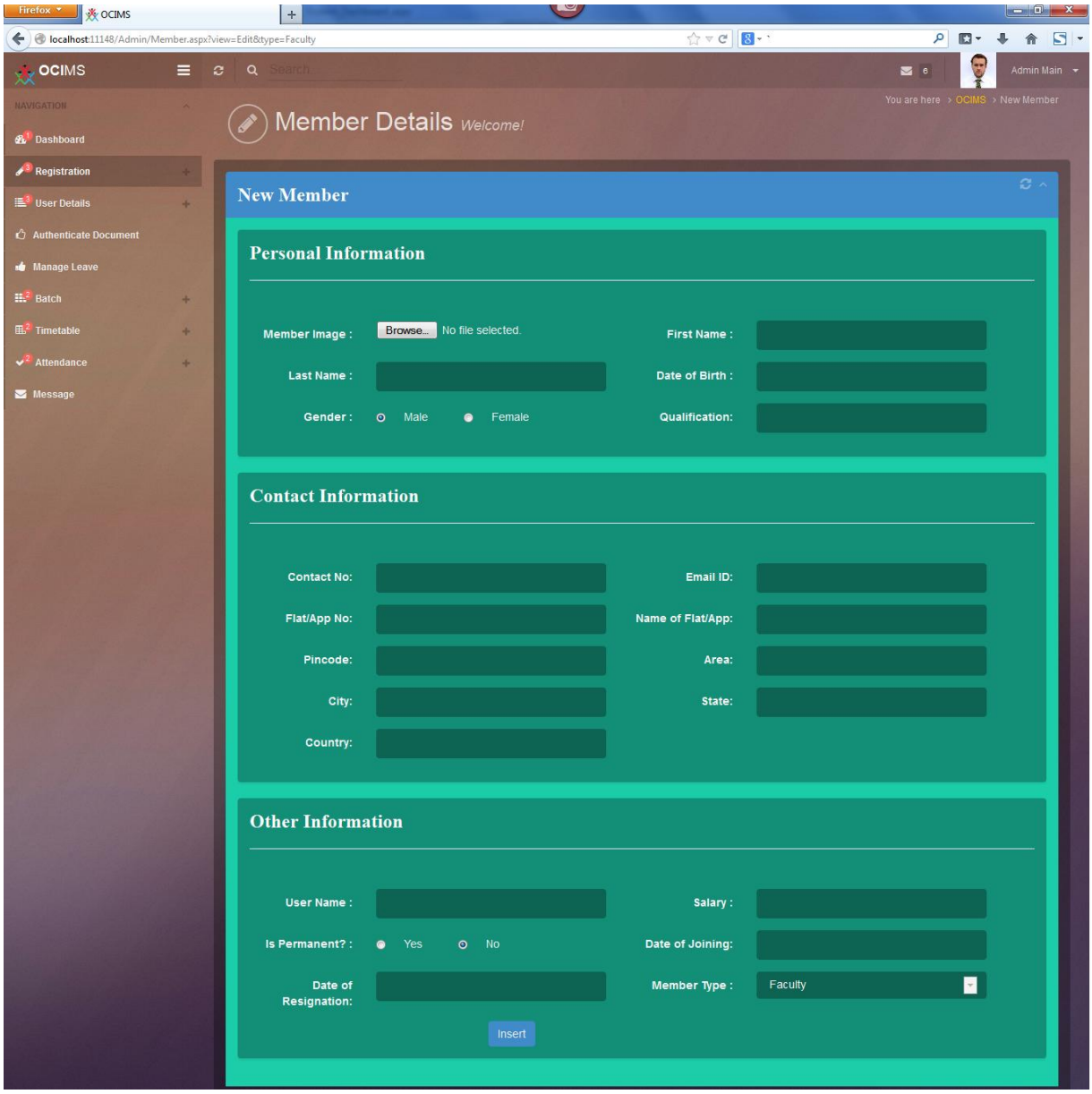

Figure 8. 4 Screenshot showing registration page for new faculty

- The above screenshot shows registration page for registering faculties.
- It has three sections personal information, contact information and other information.
- On clicking insert button the data will be inserted into the database.

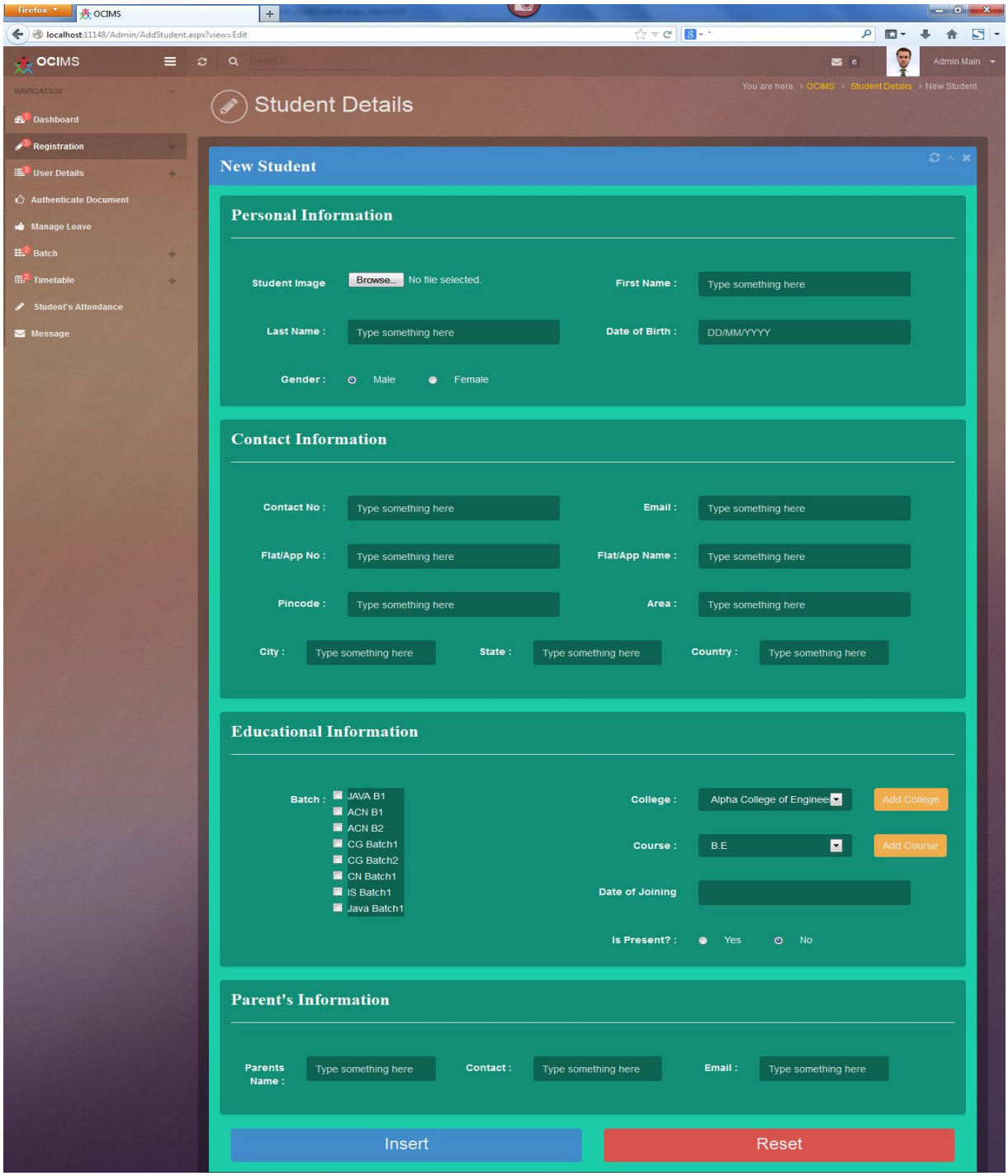

Figure 8. 5 Screenshot showing registration page for new student

- The above screenshot shows registration page for registering students.
- It has three sections personal information, contact information, educational information and parent's information.

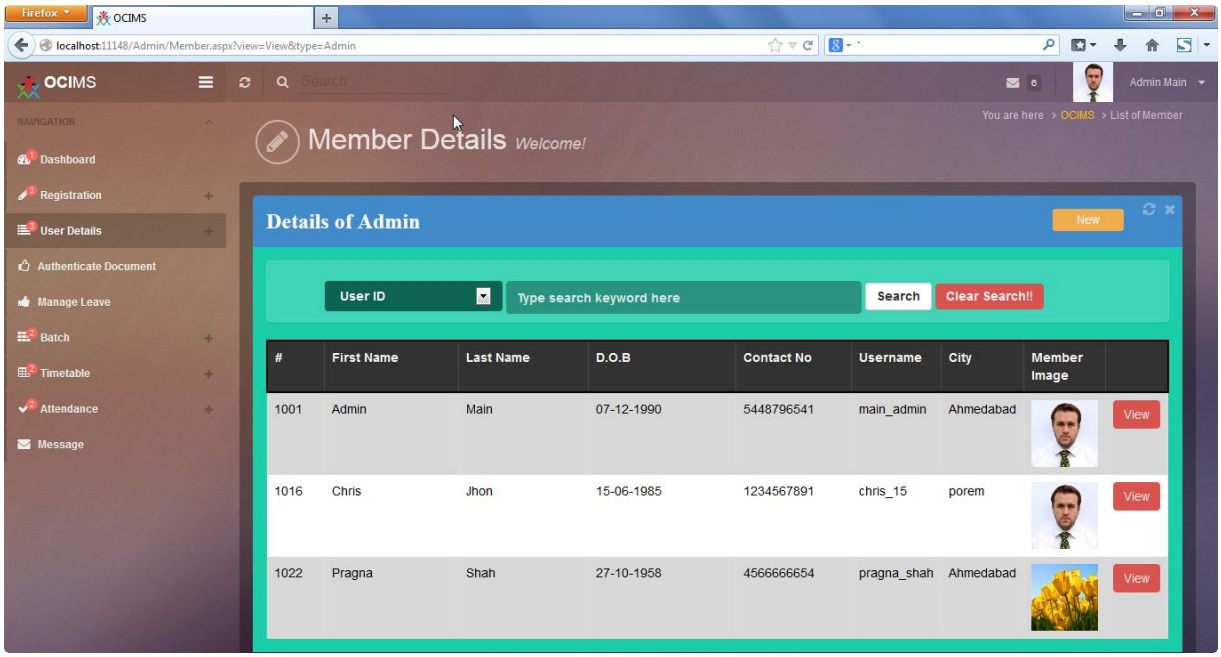

Figure 8. 6 Screenshot showing list of admins

- The above screenshot shows list of admins of the system.
- On clicking view button detailed information of selected admin is displayed.
- And admin can edit details of specific admin by clicking edit button on detailed display page.

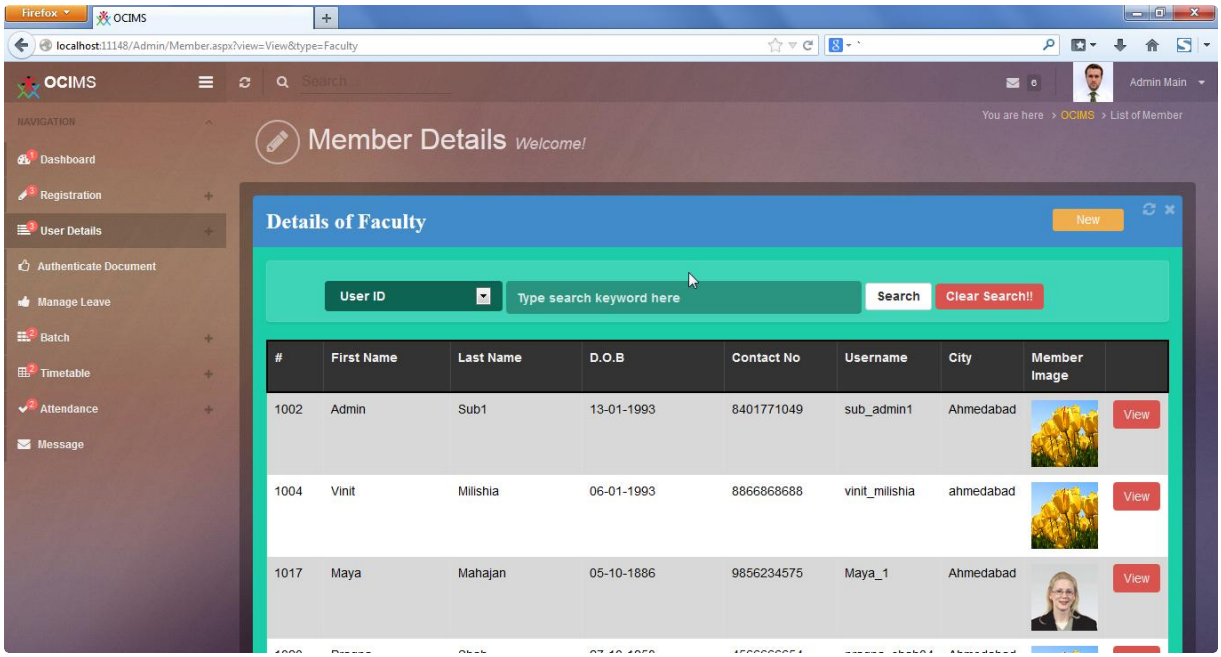

Figure 8.7 Screenshot showing User Details of registered Faculties

- The above screenshot shows list of faculties of the system.
- On clicking view button detailed information of selected faculty is displayed.
- And admin can edit details of specific faculty by clicking edit button on detailed display page.

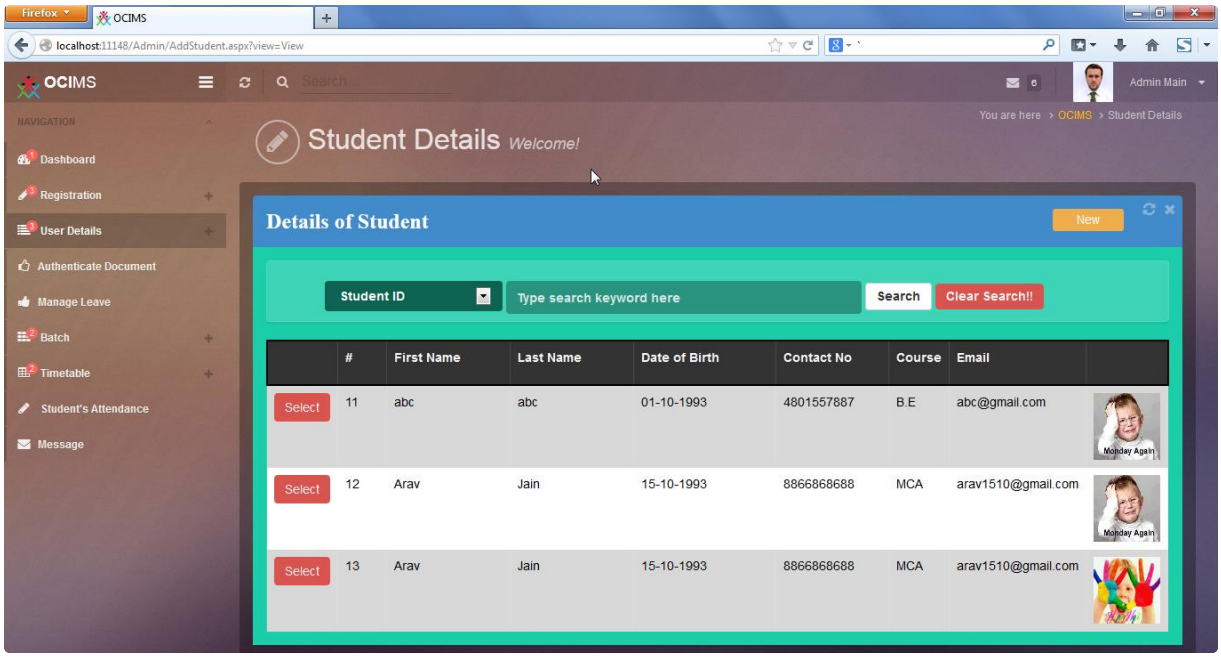

Figure 8.8 Screenshot showing User Details of registered Students

- The above screenshot shows list of students of the system.
- On clicking view button detailed information of selected student is displayed.
- And admin can edit details of specific student by clicking edit button on detailed display page.

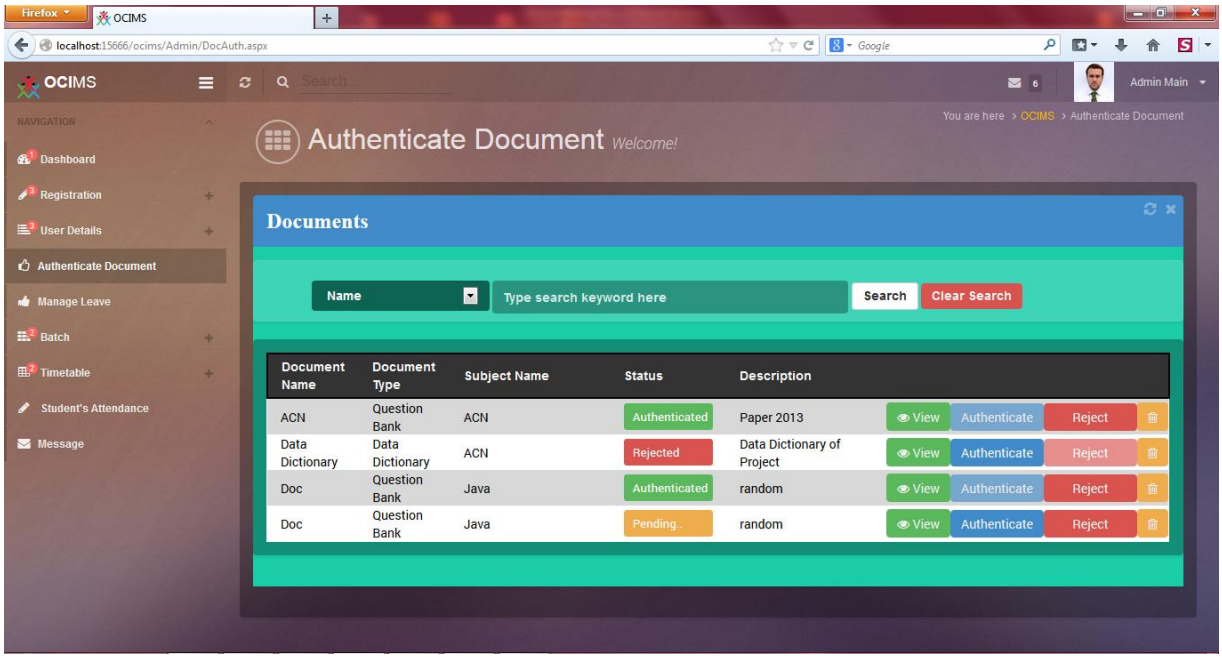

Figure 8.9 Screenshot showing Authentication page for documents

- This Screenshot has details of page used for authentication of documents uploaded by faculties as well as students.
- Here status of documents uploaded is also shown.
- If document is approved authenticate label is active, similarly for pending and rejected.
- Here authentication of documents is done by Admin.

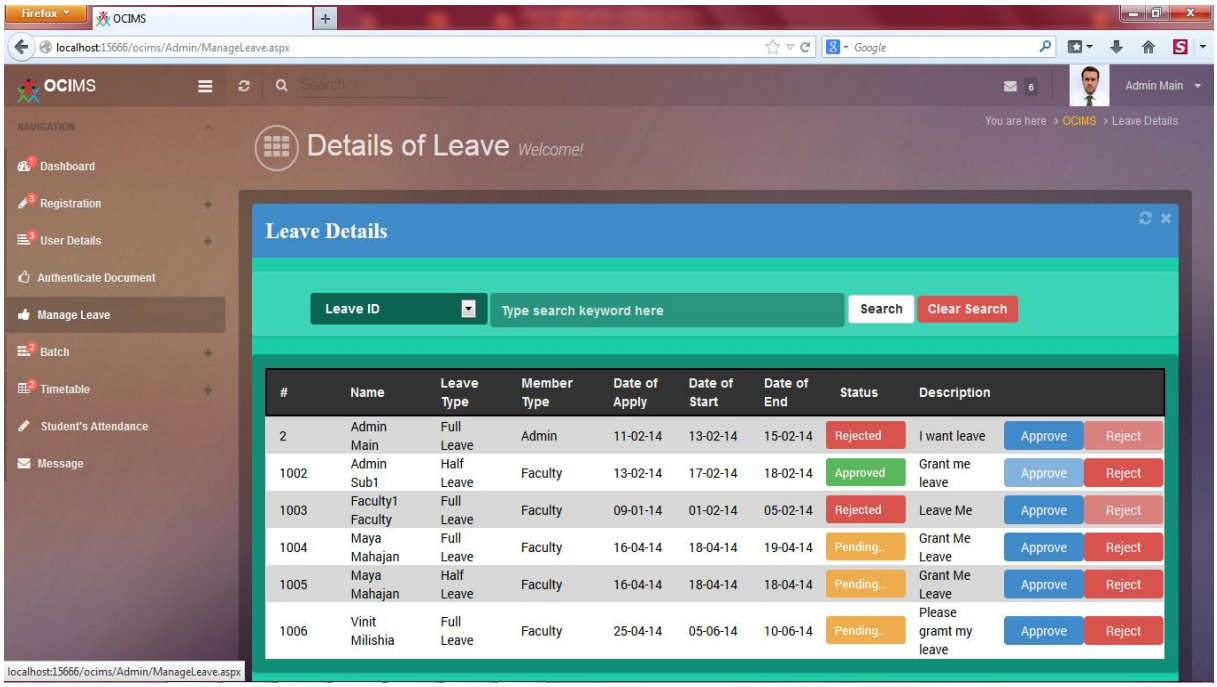

Figure 8.10 Screenshot showing Manage Leave Page

- This Screenshot shows details of leave management of Faculties by Admin.
- It also shows status of leave whether approved, rejected, to be approved and pending.
- It also shows description of leaves.

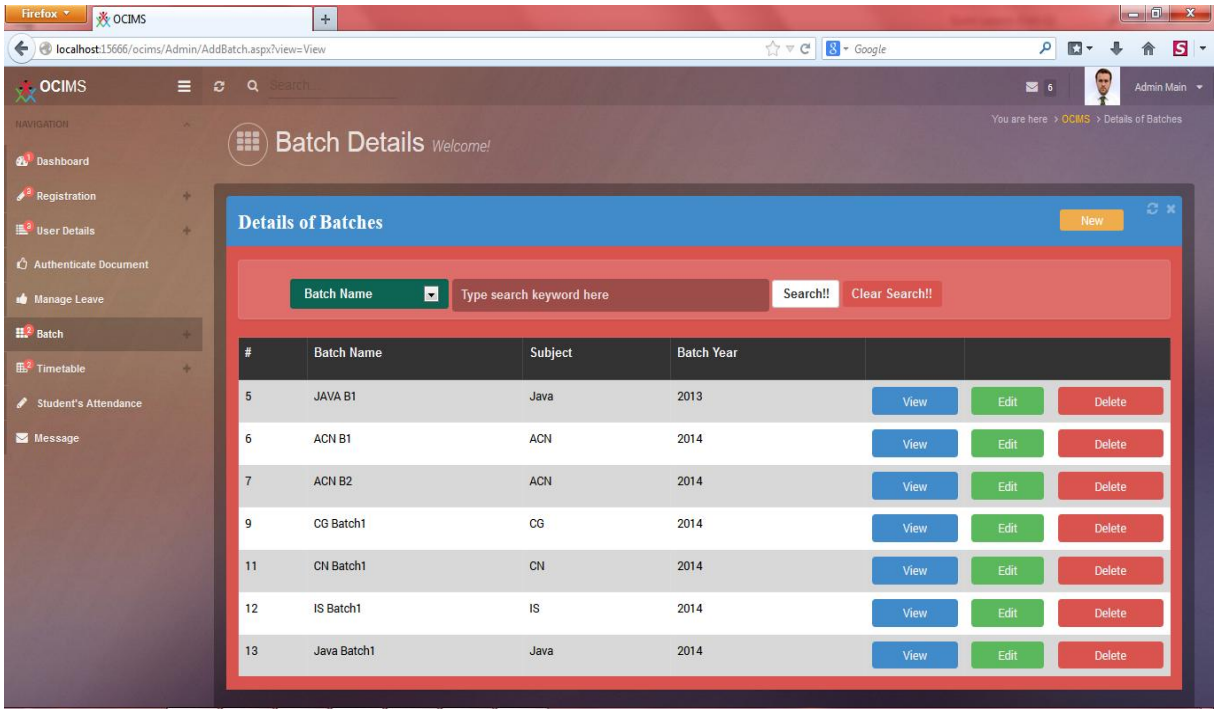

Figure 8.11 Screenshot showing Details of present batches

- The above screenshot shows list of batches.
- On clicking view button detailed information of selected batch is displayed.
- On clicking edit button admin can edit details of specific batch and by clicking delete button batch will be deleted.

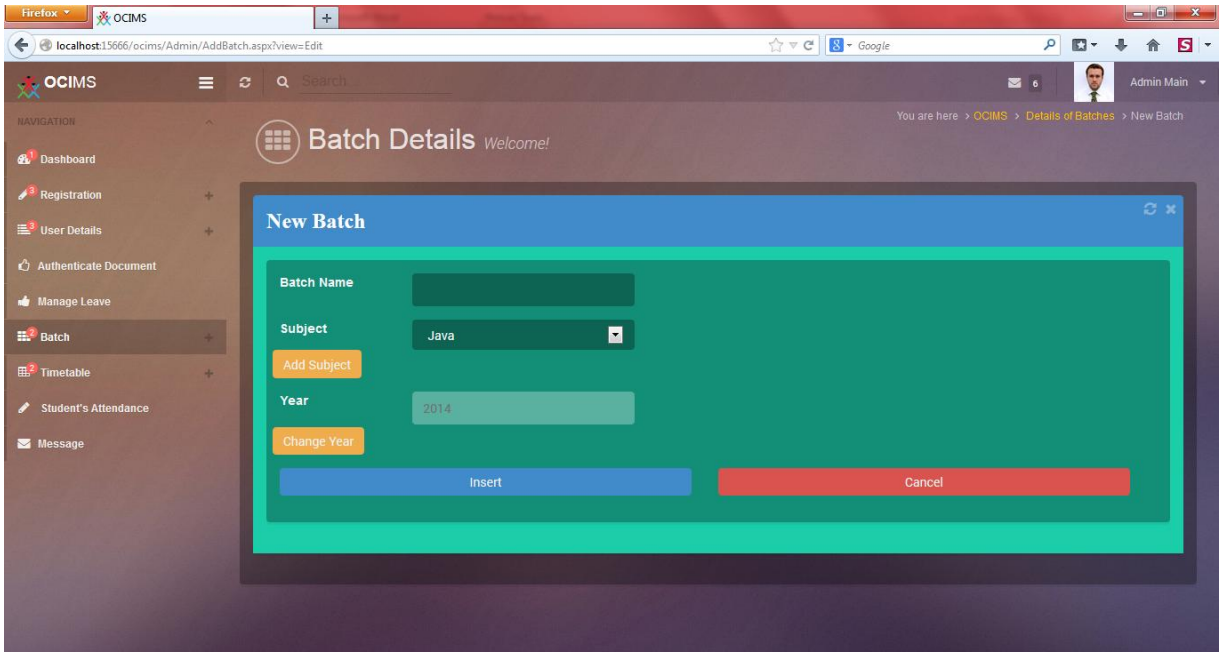

Figure 8.12 Screenshot showing page for adding new batch

- This screenshot shows page where new batches are added in database by Admin.
- If admin does not find subject in dropdown list than admin can add subject using Add Subject button.
- Admin can also change year by clicking change year button.
- Insert button will insert batch in database.

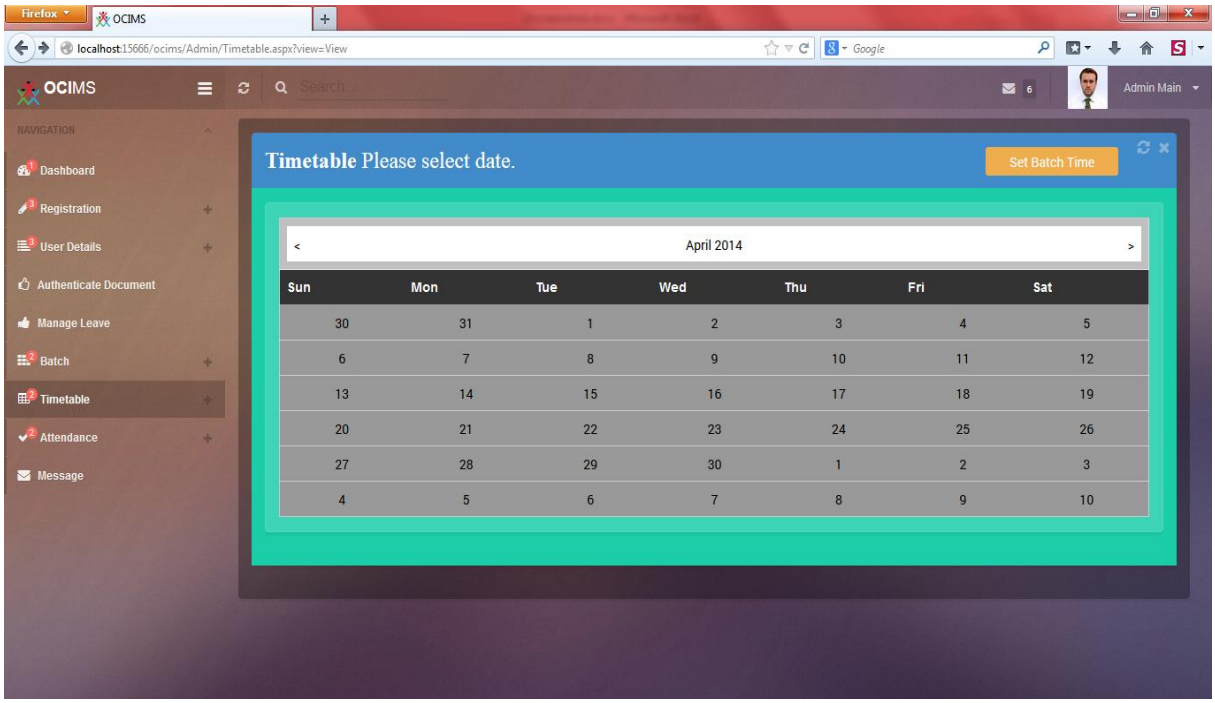

Figure 8.13 Screenshot showing timetable

- This Screenshot show timetable. Here by selecting date, batch details on that date is displayed.
- On clicking Set Batch Time, admin is taken to the page where he can add batch in timetable.

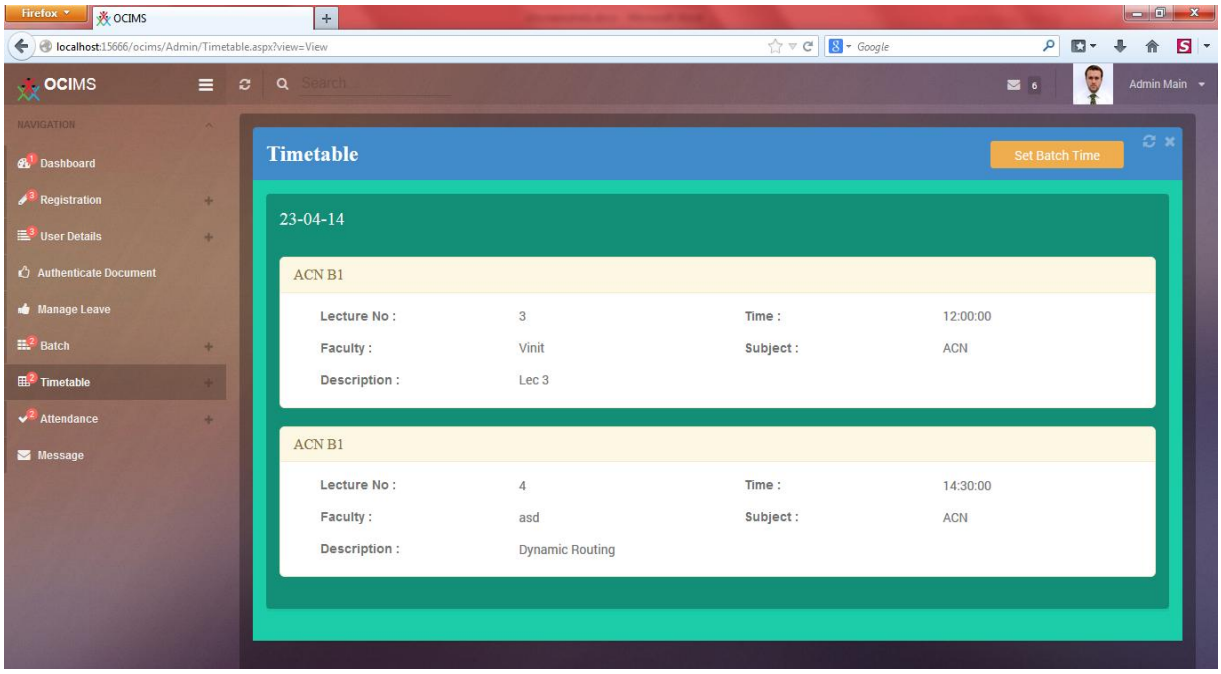

Figure 8.14 Screenshot showing details of particular batches on particular date

- The above screenshot shows details of particular batches on particular date.
- On clicking Set Batch Time, admin is taken to the page where he can add batch in timetable.

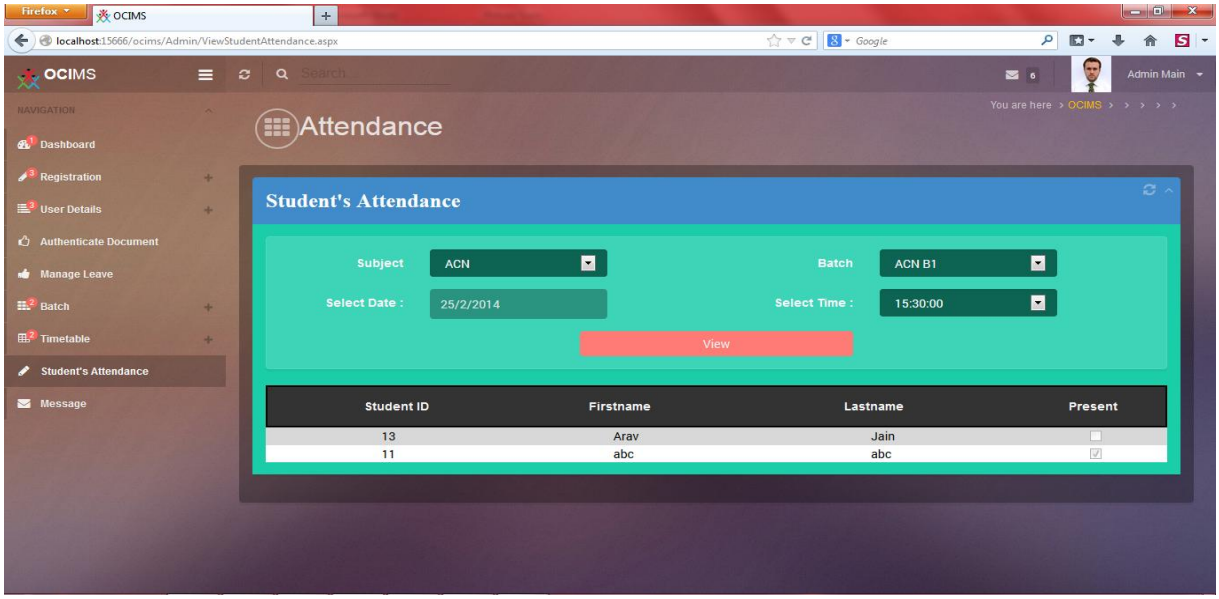

Figure 8.15 Screenshot showing attendance of students

- This Screenshot shows details of Student's attendance.
- Attendance is shown of specific date.

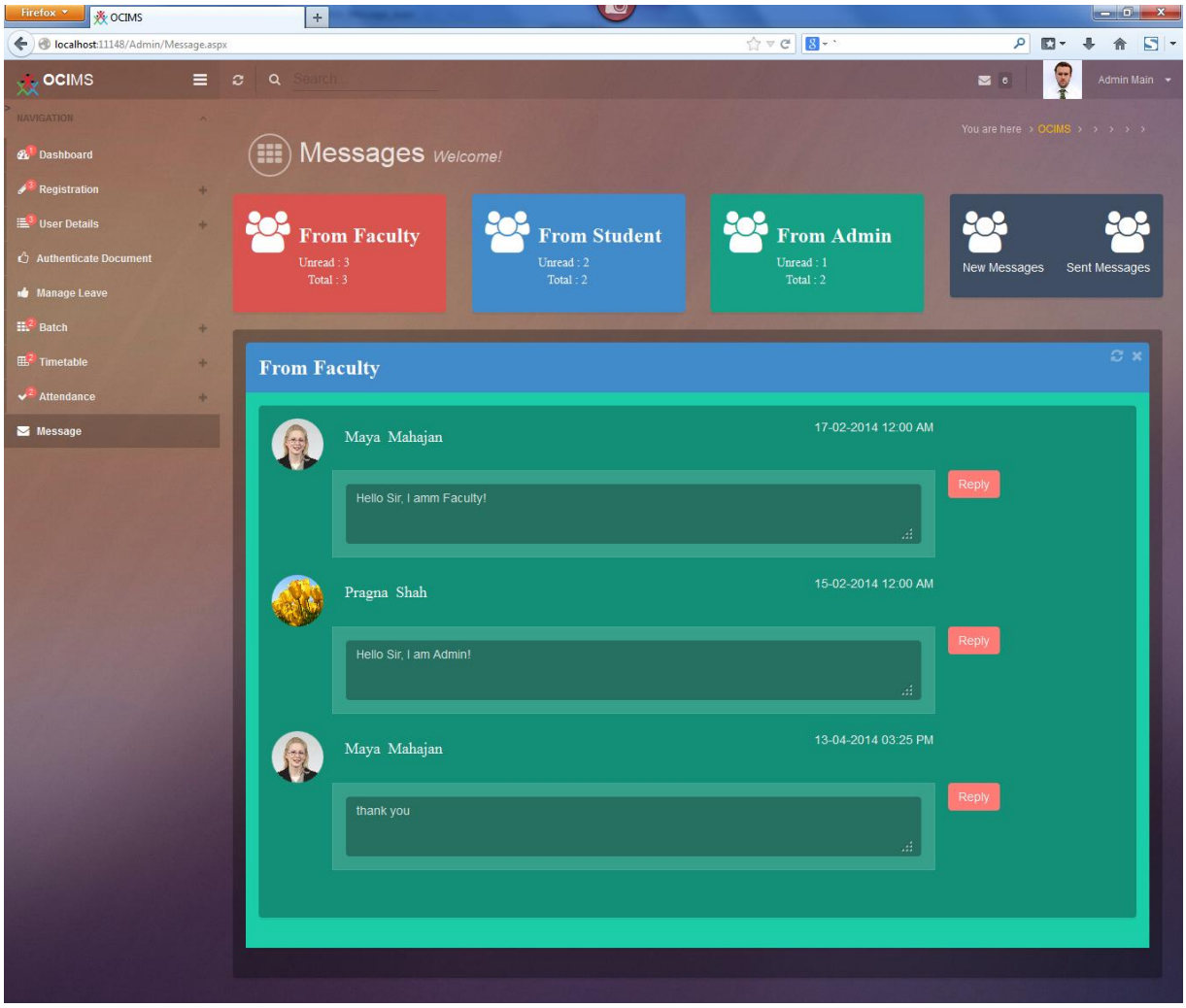

Figure 8.16 Screenshot showing messages received from Faculties

- This Screenshot shows messages received by Admin from Faculties.
- Admin can reply directly from individual message received.
- Admin can also view messages received from students and other admins.

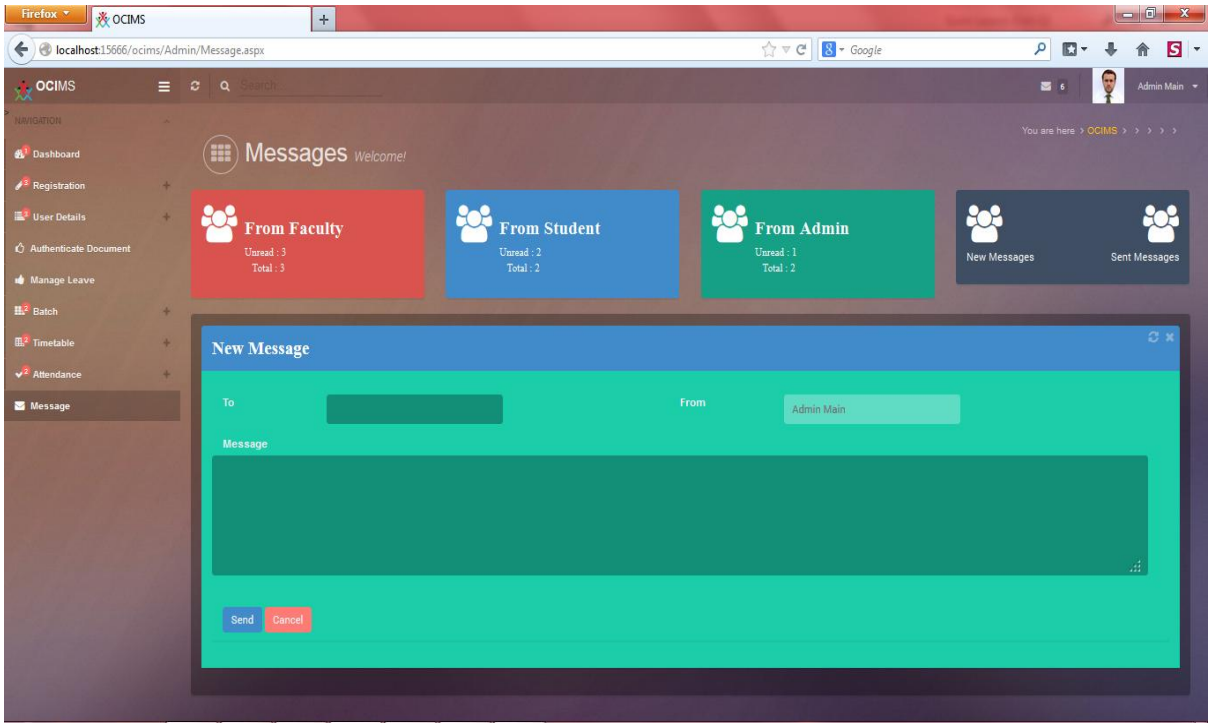

Figure 8.17 Screenshot showing page for sending messages

- This Screenshot shows page for sending messages to students, faculties.
- Admin have to enter user name of the member in order to send message.

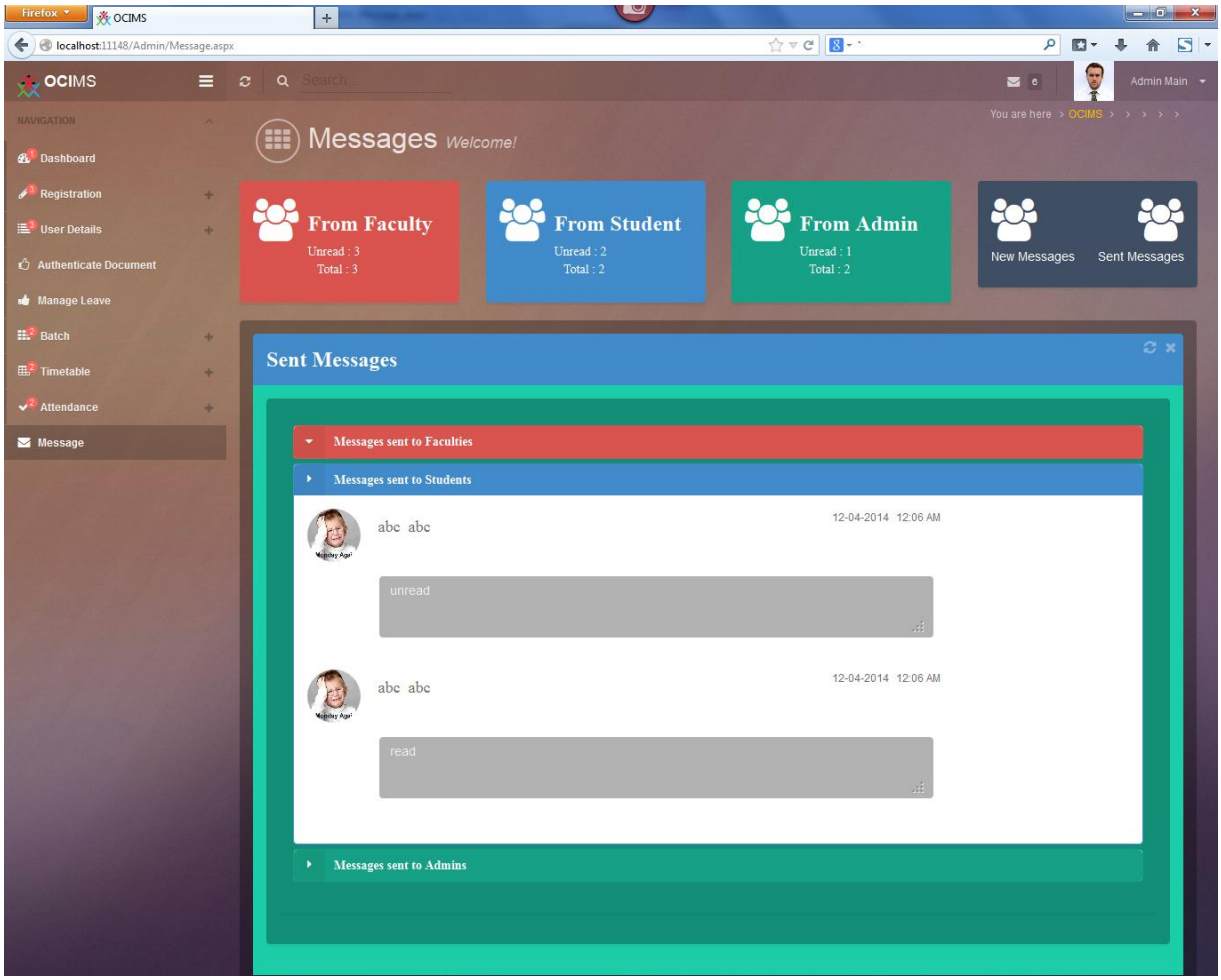

Figure 8.18 Screenshot showing sent messages

- This Screenshot shows sent messages of Admin to Faculties, Students and other Admin members.
- On clicking red bar, admin can view messages sent to faculties.
- On clicking blue bar, admin can view messages sent to students.
- On clicking green bar, admin can view messages sent to admins.

8.2 Faculty Side

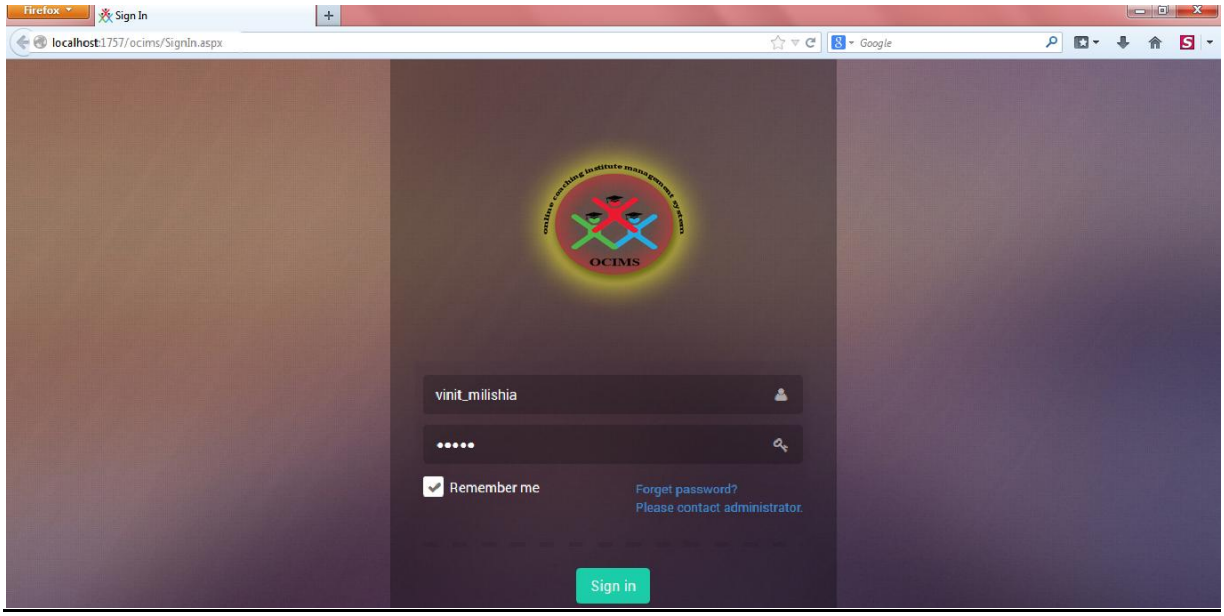

Figure 8.19 Screenshot showing Login Page

- This Screenshot contains login information about faculty.
- First field shown login name of faculty and second field shows password of that faculty respectively.
- If the (remember me) checkbox is checked than user details are remembered when that user login again.

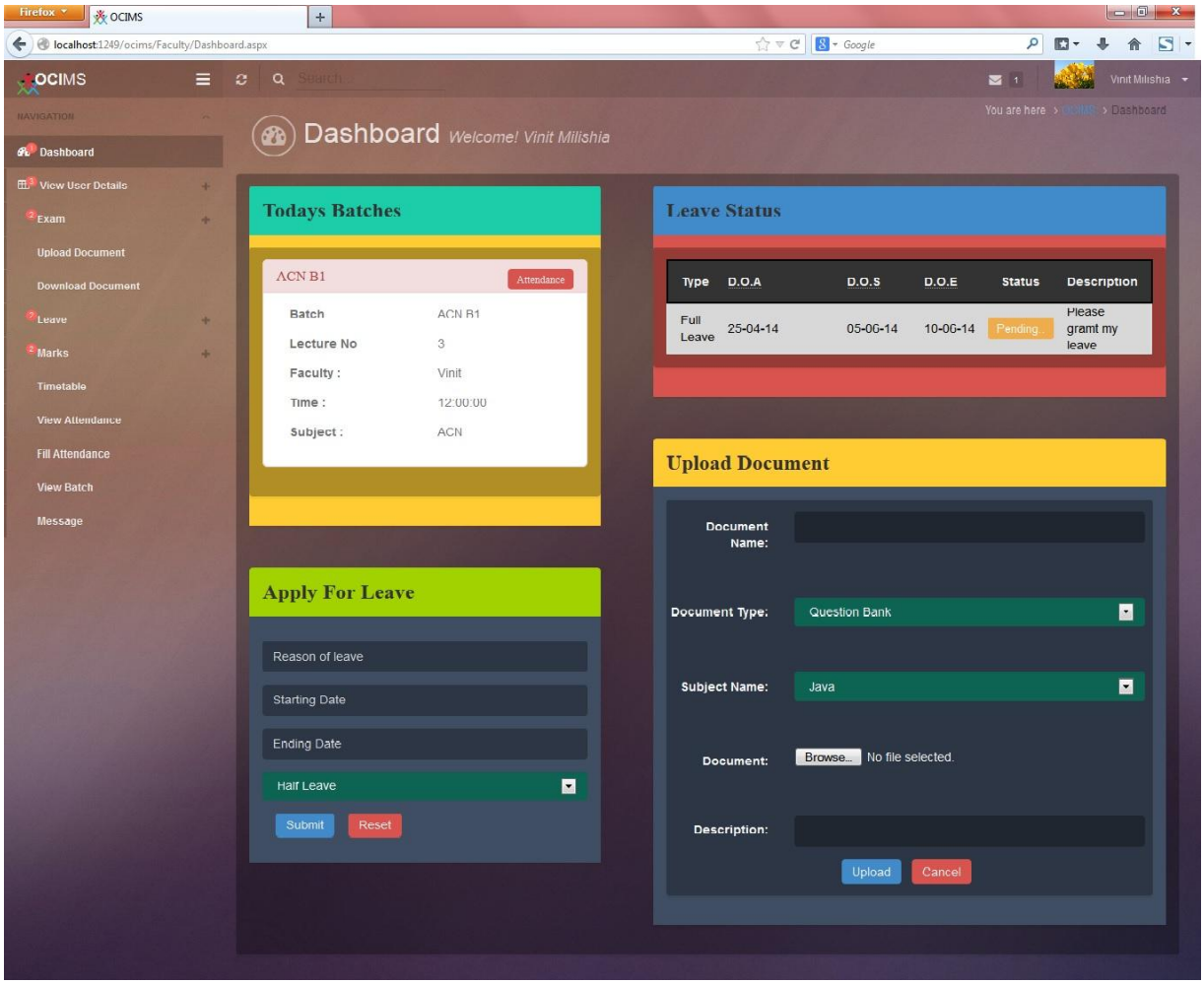

Figure 8.20 Screenshot showing Dashboard of Faculty-side

- The above Screenshot shows dashboard of Faculty side displays current batches.
- It also contains leave status (if applied) for leave and form for application of leave.
- It also contains form for uploading various documents which are used by students.

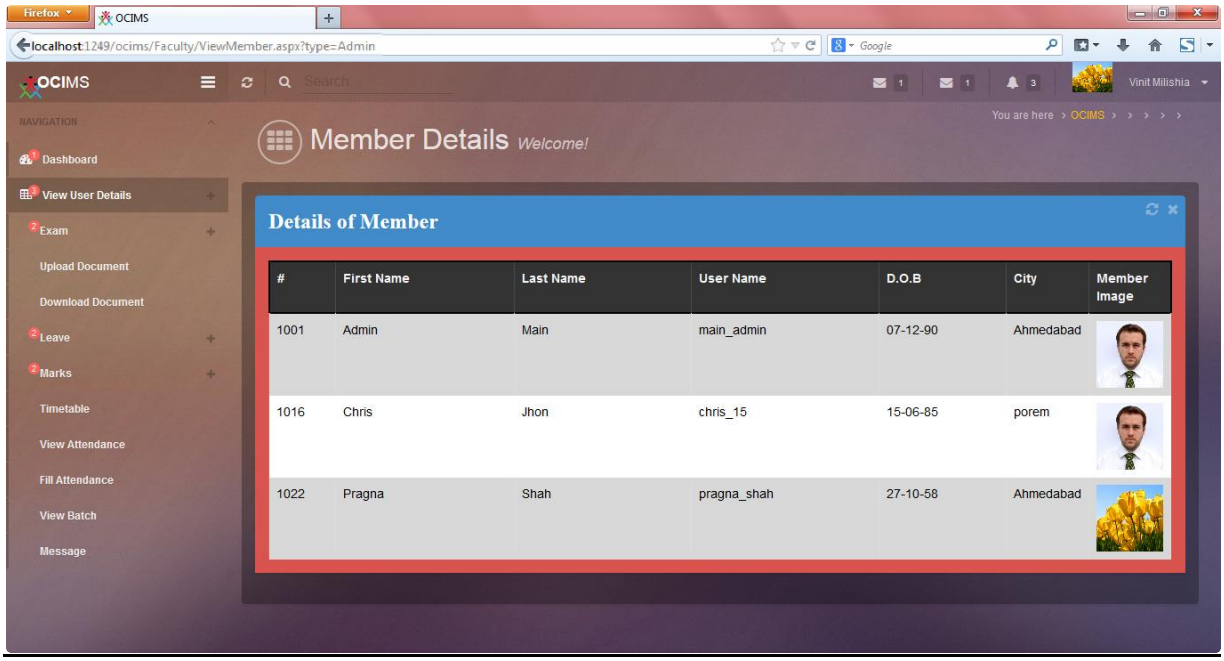

Figure 8.21 Screenshot showing Details of existing Admin

- The above Screenshot shows details of existing admin which are viewed by faculty.

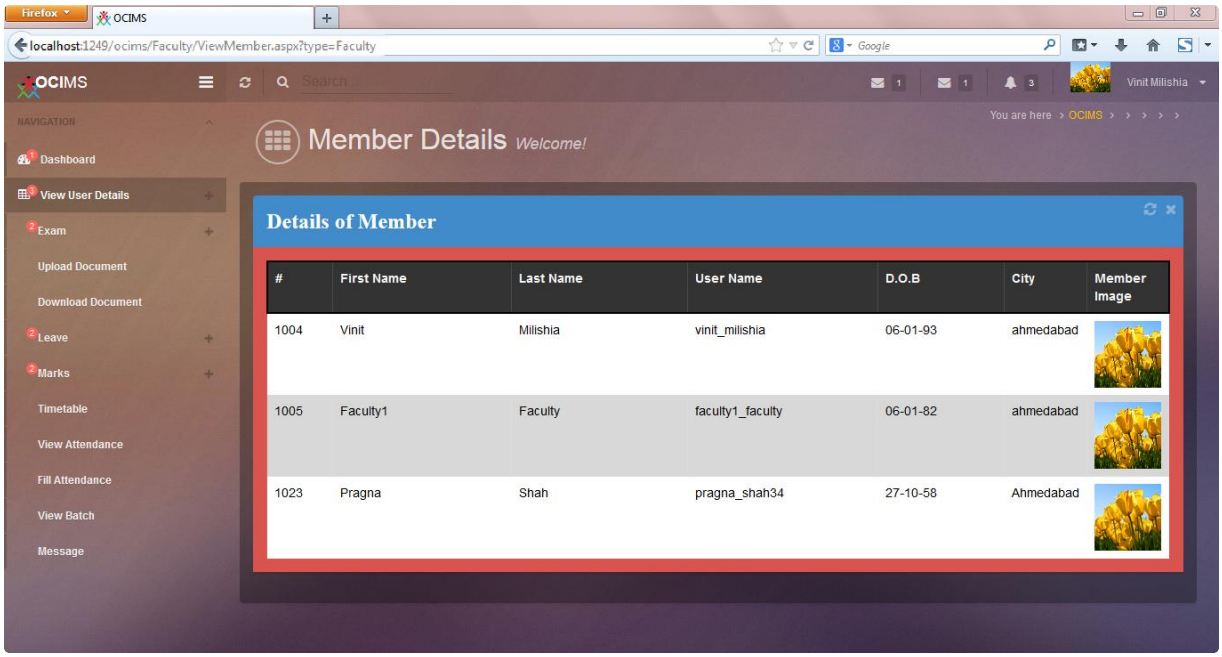

Figure 8.22 Screenshot showing Details of existing Faculties

- The above Screenshot shows details of existing faculties.

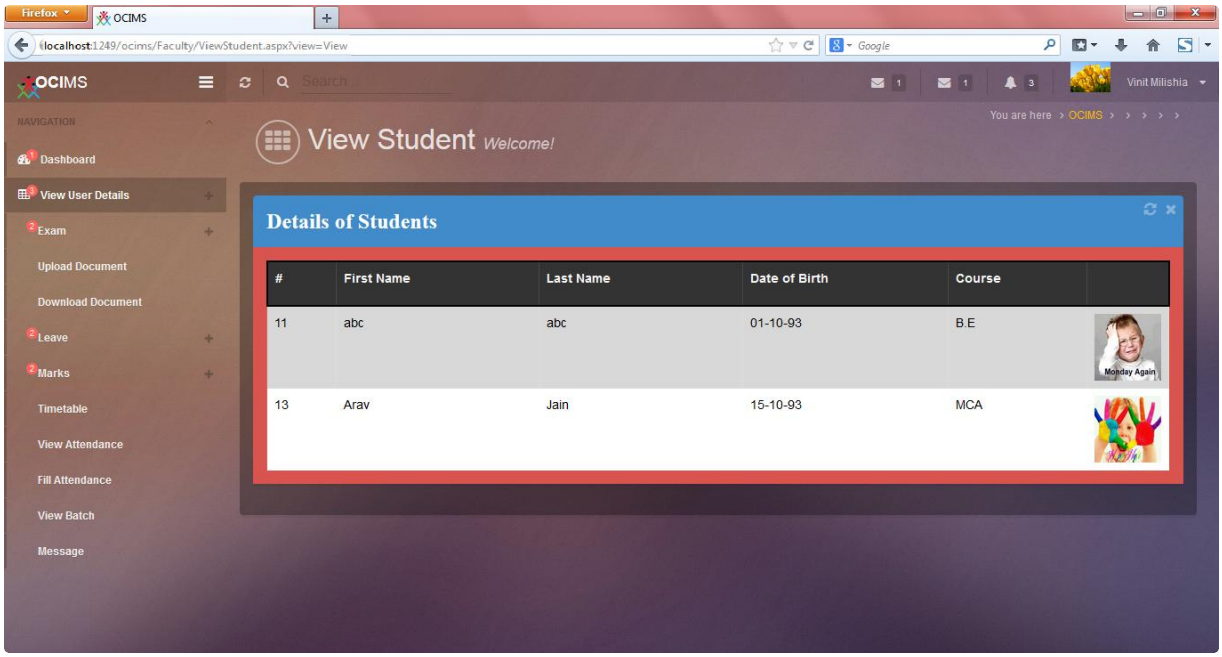

Figure 8.23 Screenshot showing Details of existing Students

- The above Screenshot shows details of existing students which are viewed by faculty.

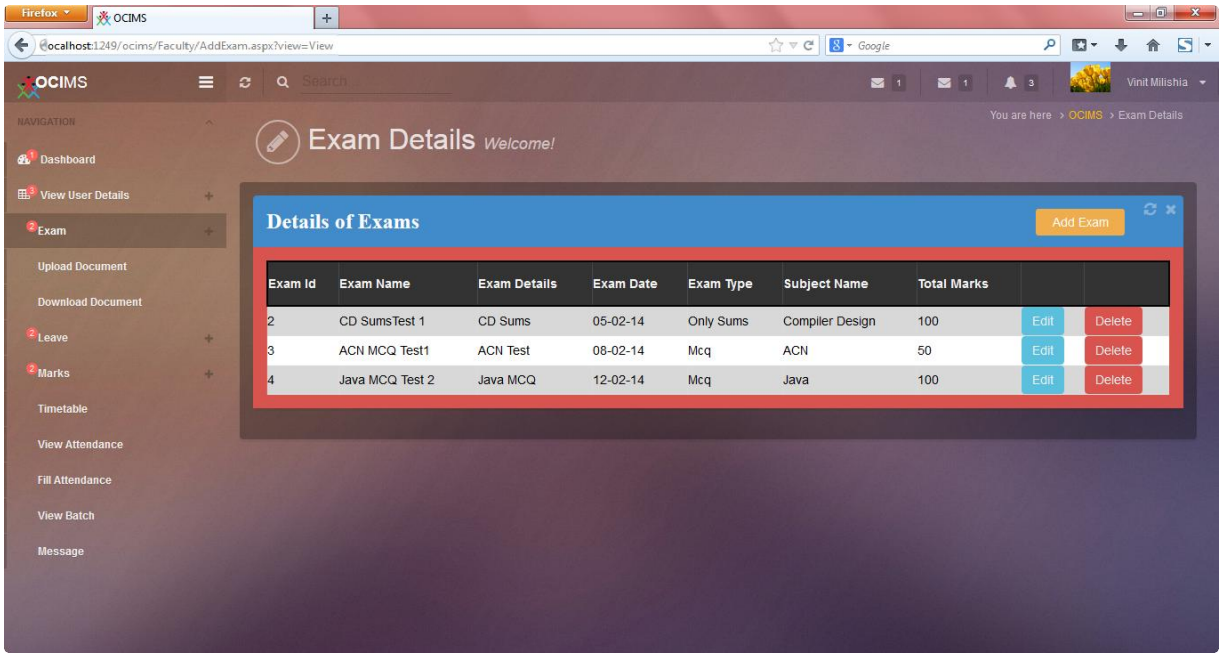

Figure 8.24 Screenshot showing details of Examination taken

- The above Screenshot shows details of exams taken by faculties.
- Faculties (respective user) can edit as well as delete examination details.
- Faculties can also add new examination details directly from this page

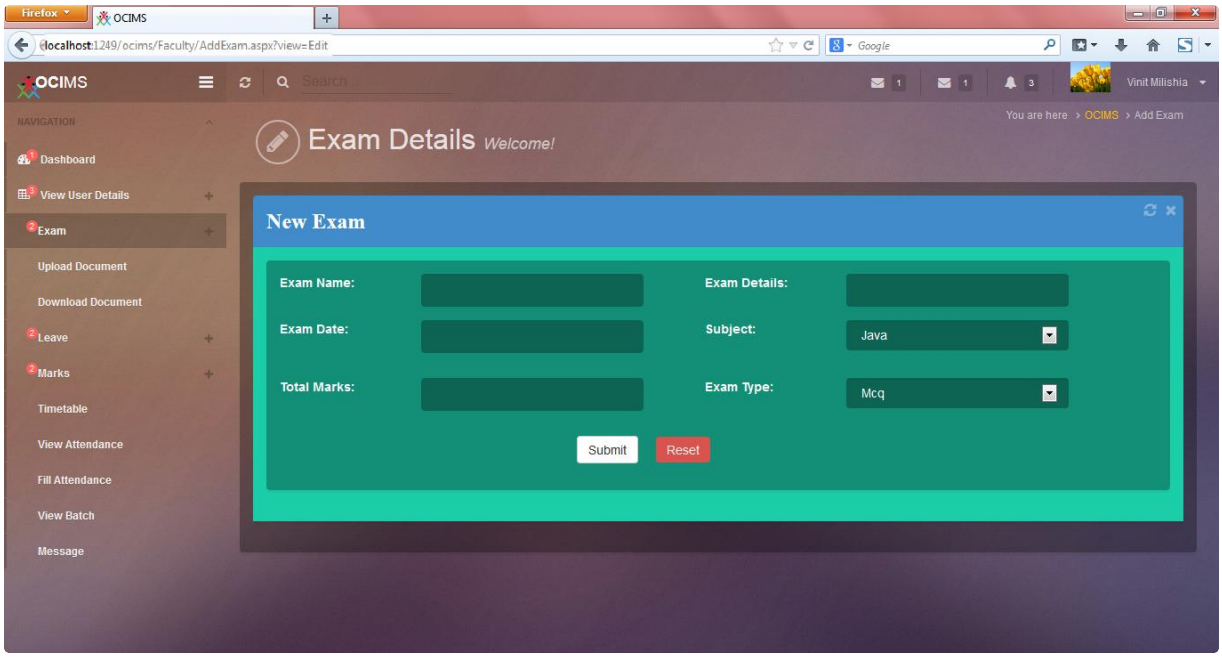

Figure 8.25 Screenshot showing page for adding new exam details

- The above Screenshot shows page for adding examination details.
- Reset button is given which would delete all details entered by user.
- Submit button would submit the entered data successfully in database.

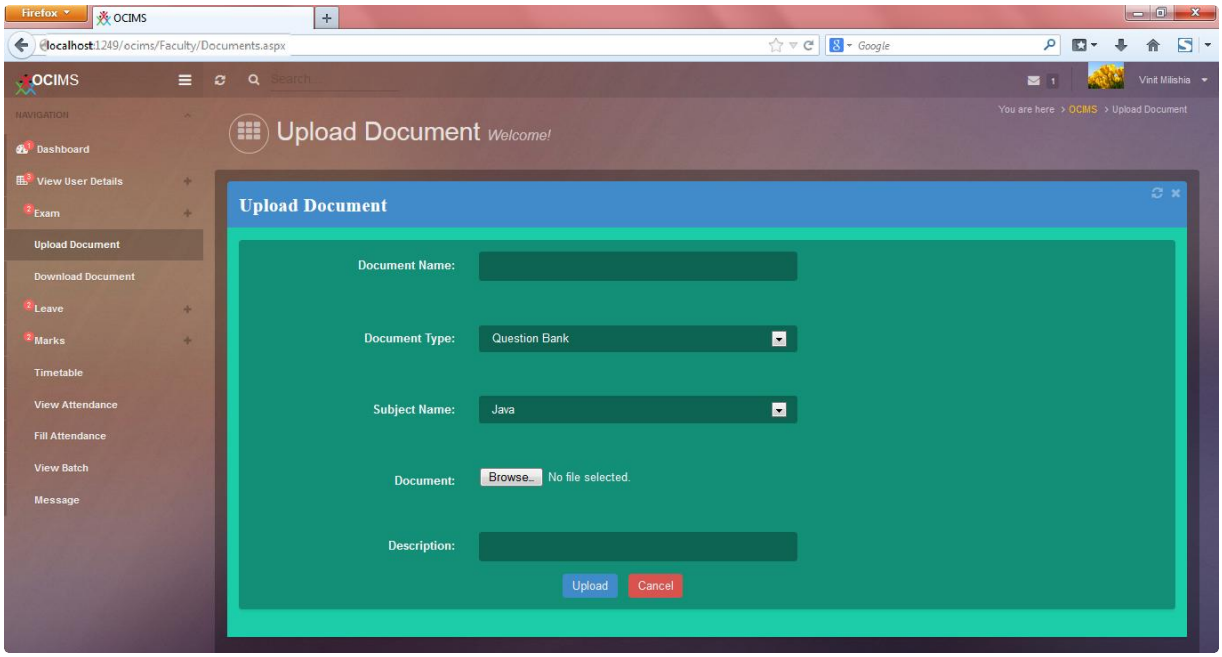

Figure 8.26 Screenshot showing form for uploading documents

- The above Screenshot shows form for uploading documents.
- Documents include various study materials, notices, exam papers & their solutions.
- This documents are not directly uploaded they need to be authenticated by admin.

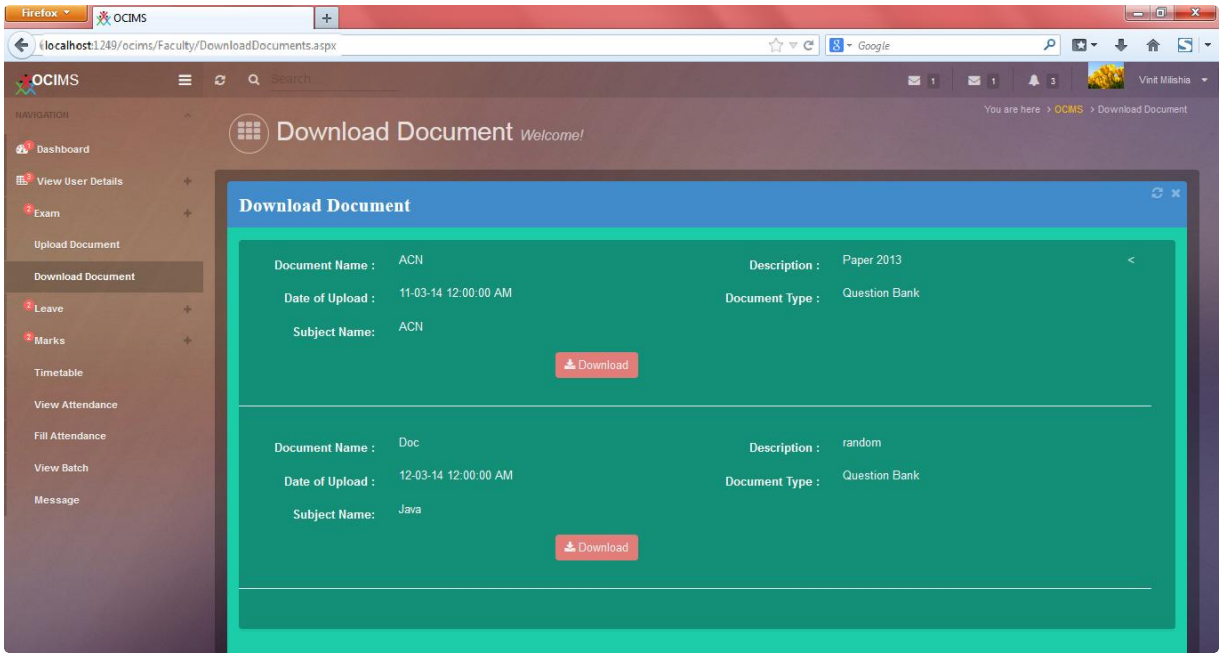

Figure 8.27 Screenshot showing page for downloading documents

- The above Screenshot shows form for downloading various documents.
- By clicking on Download button, document would be downloaded in uploaded format.

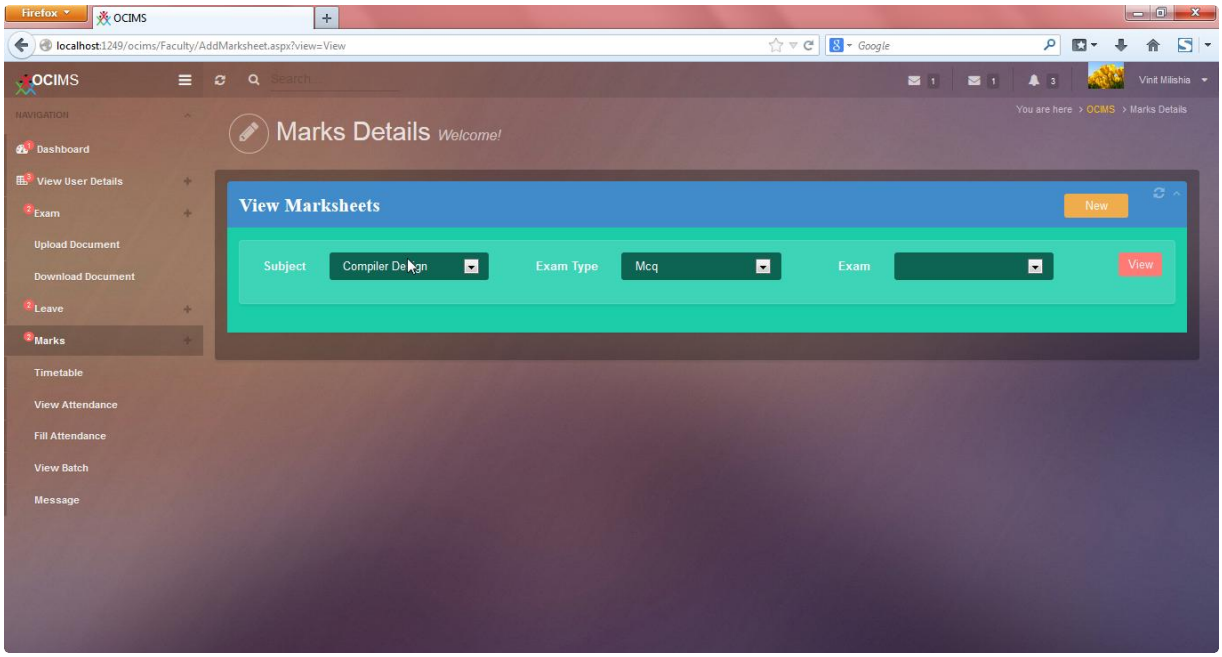

Figure 8.28 Screenshot showing marks details of students

- The above screenshot shows marks details of students.
- Admin have to select subject first than type of exam and exam to view the marks details of students.

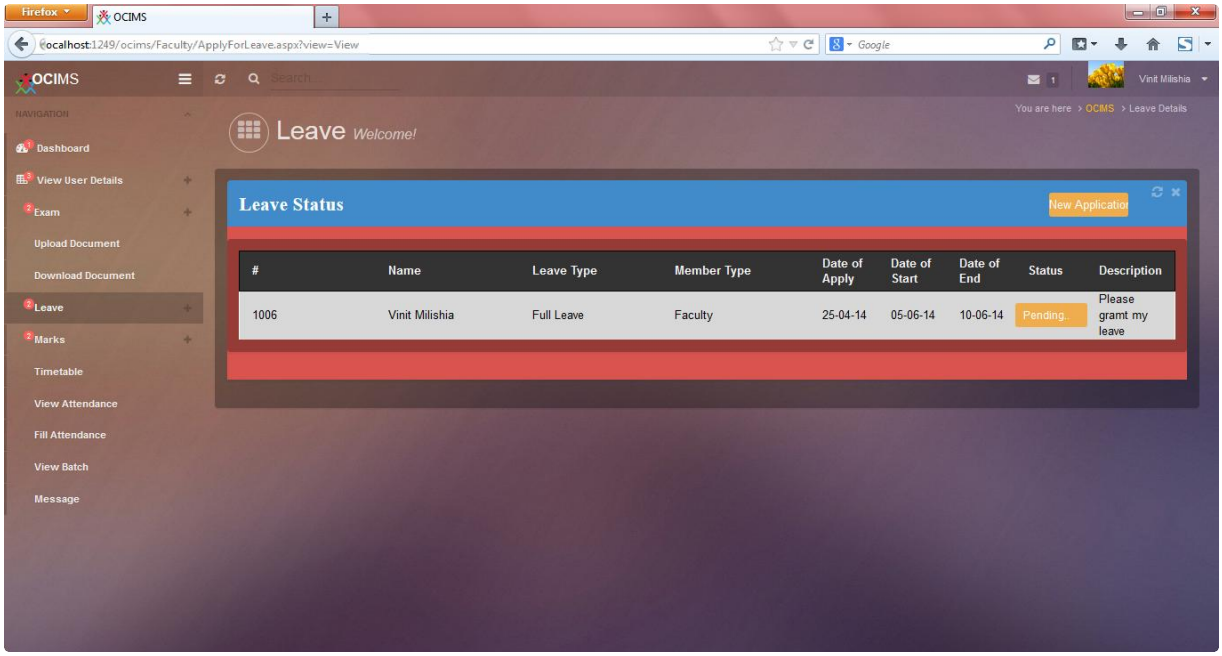

Figure 8.29 Screenshot showing leave status

- The above Screenshot shows details and status of applied leave by faculty.
- New Application button is given for adding or applying for new leave.

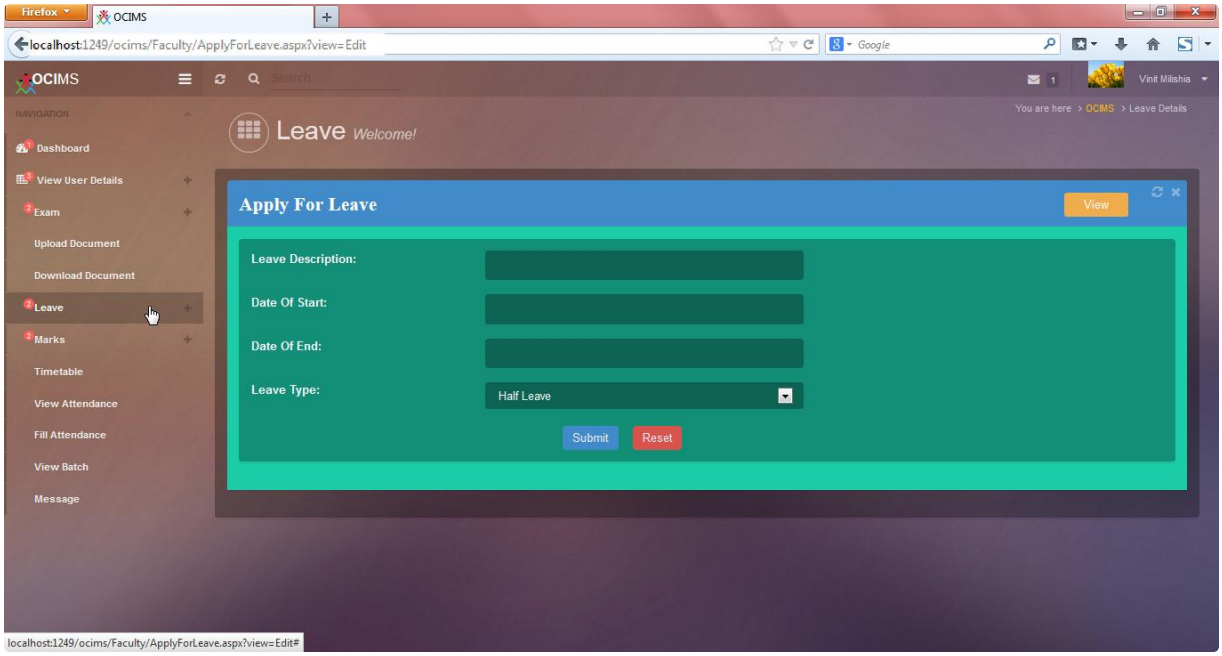

Figure 8.30 Screenshot showing form for applying for leave

- The above Screenshot shows form which is used by faculty for applying for new leave.
- Submit button is used to submit the application.
- Reset button clear the data written.
- Leave type dropdown list describes the type of leave faculty wants to take.
- View button is used to view the applied leave.

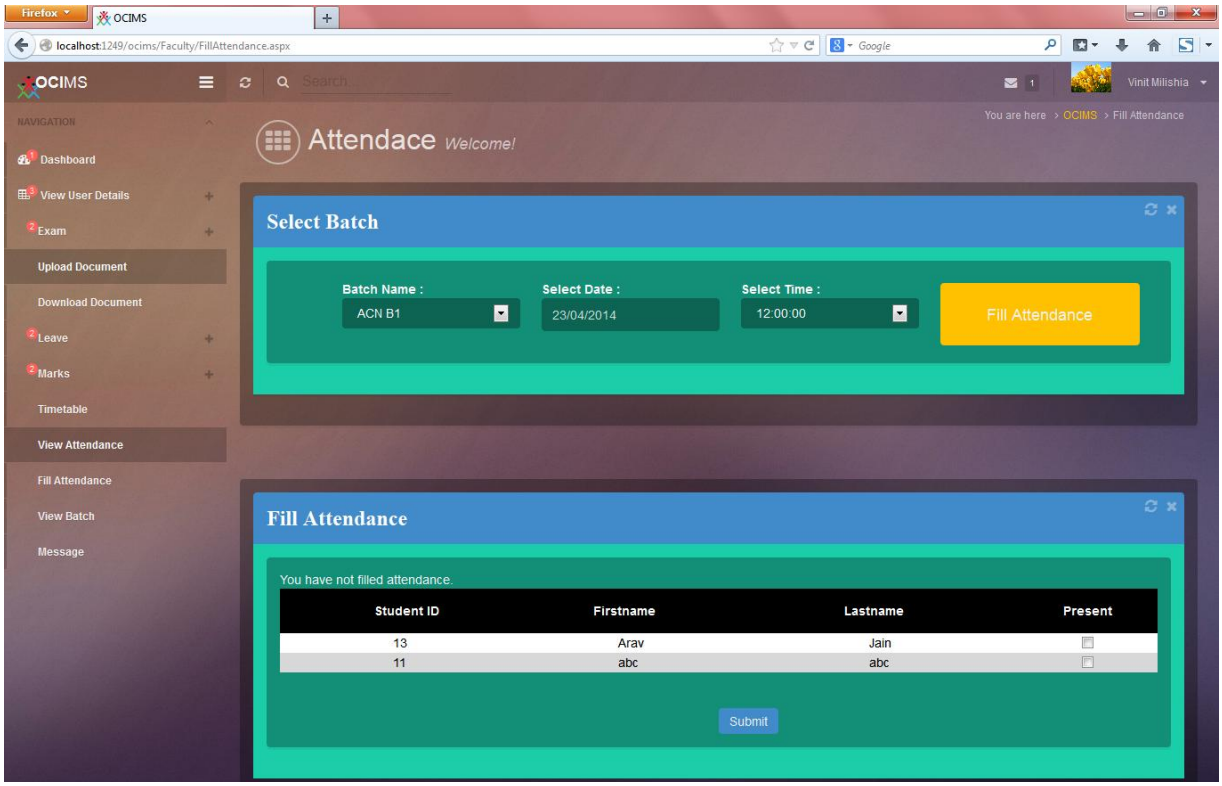

Figure 8.31 Screenshot showing fill attendance page

- The above Screenshot shows attendance that is filled and also with details of student's batch.
- Faculty can also fill attendance by using Fill Attendance button.
- If attendance is already filled than it will display message that attendance is already filled.

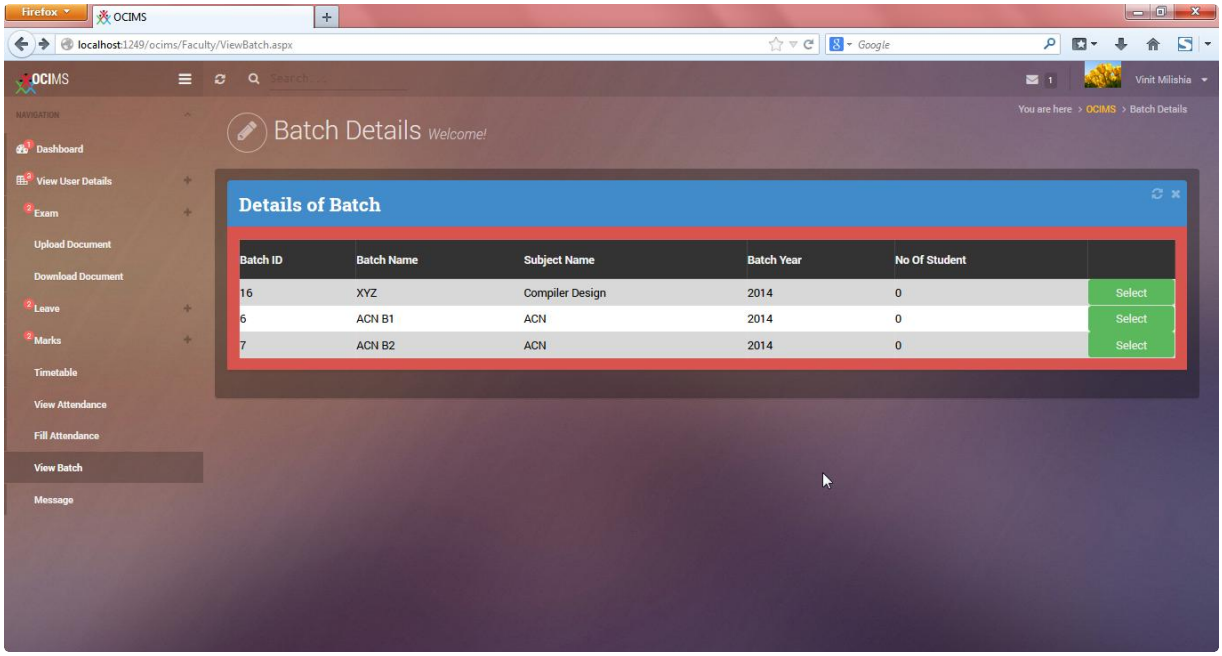

Figure 8.32 Screenshot showing list of batches taken by faculty

- The above Screenshot shows the batches taken by Respective faculty (user).
- Select button gives details of students in that batch.

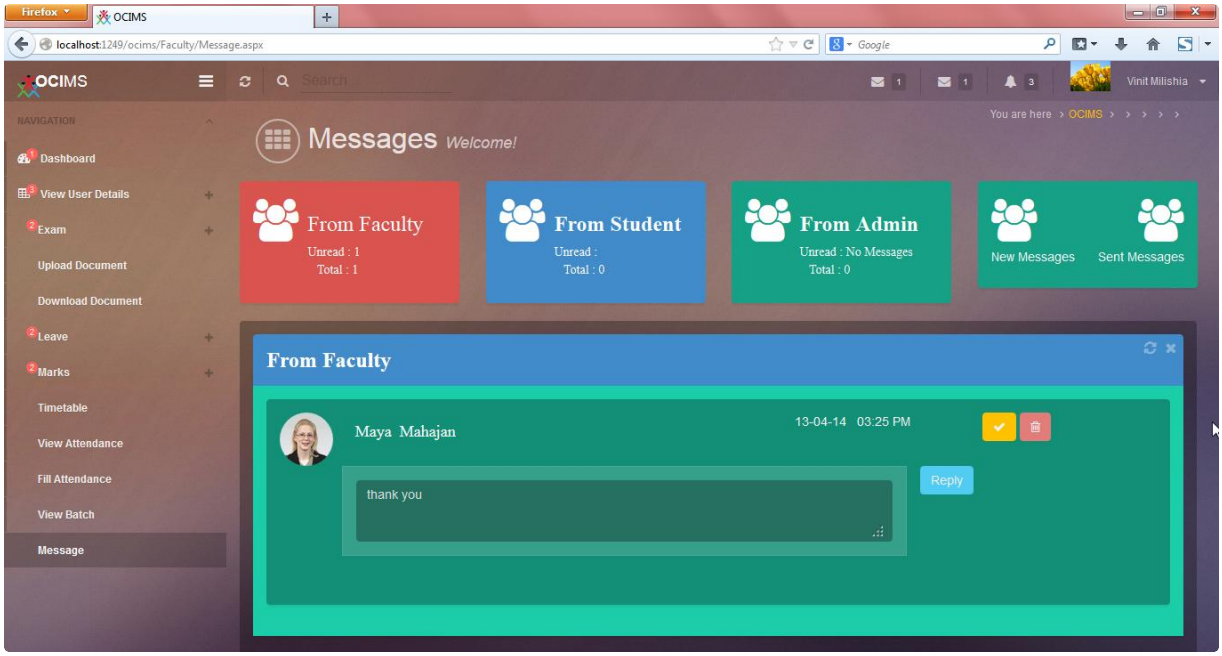

Figure 8.33 Screenshot showing messages from faculty

- The above Screenshot shows inbox of the respective faculty.
- Messages are received from students, other faculties and admin.
- Here reply to individual message is done easily as with each incoming message, reply button is given.

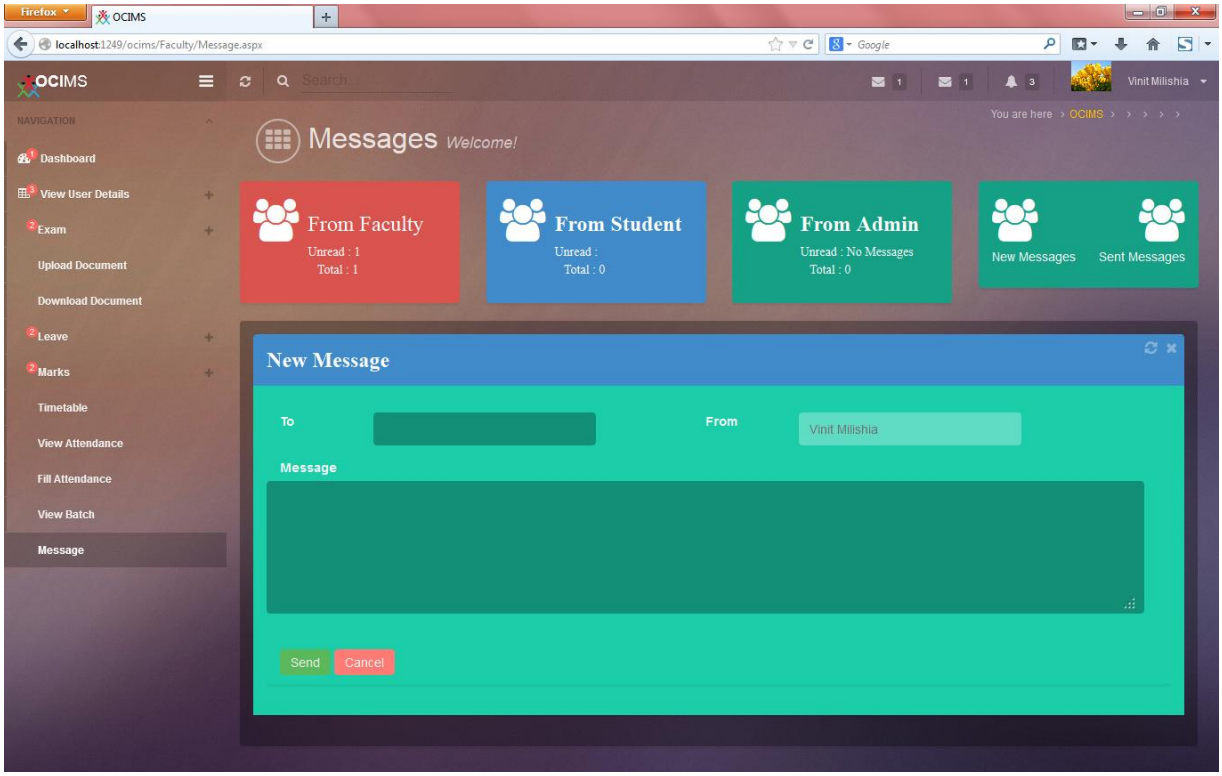

Figure 8.34 Screenshot showing form for composing message

- The above Screenshot shows form for composing message.
- Faculty can send messages to students, admin and other faculties using this form.

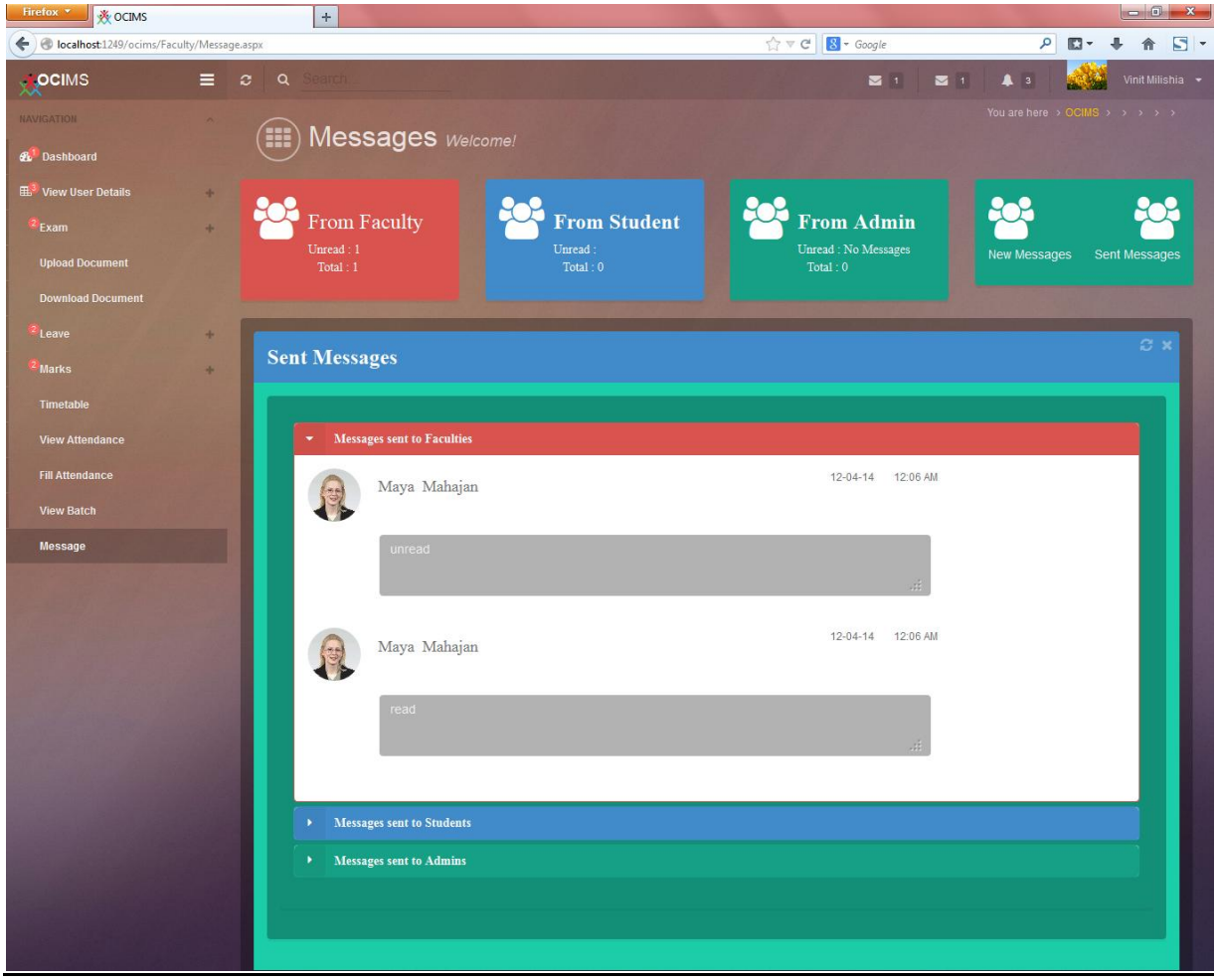

Figure 8.35 Screenshot showing sent messages

- The above Screenshot shows form which displays sent messages.
- On clicking red bar, admin can view messages sent to faculties.
- On clicking blue bar, admin can view messages sent to students.
- On clicking green bar, admin can view messages sent to admins.

8.3 Student Side

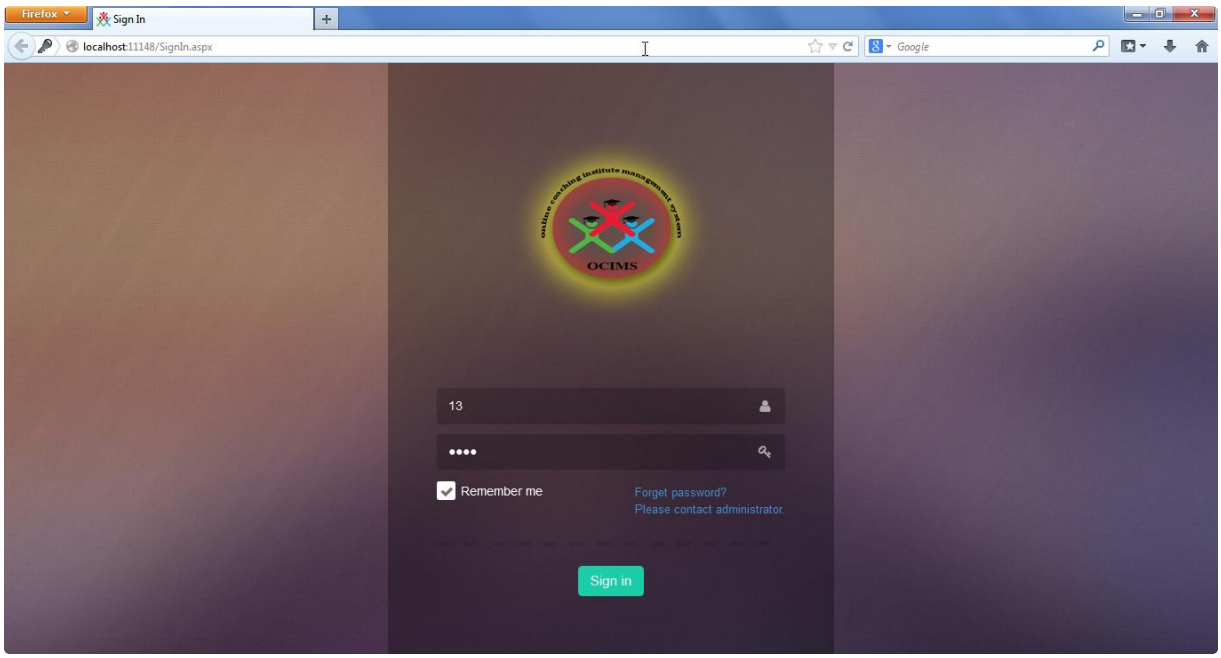

Figure 8.36 Screenshot showing login page

- The above Screenshot shows login page.
- If Remember me checkbox is clicked, login name and password would be remembered by the system.

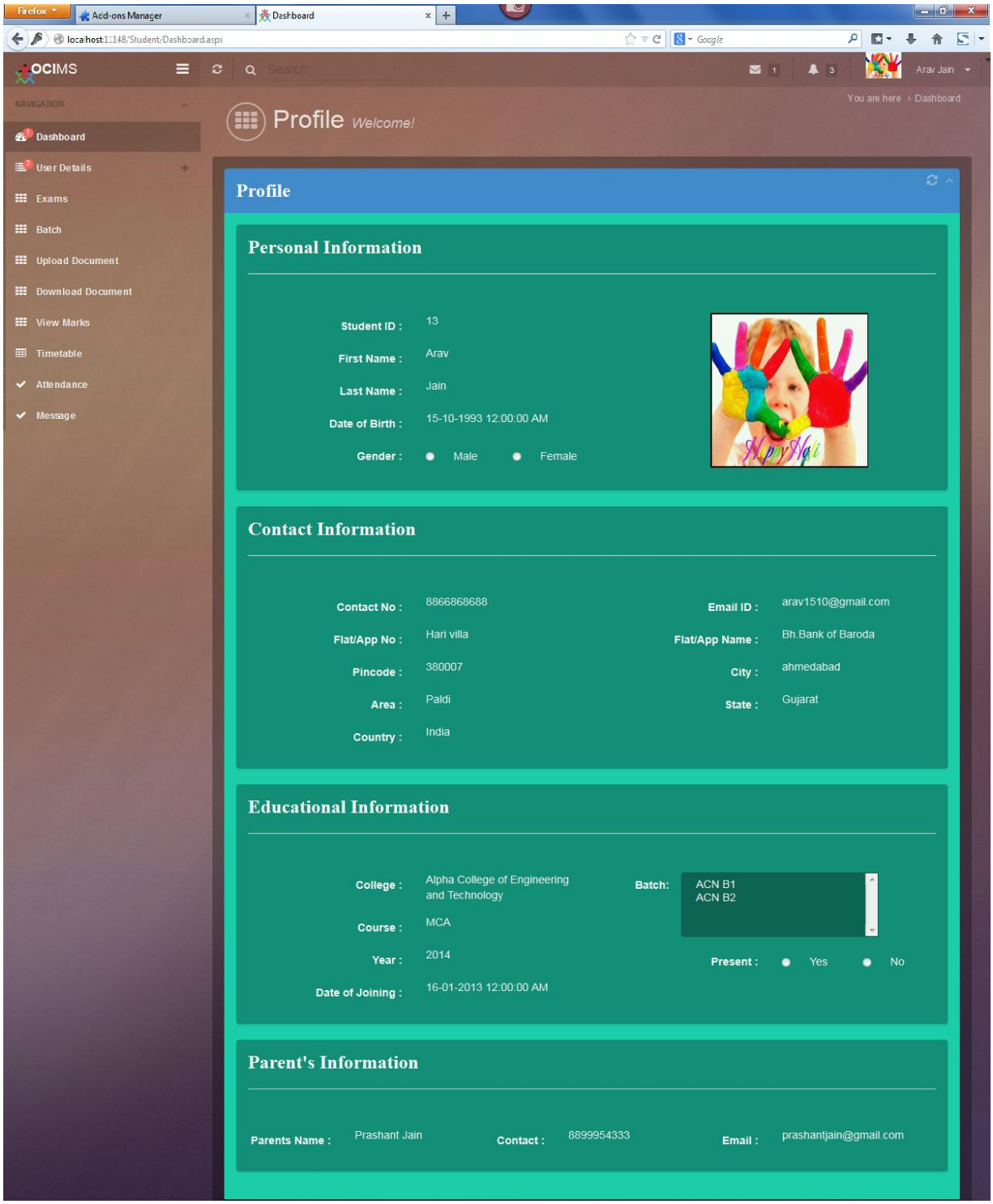

Figure 8.37 Screenshot showing profile of user

- The above Screenshot shows profile of logged in student.

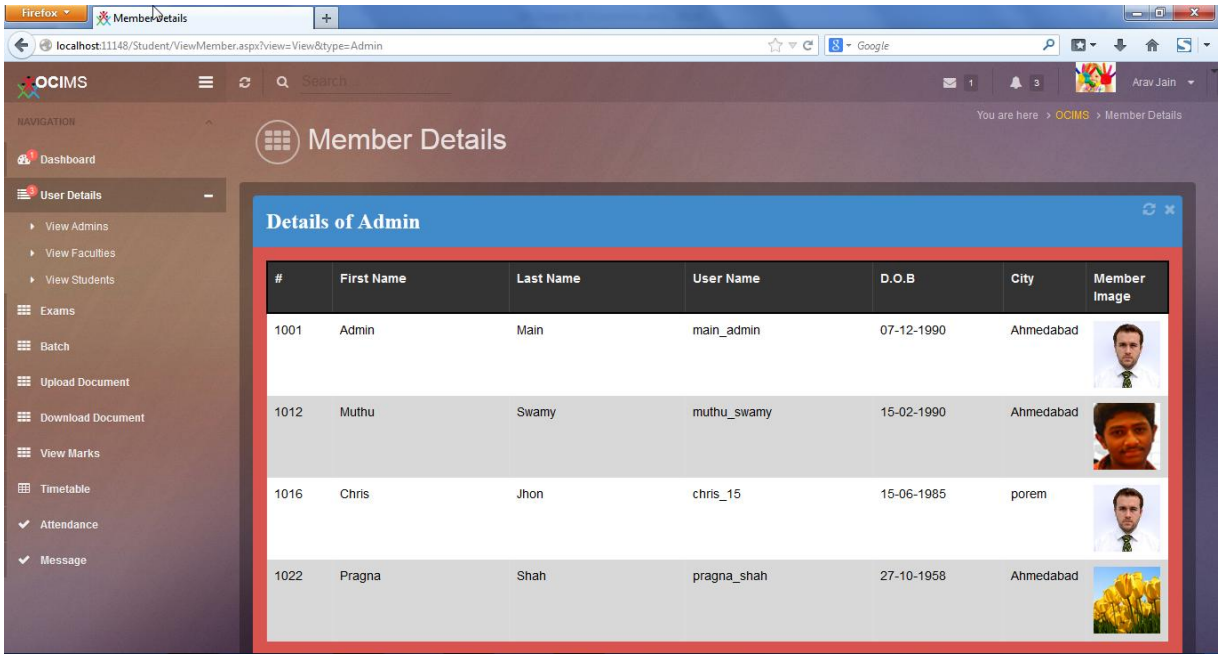

Figure 8.38 Screenshot showing details of Admin

- *The above Screenshot shows details of Admin.*

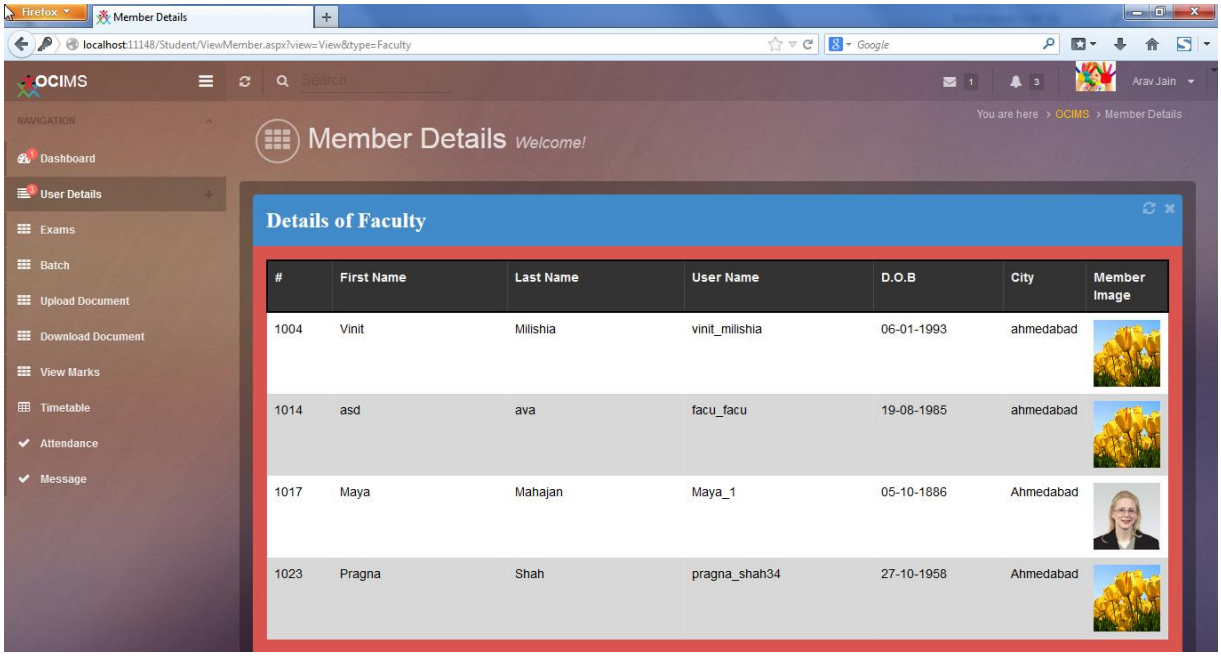

Figure 8.39 Screenshot showing details of faculty

- *The above Screenshot shows details of faculties.*

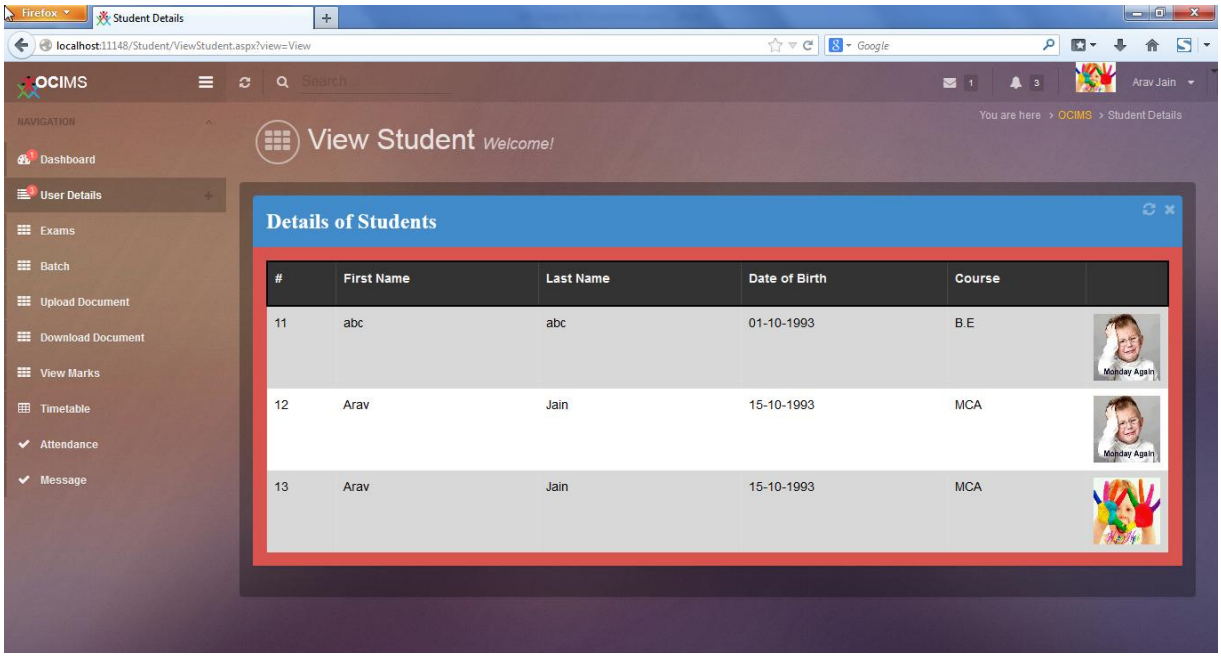

Figure 8.40 Screenshot showing details of students

- *The above Screenshot shows details of students.*

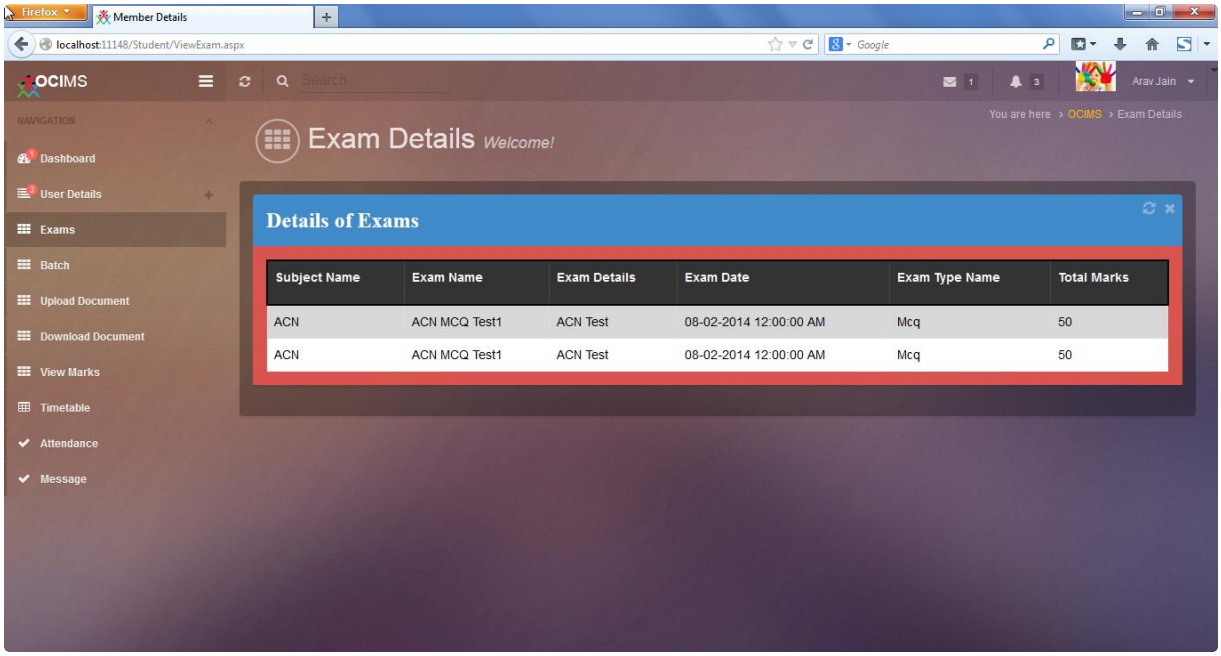

Figure 8.41 Screenshot showing details of exam given by student

- *The above Screenshot shows details of exams given by user (student).*
- *The list of exam corresponding to subjects of student is shown above.*

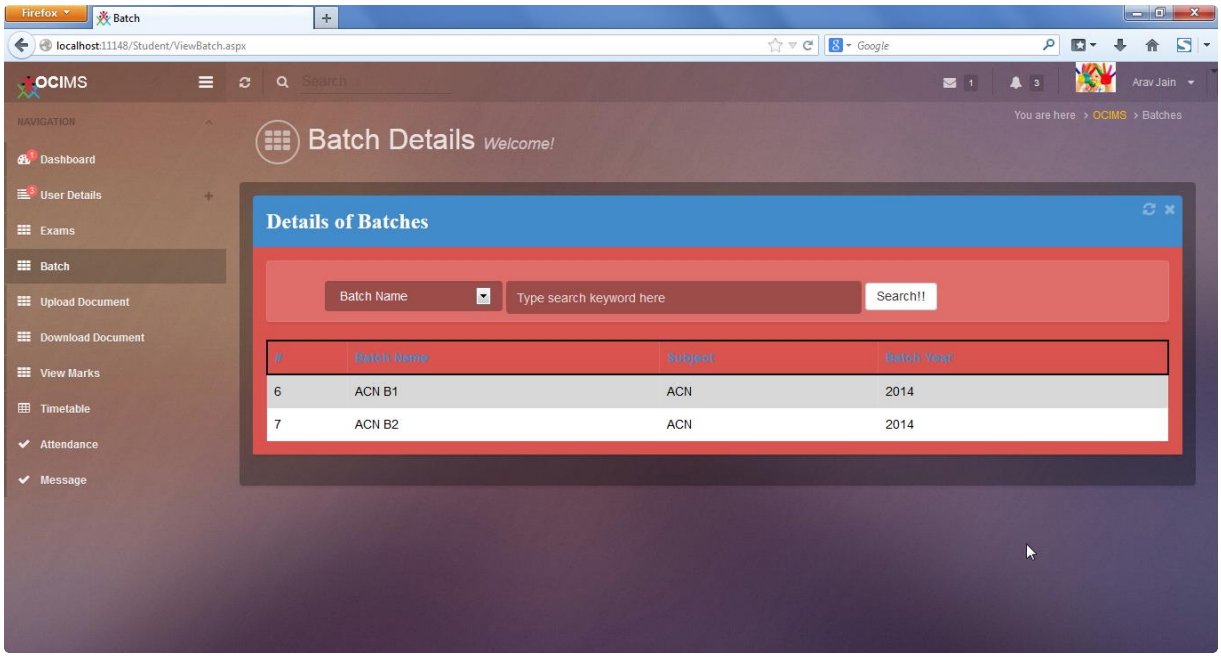

Figure 8.42 Screenshot showing details of batches

- *The above Screenshot shows details of batches in which student has enrolled.*

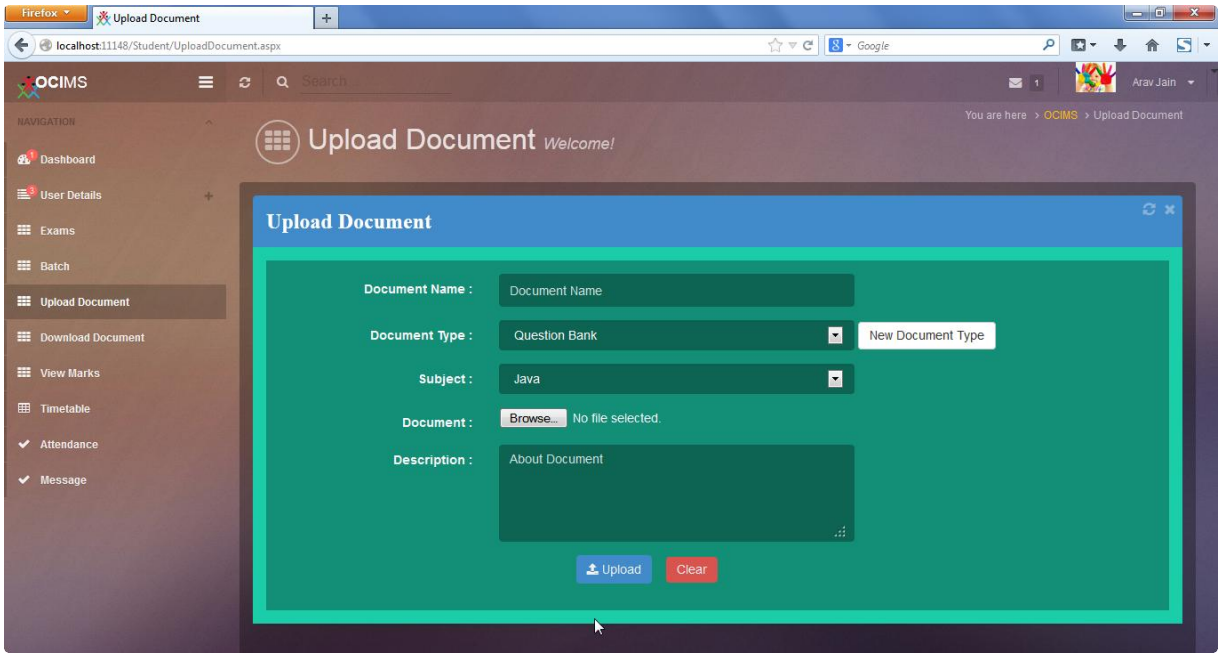

Figure 8.43 Screenshot showing form for uploading document

- *The above Screenshot shows form for uploading documents by students.*
- *Here student can upload important notes, papers which are useful to other students.*

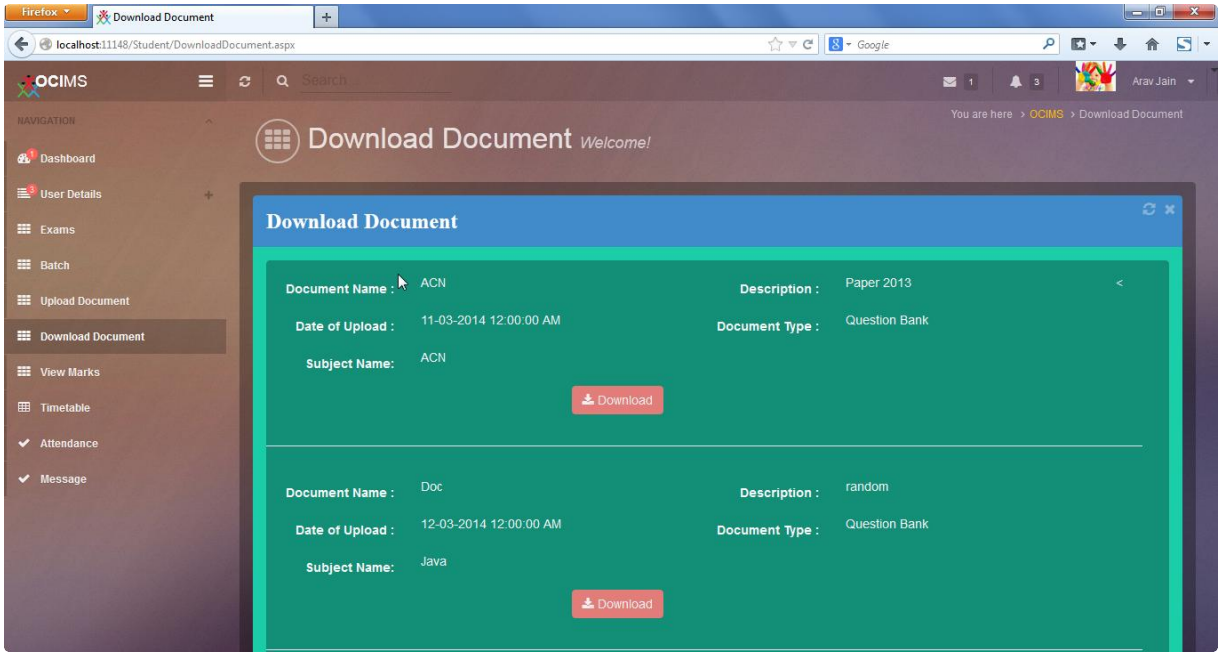

Figure 8.44 Screenshot showing page for downloading document

- *The above Screenshot shows form for downloading various documents uploaded by faculties and students as well.*
- *On clicking download button the document will be downloaded.*
- *The document displayed here are the documents which are approved by admin.*

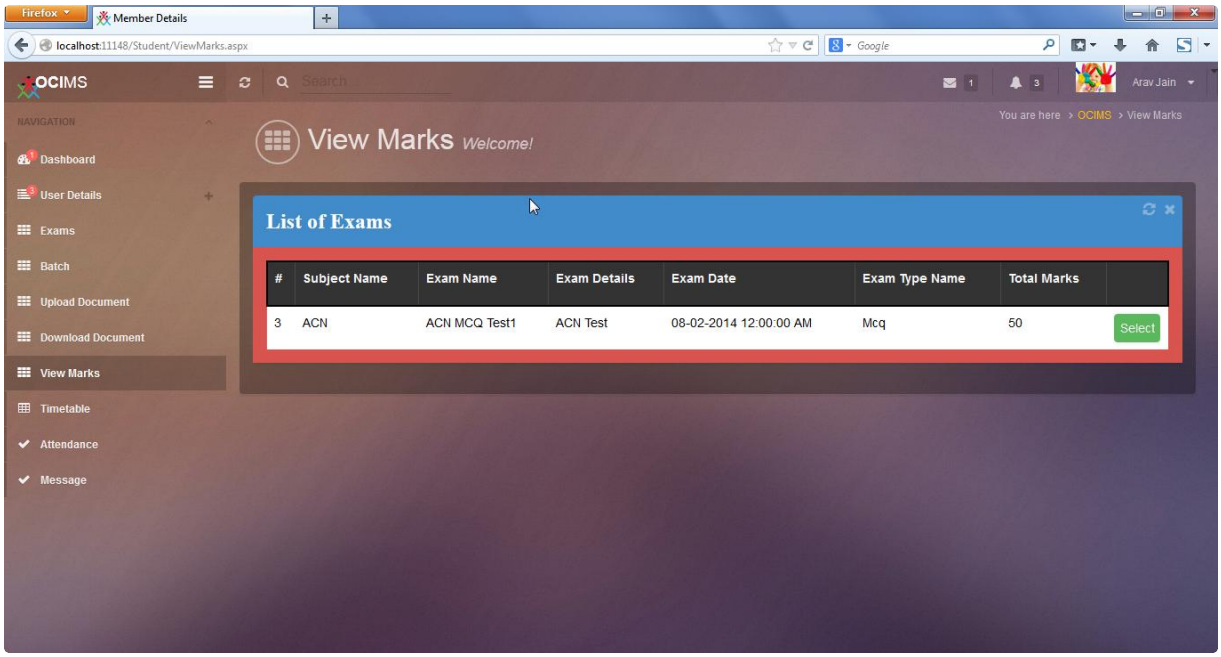

Figure 8.45 Screenshot showing marks of user

- *The above Screenshot shows marks details of respective user that is student.*

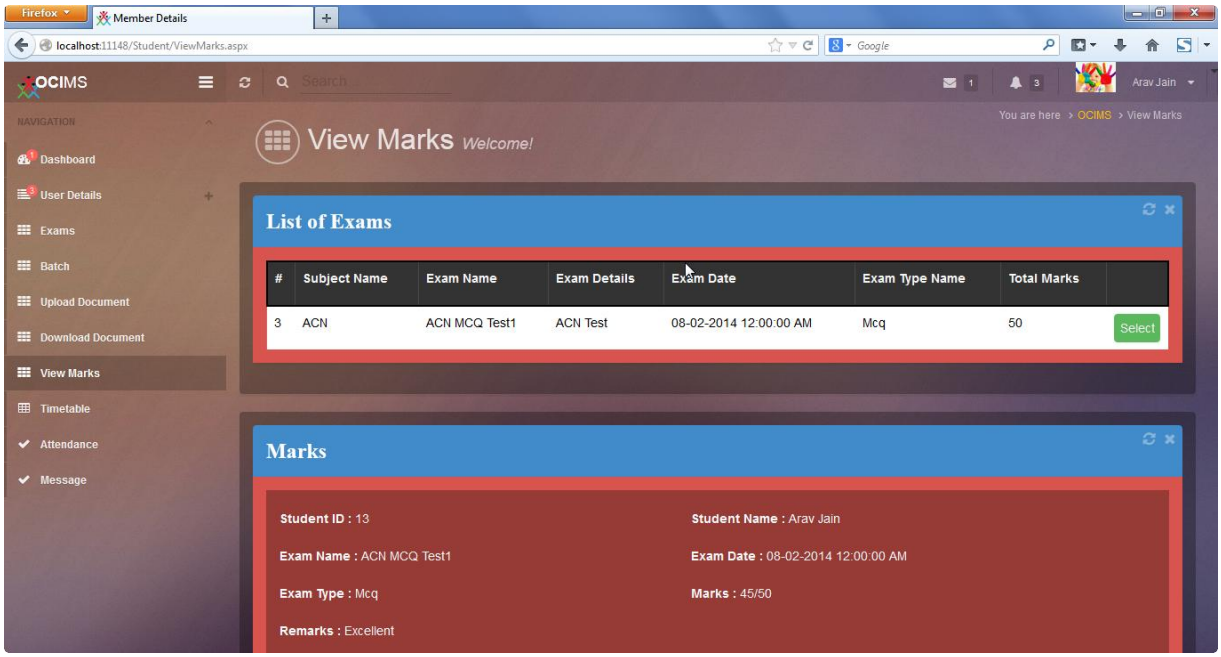

Figure 8.46 Screenshot showing details of exams and marks

- *The above Screenshot shows list of exams and by clicking on Select button it displays detailed description of marks below.*

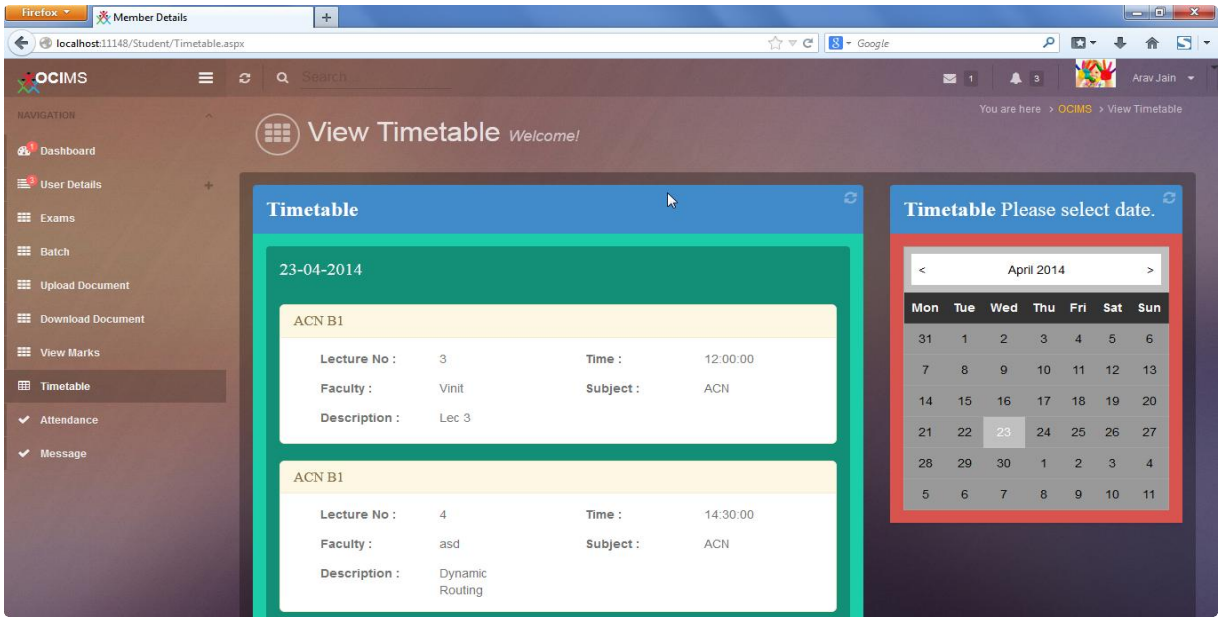

Figure 8.47 Screenshot showing timetable

- In the above Screenshot by selecting date, system displays the batches of user on that day.
- When student selects date, list of batches on that day will be displayed.

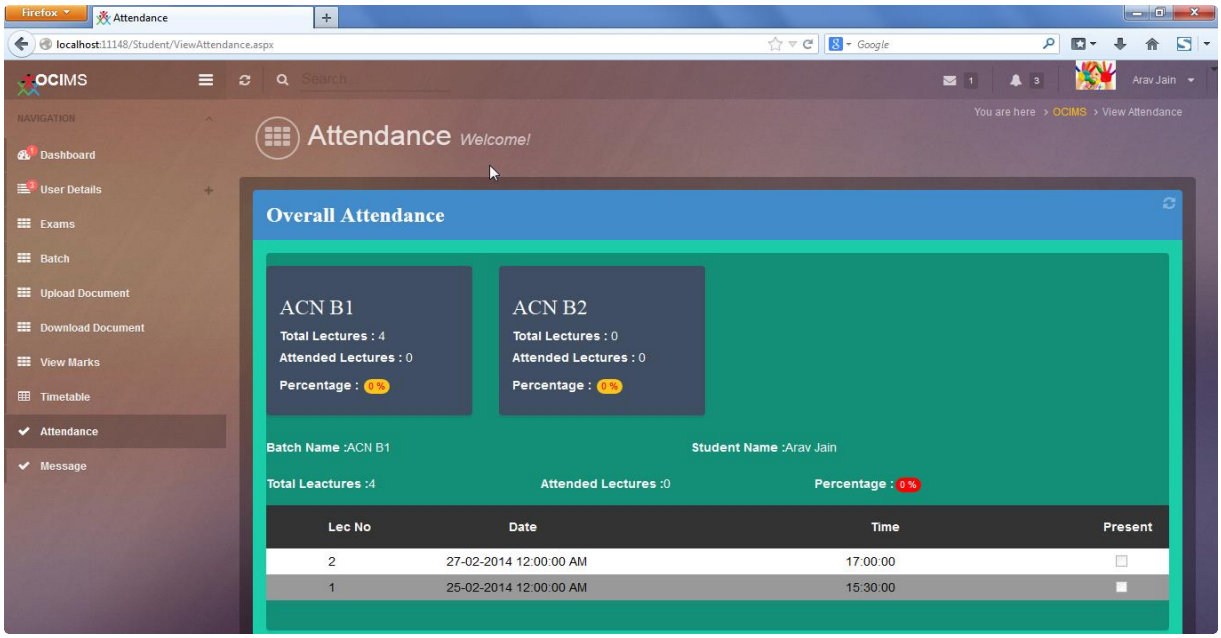

Figure 8.48 Screenshot showing overall attendance of student

- It displays details of current total batches of student.
- The upper boxes displays overview of attendance of particular batch.
- By clicking on the displayed batch tile detailed description of attendance of user is displayed.

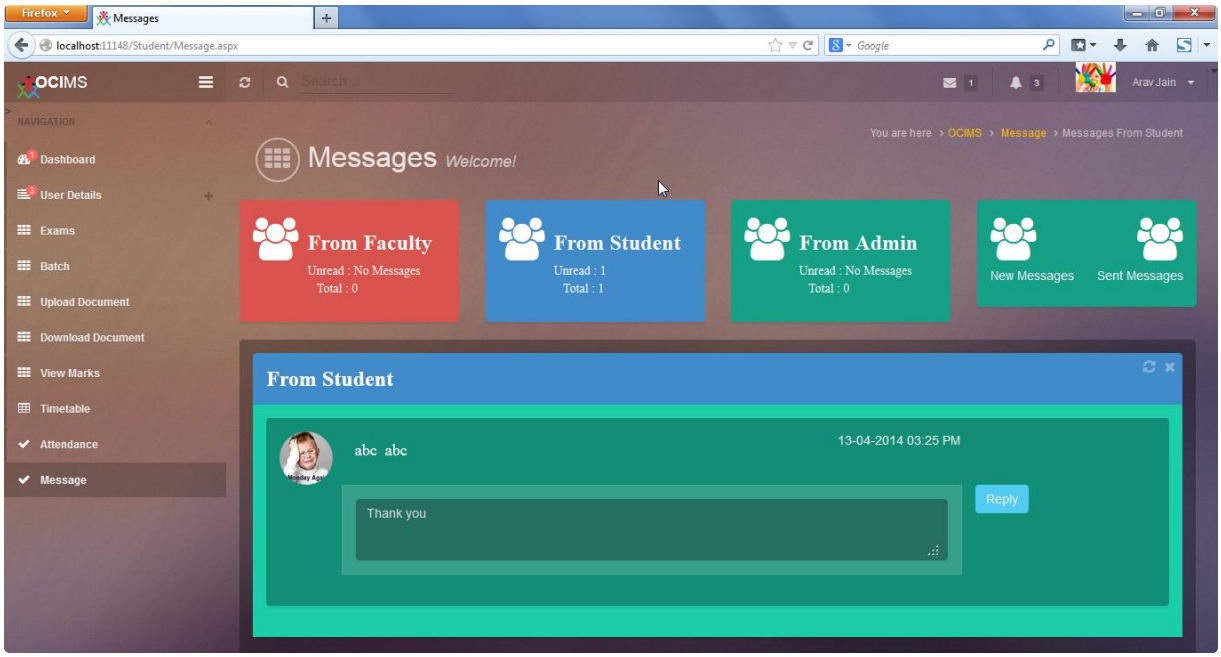

Figure 8.49 Screenshot showing messages from student

- The above Screenshot shows inbox of the respective student.
- Messages are received from students, other faculties and admin.
- Here reply to individual message is done easily as with each incoming message, reply button is given.

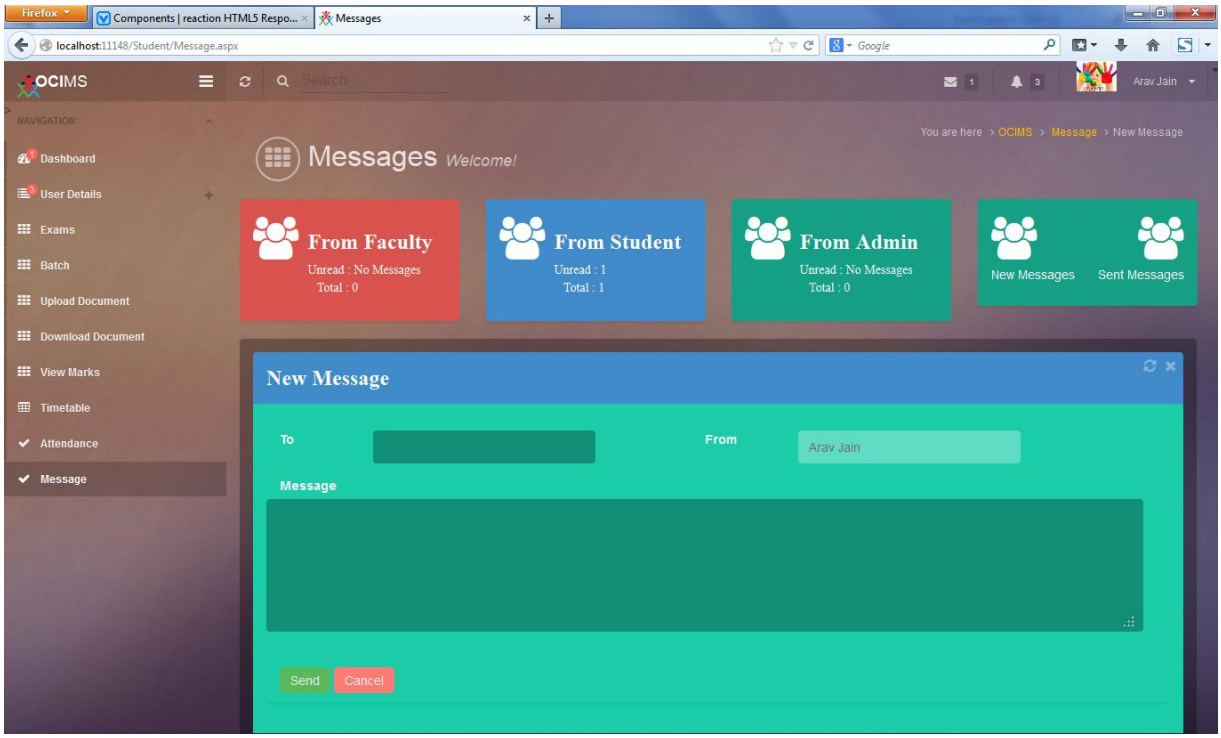

Figure 8.50 Screenshot showing form for composing message

- The above Screenshot shows form for composing message.
- Student can send messages to students, admin and faculties using this form.

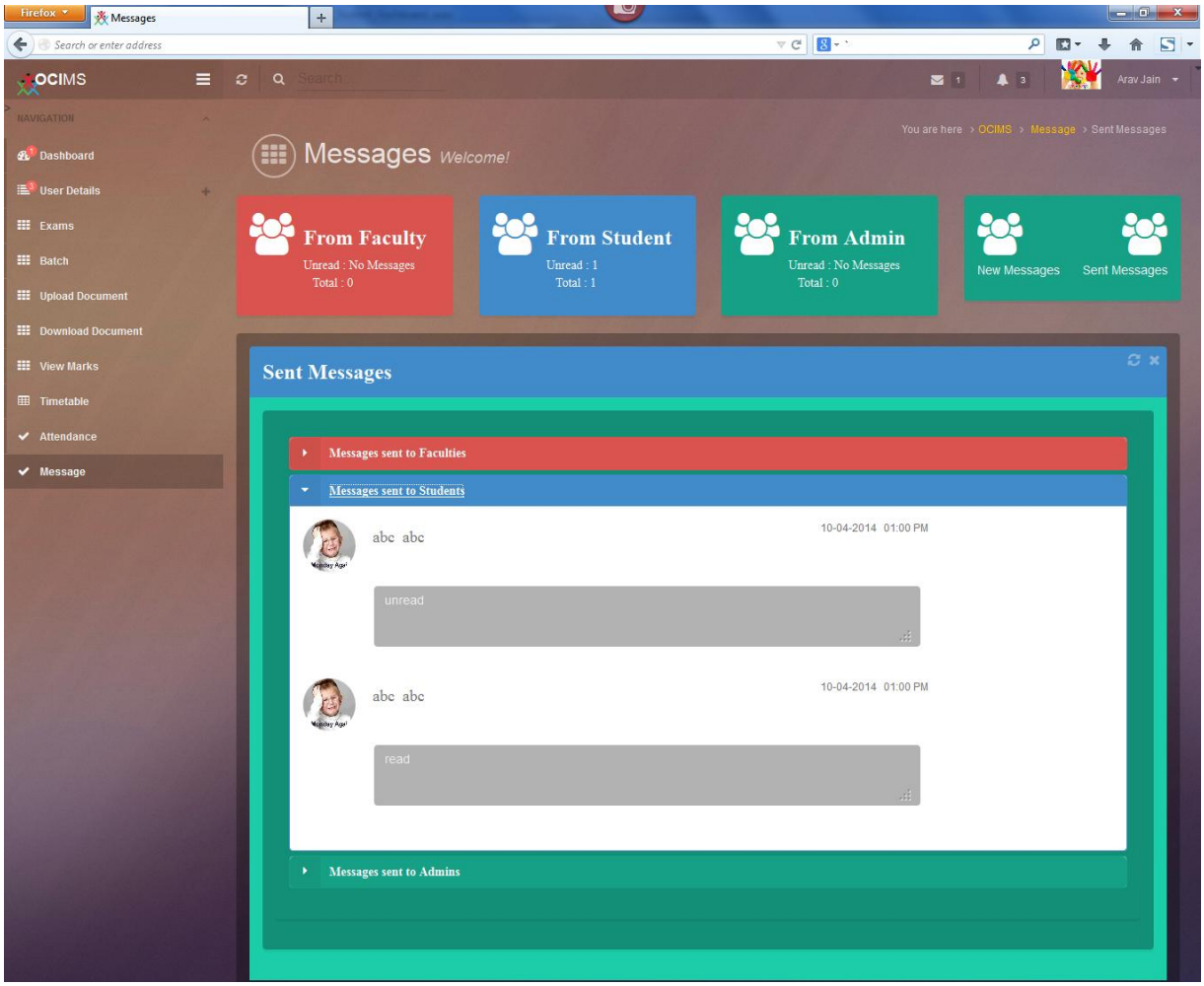

Figure 8.51 Screenshot showing sent messages

- The above Screenshot shows form which displays sent messages.
- On clicking red bar, admin can view messages sent to faculties.
- On clicking blue bar, admin can view messages sent to students.
- On clicking green bar, admin can view messages sent to admins.

Chapter: 9
Conclusion & Future Enhancement

9.1 Conclusion

- OCIMS will be helpful to reduce paperwork and file system. Data accuracy and reliability would be maintained.
- This provide easy way of sharing data and solving student's queries.
- This will make easy to keep records and tracks of students.
- This system also leave management system for keeping track of leaves of members.

9.2 Future Enhancement

- Examination can be taken online.
- Library management can be included in this system.
- Video lectures could be arranged.
- Online Payroll system could be implemented

Chapter: 10

References

❖ **Books**

- Asp.net Professional (Wrox Publication)

  By: Wrox Publication

- JavaScript In 21 Days
- JavaScript Bible

  By: Danny Goodman

- Software Engineering – A Practitioner's Approach

  By: Roger S. Pressman

- Software Engineering

  By: Ian Somerville

- C#.net Professional (Wrox Publication)

  By: Wrox Publication

❖ **Websites/Softwares**

- Coaching Institute Management Software

  By: Techior Solutions Pvt. Ltd.

- www.fedena.com
- www.classpro.com