

B.Sc. ENGG. REPORT

A Report on Computer Based Software University Management
system

Submitted to

Department of Computer Science & Engineering

(In partial fulfillment of the requirements for the degree of
Bachelor of Science in Computer Science & Engineering)



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Abstract

Working with big data faces different issues but the most important issues are the search,edit,delete,save,crate processing time or power. We have tried to solve these problems with our project. We have distributed the database in different blocks and used hard disk storage of the system.UNIVERSITY MANAGEMENT SYSTEM deals with the maintenance of University data, records, instructions, and students information within the University. UMS is an automation system, which is used to store the information, students record, and information of courses. Starting from registration of a new student in the college, it maintains all the details regarding the attendance and marks of the student.The project deals with the retrieval of information through an offline based campus wide portal. It collects related information from all the departments of an organization and maintains files, which are used to generate reports in various forms to measure individual and overall performance of the students very fast and bug free. *University Management system.*

Declaration

We hereby declare that the work presented in the project report entitled University Management System submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering of Bangladesh University of Business and Technology (BUBT) is our own work.

The matter embodied in this project report has not been submitted elsewhere by anybody for the award of any degree.

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Chapter 1

Introduction

1.1 Introduction

The university management system is developed to override the problems prevailing in the practicing manual system, this software is supported to eliminate and in some cases reduce the hardships faced by this existing system. Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus by this all it proves it is user-friendly. University Management System, as described above, can lead to error free, secure, reliable and fast management system. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. Every organization/university, whether big or small, has challenges to overcome and managing the information of students, faculties, Registrations, courses at the management level.

1.2 The Concept of University Management System

A university management system is a software solution that has developed focused on the challenges universities face with the capability to restructure your institute for good. Comes with several modules dedicated to helping you tackle the problems and challenges that you are

facing the system can deliver your institute many benefits. The main objective of University management system is to automate all functionalities of a University or university. Using this system you can manage all University management work like admission, time table management and result declaration. Using this University management system you can view or update data and information about students and staff easily. This system helps in managing the activity like student admission, student registration, notice. Admin can also retrieve information of employee student.

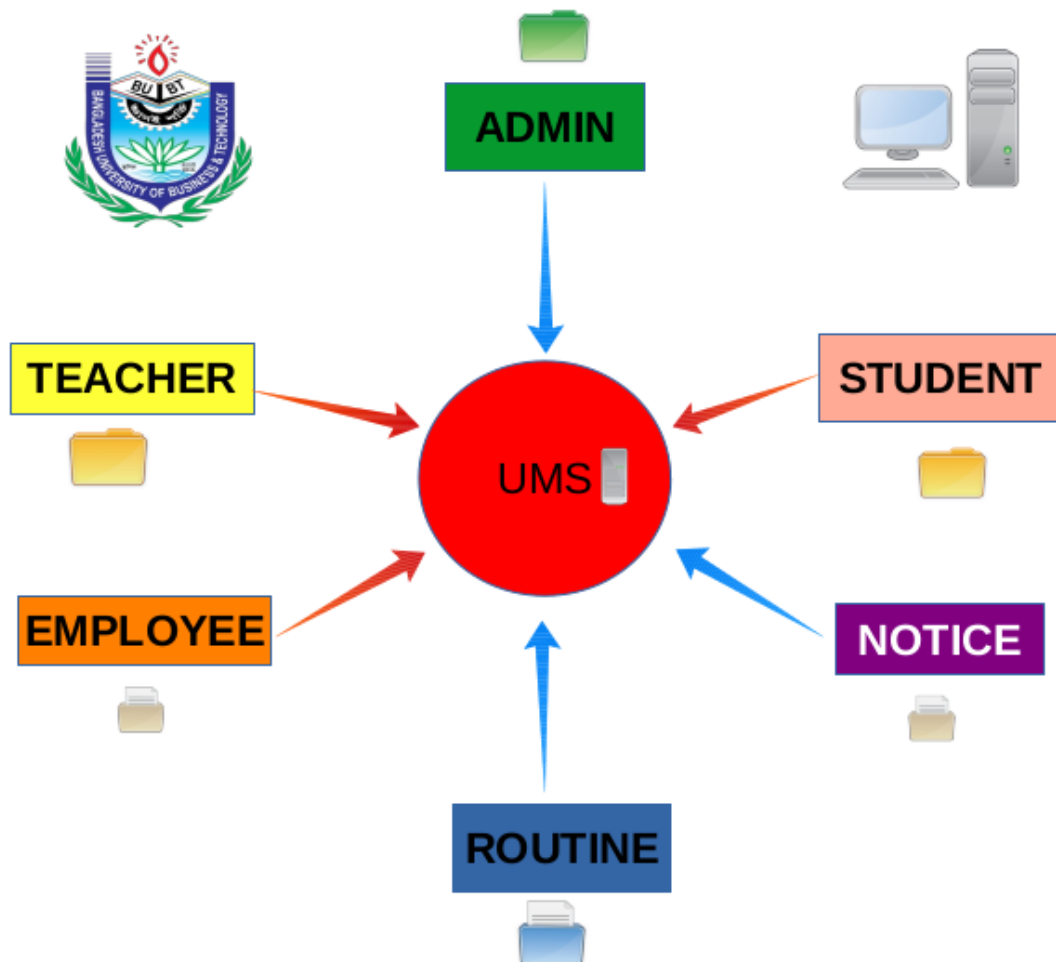


Figure 1.1: Basic Diagram of UMS Process

The University MANAGEMENT SYSTEM can be used to store student information like personal information and student result etc. admin can create report regarding any student any time using this system. Using this system you can register new student and their course details. You can update students result and can check result details anytime. You can create exam result and submit in this system. Student can check their result online by logging to the system. You can also add new employee in the system and can check details of the employee easily. Student can also check course detail from this system.

Using this system you can manage all information of all aspects of a University, its students, faculties, Departments, marks and other curricular activities. University management system provides the easiest way to manage all functionalities of a University. This system facilitates University to maintain the functionality related to University employees and their students.

University Management System can store and manage all data of the various departments of a University like Administration, Staff details etc. using this system user can retrieve any information related to student, teacher and fees. Using this system teacher can check student attendance anytime. This system also help teacher to announce the result. University administration can also manage University work easily. Admin can check everyone details of teacher any time. They can also create time table of classes from this system.

1.2.1 Working System of University Management System

A University management system works on input data. First Admin of university Add student,employee,teacher create a profile every profile has a username and password . Student,Employee,Teacher login with his/her id.When admin add a new Teacher/Employee/Student application create a folder for Teacher/Employee/Student.

After creating a new account program generate a default password user can change the password and set password what she/he likes.Admin can also delete the account of any user.Admin is in the main power.Student and Teacher have a nice communication system.If any student or Teacher have any query to Teacher or student can message each other.Student can select their courses.Teacher can update student result.

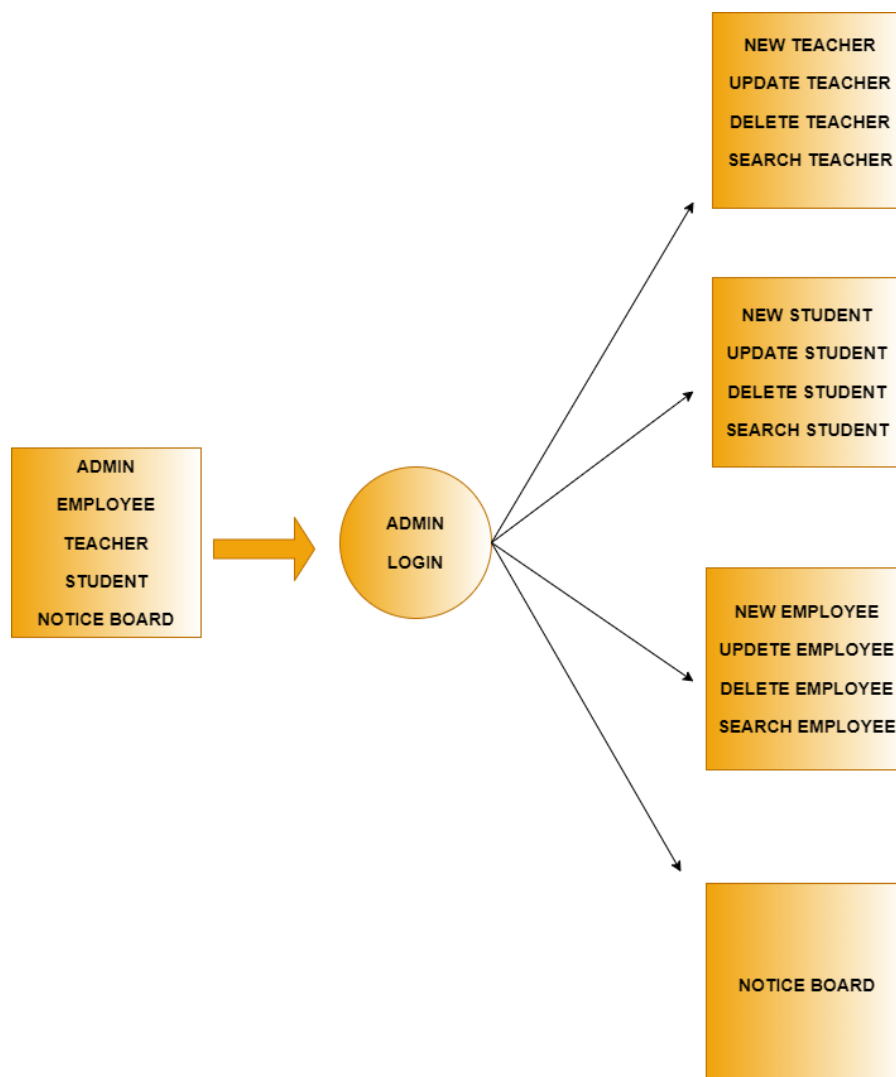


Figure 1.2: Working procedure of UMS

1.2.2 Why University Management System

Man is a social animal and has endless wants and needs. The days of the primitive man are gone. Gone too are the days when survival meant just food, clothing and shelter. Technology has changed the ways we live. The invention of currency has ushered in a new breed of humans. Most business transactions are clinched by fiscal exchanges.

To sustain them, people put in hours of work. The average adult spends approximately one-third of his or her life working. Business is booming. A considerable portion of the expenditure of the business is on the compensation given to its employees. Therefore it becomes necessary

for an organization to maintain perfect and accurate record. For this we need a computerized university management system.

Perfectness is the key to work. It is very important from the point of view of the organization as well as for the student that the record is maintained about the colleges and students error free. So, speedier and accurate maintenance of the university becomes a matter of importance. Automation does this to a large extent.

As we know that today is the world of computers and it has entered in the each and every phase of everyday life. Computer plays an important role in day-to-day work. Hence today is the day of computers.

The use of computers in the field of management of information is well known to us .The use of computers in the university management system provides following benefits over manual system.

- **Availability**

It gives us that information which was not provided by the manual system.

- **Timeliness**

Provides information (output) in less time.

- **Accuracy**

Using computer, we will get the information more accurate rather than the manually calculated and manual records information.

- **Completeness**

Computer never gives us incomplete information. We will always get the complete and full information using the computer.

- **Meaningful and action oriented**

Whatever the work we will provide the computer to do, computer works on only that particular work. It means computer always do a meaningful and action oriented work for the user.

A University Management System handles all information necessary for handling a universities student. The system must maintains files on individual student record, provide up to

date the information, show outputs on information related to the University.

The University management system processes data related with activities of students and university. So university management system is very important for a university. Needless to say, careful planning and suitable backup measures are absolutely necessary when automating these activities. Improve benefits over before talking the whole questions of automating the process. A good university management system will process input data faster and reduce clerical time.

1.2.3 Introduction of C Language

C is a procedural programming language. It was initially developed by Dennis Ritchie in the year 1972. It was mainly developed as a system programming language to write an operating system. C is a general-purpose, procedural computer programming language supporting structured programming, lexical variable scope, and recursion, with a static type system. By design, C provides constructs that map efficiently to typical machine instructions. It has found lasting use in applications previously coded in assembly language. Such applications include operating systems and various application software for computer architectures that range from supercomputers to PLCs and embedded systems.

A successor to the programming language B, C was originally developed at Bell Labs by Dennis Ritchie between 1972 and 1973 to construct utilities running on Unix. It was applied to re-implementing the kernel of the Unix operating system. During the 1980s, C gradually gained popularity. It has become one of the most widely used programming languages, with C compilers from various vendors available for the majority of existing computer architectures and operating systems. C has been standardized by the ANSI since 1989 (ANSI C) and by the International Organization for Standardization (ISO). C is an imperative procedural language. It was designed to be compiled to provide low-level access to memory and language constructs that map efficiently to machine instructions, all with minimal runtime support. Despite its low-level capabilities, the language was designed to encourage cross-platform programming. A standards-compliant C program written with portability in mind can be compiled for a wide variety of computer platforms and operating systems with few changes to its source code.

As of January 2021, C was ranked first in the TIOBE index, a measure of the popularity of programming languages, moving up from the no. 2 spot the previous year. The main features



Figure 1.3: C language logo

of C language include low-level access to memory, a simple set of keywords, and clean style, these features make C language suitable for system programmings like an operating system or compiler development. C is a general-purpose programming language that is extremely popular, simple, and flexible to use.

It is a structured programming language that is machine-independent and extensively used to write various applications, Operating Systems like Windows, and many other complex programs like Oracle database, Git, Python interpreter, and more. Easy to learn, Structured language, It produces efficient programs, It can handle low-level activities, It can be compiled on a variety of computers.

1.3 Existing System of University Management System

In the existing system all the works are done manually. Students have to fill up admission form on paper and all the records are maintained on paper file. In this system it is very difficult to find any information. And it is very difficult to maintain the course registration and exam result reports of university in proper way.

1.3.1 UMS for educational institution

In today's era, education has been drastically transformed. These days, the academic institutions want to exhibit their power of proffering education at all levels. The academic institutions want to prove that they are best in presenting education at every level. You will notice that every academic centre wants to be popular by hiring more students in their institutions. From school, college to institutes, every academic centre wants to grab countless students at its end. To attract students in their institutions, the academic institutes project that they are highly maintained in every educational sphere. All university are trying to be well maintained and so, the administration is investing the finance in technology.

The university administration is introducing latest technologies at its campus. The academic management system in Bangladesh is introducing advanced technologies in their university campus. It is an integrated system which is equipped with necessary tools which will help keep record of the students as per their academic program. The software has a tool which helps faculty members, academic visitors, students, registrar and other people who are connected with campus. This software helps stay connected with each other, converse easily and can be in touch with pivotal notices which provide information at all times. After installing the university management software, it will be convenient for all students to have a look at a course taken by a student. Also, they will come to know the secured grades, per subject result and so on of all students. With the help of this software, it gets easy to assess the student's status and academic track, looking at the set-up of the course map.

You can also get the status updates such as the completion of course, total marks obtained. The university management system is user-friendly. The software consists of a module which is known as Satisfactory Academic Progress which further makes it good, as it helps understand the students and foretells the result, increases the level of the eligibility of the financial support, stays in touch with the new program rules, follows the enrolment policies and assesses the progress of each student. Moreover, the software makes sure to maintain a healthy communication between teachers and students.

1.4 Motivation

In different cases working with a bigger data is time consuming and makes complicated. Generally university have thousand of students. So many students and many different department. So it's too difficult for find any single employee, student or teacher. Perfectness is the key to work. It is very important from the point of view of the organization as well as for the student that the record is maintained about the colleges and students error free. So, speedier and accurate maintenance of the university becomes a matter of importance. Automation does this to a large extent. We created a university management system that manages the data of all person who connected with the university. The system will save a lot of paperwork and will give easy and quick access to all students, employee, teacher, admin that would like to check their status and save countless man hours and pressure. University management system improves the organization of work of the institution and reduces the number of paperwork which is often the waste of time and resources. If one wants to enter a university, he will need to register in the system and find all the necessary data there. Students also can find a range of advantages using the system. First of all it enables them find out the information about the courses, subjects, required disciplines, the timetable, etc. Moreover, there are always data bases which contain all the information about student's success and failures, as all the points and marks are registered in the system. The main advantage of the university management system is its convenience and speed. One can find all the necessary data about the university and the educational process very fast and will not have to travel much to visit the university himself and ask for consultation there. Moreover, university management system makes the educational process more open and fair, because no one can influence on the data registered in the system and alter it. University management system is the greatest innovation which managed to help with the control of the work of higher educational institutions in the effective way. Young people who are required to prepare a good case study on the problem related with university management system should find time to investigate the problem in general. One will need to find all the strong and weak sides of the system to be able to make the correct conclusions and analyze concrete problems on the topic.

1.5 Objectives of This Project

The main purpose of our project is to make a next level of data management system and ensuring the data. The main objectives of our project is as following-

- Admin : Admin can add,delete,update a teacher,student,employee and update course.Create a new notice or delete a notice.
- Teacher : Teacher can see a student data update student result.Can message student for any query,create a result sheet.
- Student : Student can add new subject.Enroll a new semester.Can see his/her data and result of any semester.
- Reduce processing time: Propose a solution approach for the reducing processing time so that our solution will perform better.
- Communication : Propose a solution approach for ensuring student and teacher better communication.

In this project we motivate to a system that can make a huge change to the data store and the data processing unit.

1.6 Our Contributions

The main purpose of our project is to make a next level of data data management and ensuring the low time and low cost over the project. The main objectives of our thesis is as following-

- Language : We have use c language which is very fast and simple and it is easy to find any bug and fix.It is possible and easy to add new feature and delete any feature.
- Hardware : For this project we use very low level and low cost computer.It's work very smoothly.So it's possible to use any institution for management their data.
- If any college or school want to use this soft they can use because same option also need for any educational institution.

- It gives us that information which was not provided by the manual system.
- Increase operational ability and efficiency.
- Improved abilities in computation and analysis.
- Improved Student and Teacher communication.

In this thesis we motivate to a system that can make a huge change to the data storage technology and the data processing unit.

1.7 Organization of This project Report

The rest of the book is organized in the following way. In Chapter 1, we will show the background and related project. After that,

- **In Chapter 2**, describes Existing System, existing or supporting literature and review of existing system. In existing system, we will discuss about the history of student data management system. Moreover, in this part we will also discuss about the related works with ums importance of ums system.
- **In Chapter 3**, consists of our Proposed Model. The algorithm and flow chart and also step by step discussion and figure will be provided there. In this chapter first we discuss the full procedure with figures. Then next part there is an example of the calculation for better understandings. The calculated result is shown at the end.
- **In Chapter 4**, consists of our Implementation. The implementation and Processing will be shown step by step discussion and figure will be provided there. In this chapter first we discuss the full Implementation system.
- **In Chapter 5**, explains about the Experimental Results of our project and analysis of the result and also discuss about the applications of our project.
- **In Chapter 6**, concludes the Report of Our Project. In this chapter we will discuss about limitations and future works. In limitation part we will discuss about the limitations of

our system. In future works we will discuss about the modules which we will develop in future.

1.8 Conclusions

As we know that today is the world of computers and it has entered in the each and every phase of everyday life. Computer plays an important role in day-to-day work. Hence today is the day of computers. The use of computers in the field of management of information is well known to us .The use of computers in the university management system provides following benefits over manual system.

Chapter 2

Existing Literature

2.1 Introduction

Education ERP software is a web based ERP software solution is to streamline and manage student information efficiently along with automating processes for the Stakeholders, It help students, teachers, parents and the school administrative staff to use school data in a more organized and structured manner.



Figure 2.1: IBM logo

Student information system was invented by IBM SMPL before 2005.

2.2 Related Work of UMS

This project is developed mainly to administrate the student records. The purpose of the project entitled as to computerize the Front Office Management of student records in college and university to develop software which is user friendly, simple, fast and cost-effective. Traditionally, it was done manually. The main function of the system is to register and store student details, retrieve and these details as and when required, and also to manipulate these details meaningfully. It also enables students to enrol to particular course through examination results, and also get notified when important events occur. All data stored and retrieved through the application is secure. So to achieve this we have developed a powerful secured interface application which supports all type of request which are coming from the students also which gathers and corrects all student information.

2.3 How UMS important role in the education system

This system is provides seamless access through the computer based application to access and manage different department or all over the organization. This system is used to mainly monitor the attendance for the university. Students are provided access to login to application and view the progress report and result report. This system is developed for any university or college it will provide end users to maintain their data with minimum effort. Initially faculties/students/employee get registered with the system once they finish registration process they can access the system as well as they are able see the data. As per the requirement users has been granted with certain level permission to manage and track the student information. Either student or faculty can print a copy the statistics from the database. In today's era, education has been drastically transformed. These days, the academic institutions want to exhibit their power of proffering education at all levels. The academic institutions want to prove that they are best in presenting education at every level. You will notice that every academic centre wants to be popular by hiring more students in their institutions. From school, college to institutes, every academic centre wants to grab countless students at its end.

To attract students in their institutions, the academic institutes project that they are highly maintained in every educational sphere.

2.4 UMS for Sebha University

This report basically focuses on providing a simple interface for the easy collation and maintenance of all manner of student information. The creation and management of accurate, up-to- date information regarding students' academic careers is critical students and for the faculties and administration of Sebha University in Libya and for any other educational institution. A student information system deals with all kinds of data from enrollment to graduation, including program of study result. All these data need to be made available through an offline interface.

2.5 A Study of University Management Software

This report focuses on providing information to support the operation, management and decision-making functions of enterprises or organizations. In the face of huge amount of information, it is required to possess the student information management system to improve the efficiency of student management. Through this system, the standardized management, scientific statistics and fast query of student information can be realized, and thus the workload of management can be reduced. In this report, a typical student information management system will be established to realize the systematization, standardization and automation of student information relationship. The software application unbelievably unravels and quickens the university management system with unique templates by providing the administration a secure database system for storing, evaluating and publishing the test scores and grades of a student. The database likewise allows the students to observe and gander at the exam results on the notice at whatever point necessary. Automate admissions.

Eliminate manual processes and save significant staff time by enabling prospective students to apply online through a self-service portal Provide one-stop student access. Allow students



Figure 2.2: University Management in education system

to enroll, register, and pay for courses through the portal Simplify records management. With a single system for all your data needs—and a single digital record for each student—any department on campus can find the student information they need Engage faculty. Give faculty the means to enter and update grades, and have personalized access to timely, accurate, and institution-wide information

2.6 Conclusions

University Management System is a smart, flexible, and affordable solution that covers all aspects of Universities, Colleges or Schools. It's a complete end-to-end solution that covers every minute aspect of a university workflow which we had used to perform manually. University Educational Management System includes many advance feature like Registration process, Admissions, appointments with principal and teachers, Result Management, Student's

Profile Management, benefits like scholarships and other miscellaneous expenses, university staff management, and incorporate all the process with a user-friendly interface.

Chapter 3

Proposed Model

3.1 Introduction

We have studied C language, now we come to the real life problems and see how we can solve them. Here we will use C Program to develop one real life project with a simple project that is University management system with C language.

3.2 Features

A feature is a distinctive trait or a special attraction. Feature can also mean to give special attention to

something. We will discuss our system feature in next part.

3.2.1 Facility under Admin

The Administrative services division is responsible for administrative support of all units of facilities service, with specific responsibilities for log in, add new teacher, add new employee, add new student, delete a teacher, delete employee, can on/off registration process, update student present and future courses and can update notice.

- Log in :In computer security, logging in (or logging on, signing in, or signing on) is the process by which an individual gains access to a computer system by identifying and authenticating themselves.

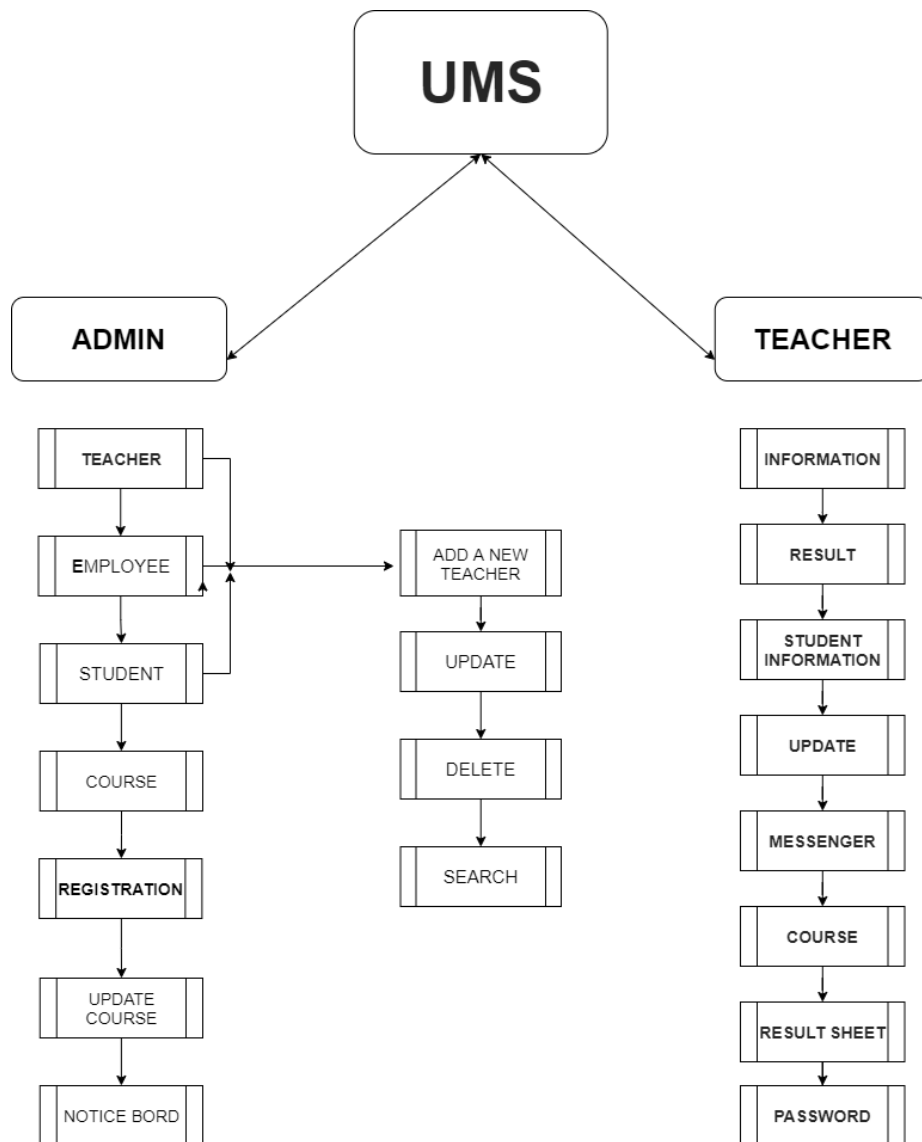


Figure 3.1: Admin-Teacher

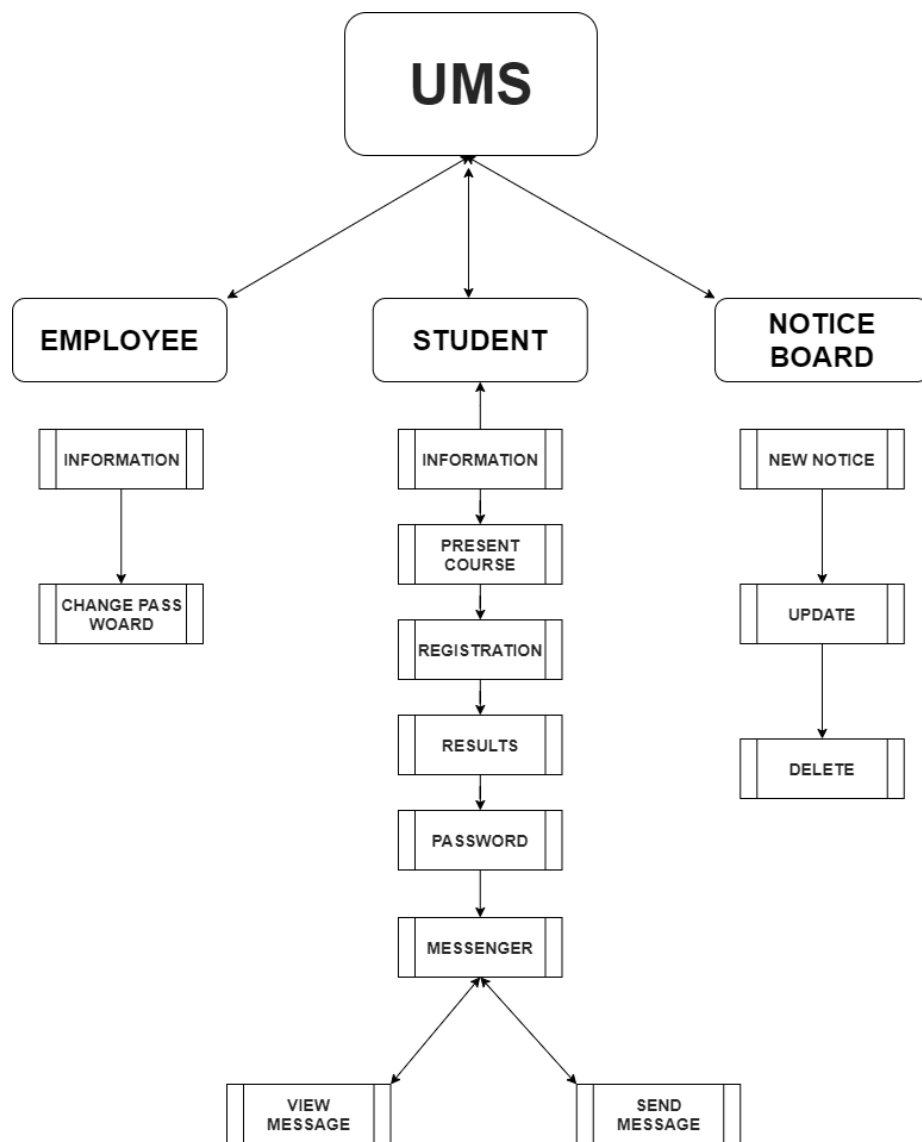


Figure 3.2: Student-Employee- Notice

- Add New Teacher: This means that at first admin create an account for a teacher with teacher required information. After create a successful account system return a unique id and password. After creating account user can change his/her password.
- Add New Employee: This means that at first admin create an account for a employee with employee's required information. After create a successful account system return a unique id and password. After creating account user can change his/her password.
- Add new student: A student who has not previously attended the University, or a student enrolling in the university for the first time. This means that at first admin create an account for a student with student required information. After create a successful account system return a unique id and password. After creating account user can change his/her password.
- Update student: Update means to give or include the latest information. If any student wants to update his/her information admin will update his/her information.
- Update Employee: Update means to give or include the latest information. If any employee wants to update his/her information admin will update his/her information.
- Update teacher: Update means to give or include the latest information. If any teacher wants to update his/her information admin will update his/her information.
- Delete a teacher/employee/student: If admin wants to delete anyone account admin have a power to delete individual student/teacher/employee account.
- Search a teacher/employee/student: If admin wants to search anyone account admin have a power to see individual student/teacher/employee account. It's a very fast process.
- Semester courses: Admin can add or see course for any intake and individual semester student. After that student can able to see upcoming subjects and when admin on the registration process student add subjects for the next semester.
- On/Off Registration Process: Admin can on or off registration process of the university. When admin on registration process all student can select course for their next

semester. When registration process off student can't select subjects for their next upcoming semester.

- Update notice: Admin can create, edit and delete a notice .For any important information admin can announce for all in the notice section. Everyone able to read the information in the notice.

3.2.2 Facility under Teacher

Teaching facilities are materials that assist teachers in delivering of their lectures to make their lesson explicit to the learners. They are also used to transmit information, ideas and notes to the learners.

- Log in: When someone logs in or logs on, or logs into a computer system, they start using the system, usually by typing their name or identity code and a password.
- Information: A teacher information can see his/her all information.
- See Student Information: A teacher can see a student data by searching with student id.
- See Student Result: A teacher can see a student academic result by searching with student id-;intake-;semester number.
- Update Student Result: A teacher can update a student result by searching with student id-;intake-;semester number. After that teacher enter course code and select mid/final/v-p-a(viva/presentation/assignment) to update student result.
- Messenger: A teacher can communicate with his/her student .We build a massaging system for teacher and student communication. Teacher can send a message to a student or reply a student message.
- Result sheet: A teacher can make a result sheet with many student for his/her subject. After creating a result sheet teacher can print result sheet from the computer.
- Change Password: A teacher can change his/her password given old password.

3.2.3 Facility under Student

A person who is studying at a university or other place of higher education. A student is primarily a person enrolled in a school or other educational institution and who is under learning with goals of acquiring knowledge, developing professions and achieving easy employment at a particular field. In the broader sense, a student is anyone who applies themselves to the intensive intellectual engagement with some matter necessary to master it as part of some practical affair in which such mastery is basic or decisive.

- Log in: When someone logs in or logs on, or logs into a computer system, they start using the system, usually by typing their name or identity code and a password.
- Information: A student can see his/her all information.
- Present Courses: A student can see his/her present courses selecting present courses option.
- See Student Result: A student can see a student academic result by giving intake-semester number.
- Registration: Admin can on or off registration process of the university. When admin on registration process student can select course for their next semester. When registration process off student can't select subjects for their next upcoming semester.
- Messenger: A student can communicate with his/her teacher .We build a massaging system for teacher and student communication. Student can send a massage to a teacher or reply a teacher message.
- Change Password: A teacher can change his/her password given old password.

3.2.4 Facility under Employee

An employee is someone who gets paid to work for a person. Workers don't need to work full time to be considered employees—they simply need to be paid to work by an employer.

- Log in: When someone logs in or logs on, or logs into a computer system, they start using the system, usually by typing their name or identity code and a password.

- Information: An employee information can see his/her all information.
- Change Password: An employee can change his/her password given old password.

3.2.5 Facility under Notice

- View all notice : Student,Teacher,Employee can see all notice.

3.3 Conclusions

After complete this project we able to find a university all data more organized and fast. Everyone can see their own data. No one can access other's data. Admin can send any argent notice to everyone.

Chapter 4

System Analysis

4.1 Introduction

System Analysis is the term used to describe the process of collecting and analyzing facts in respect of an existing operation of a situation so that an effective computerized system may be designed and implemented if proved feasible. System Analysis can be viewed as the most recent and perhaps the most comprehensive techniques for solving computer problems. System Analysis also embraces system design, which is an activity concerned with the design of a computerized application based on facts disclosed during the analysis stage. System analysis basically is an approach towards viewing process, activities and complex problems.

4.2 Programming Language

C is a middle-level programming language developed by Dennis Ritchie during the early 1970s while working at AT&T Bell Labs in the USA. The objective of its development was in the context of the re-design of the UNIX operating system to enable it to be used on multiple computers.

Earlier the language B was now used for improving the UNIX system. Being a high-level language, B allowed much faster production of code than in assembly language. Still, B suffered from drawbacks as it did not understand data-types and did not provide the use of “structures”.

These drawbacks became the driving force for Ritchie for development of a new program-

ming language called C. He kept most of language B's syntax and added data-types and many other required changes. Eventually, C was developed during 1971-73, containing both high-level functionality and the detailed features required to program an operating system. Hence, many of the UNIX components including UNIX kernel itself were eventually rewritten in C.

4.2.1 Benefits of C language

As a middle-level language, C combines the features of both high-level and low-level languages. It can be used for low-level programming, such as scripting for drivers and kernels and it also supports functions of high-level programming languages, such as scripting for software applications etc. C is a structured programming language which allows a complex program to be broken into simpler programs called functions. It also allows free movement of data across these functions. Various features of C including direct access to machine level hardware APIs, the presence of C compilers, deterministic resource use and dynamic memory allocation make C language an optimum choice for scripting applications and drivers of embedded systems. C language is case-sensitive which means lowercase and uppercase letters are treated differently. C is highly portable and is used for scripting system applications which form a major part of Windows, UNIX, and Linux operating system. C is a general-purpose programming language and can efficiently work on enterprise applications, games, graphics, and applications requiring calculations, etc. C language has a rich library which provides a number of built-in functions. It also offers dynamic memory allocation. C implements algorithms and data structures swiftly, facilitating faster computations in programs. This has enabled the use of C in applications requiring higher degrees of calculations like MATLAB and Mathematica.

4.3 Hardware Requirements

Minimum requirements:

- **Device**

Laptop Or Desktop Computer.

- **CPU**

Intel® Core™ i3 Processors or Equivalent 1 GHz or Faster.

- **GPU**

Not necessary

- **Hard Disk Drive**

Minimum 200GB.(Bigger Hard disk Store Big data)

- **Solid-State Drive**

Not necessary.(SSD makes system faster)

- **Random Access Memory (RAM)**

6 GB or Higher 64-bit.

4.4 Software Requirements

- **Operating System (OS)**

Windows 10 : Windows 10 is a series of operating systems developed by Microsoft and released as part of its Windows NT family of operating systems. It is the successor to Windows 8.1, released nearly two years earlier, and was released to manufacturing on July 15, 2015, and broadly released for the general public on July 29, 2015.

- **Integrated development environment Software (IDE)**

CodeBlocks: CodeBlocks is a free, open-source cross-platform IDE that supports multiple compilers including GCC, Clang and Visual C++. It is developed in C++ using wxWidgets as the GUI toolkit. Using a plugin architecture, its capabilities and features are defined by the provided plugins.

- **Compiler**

Mingw-w64 : Mingw-w64 is a free and open source software development environment to create Microsoft Windows PE applications. It was forked in 2005–2008 from MinGW (Minimalist GNU for Windows).

4.5 Conclusion

Up to the time of system proposal, we have concerned them with the local design of the system. Although we have decided that all software should be purchased free. So our project isn't so much expensive but it's play a importance role in our education system.

Chapter 5

Experimental Results and Evaluation

5.1 Introduction

The reason behind development of the system is to help in managing student information. College Admin will provide an easy way to automate the college and provide easy way to automate the college with reporting and giving the finest details about the student information and necessary records needed for a university information.

5.2 Result Analysis

Module

- Create Files.
- Loading.
- Main menu.
- Log in.
- Admin.
- Student.
- Teacher.

- Employee.
- Notice Board.
- Messenger.
- Result.
- Course.
- Change Password

5.2.1 Sample Screenshots

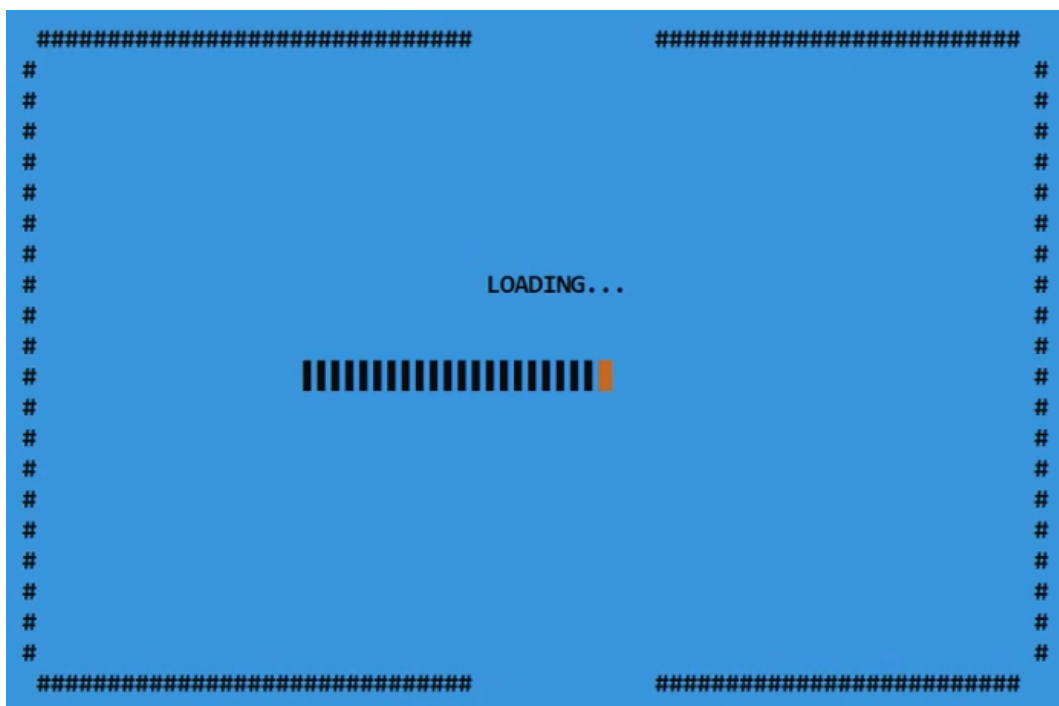


Figure 5.1: Loading

```
#####  
#  
# START TIME:- Sat Feb 27 19:43:01 2021 #  
#  
#  
#  
# Asalamualikum User. #  
#  
# -> LOGIN AS ADMIN #  
# EMPLOYEE #  
# TEACHER #  
# STUDENT #  
# NOTICE BOARD #  
# EXIT #  
#  
#  
#  
#  
#####
```

Figure 5.2: Main menu UI

```
#####  
#  
# PLEASE LOGIN #  
#  
#  
# USER ID : #  
# PASSWORD : #  
#  
#  
#####
```

Figure 5.3: User Login

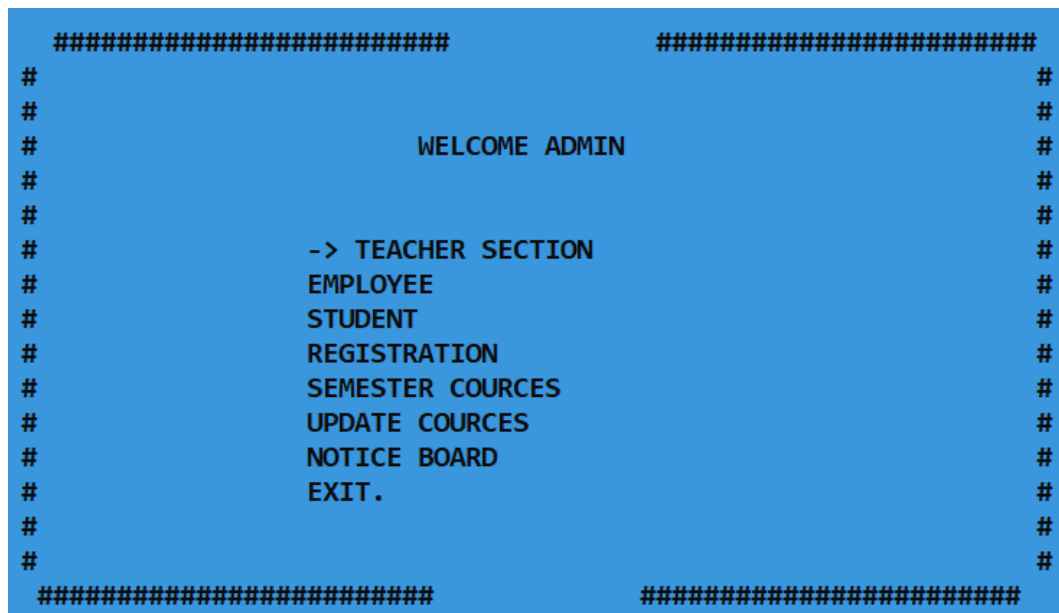


Figure 5.4: Admin UI

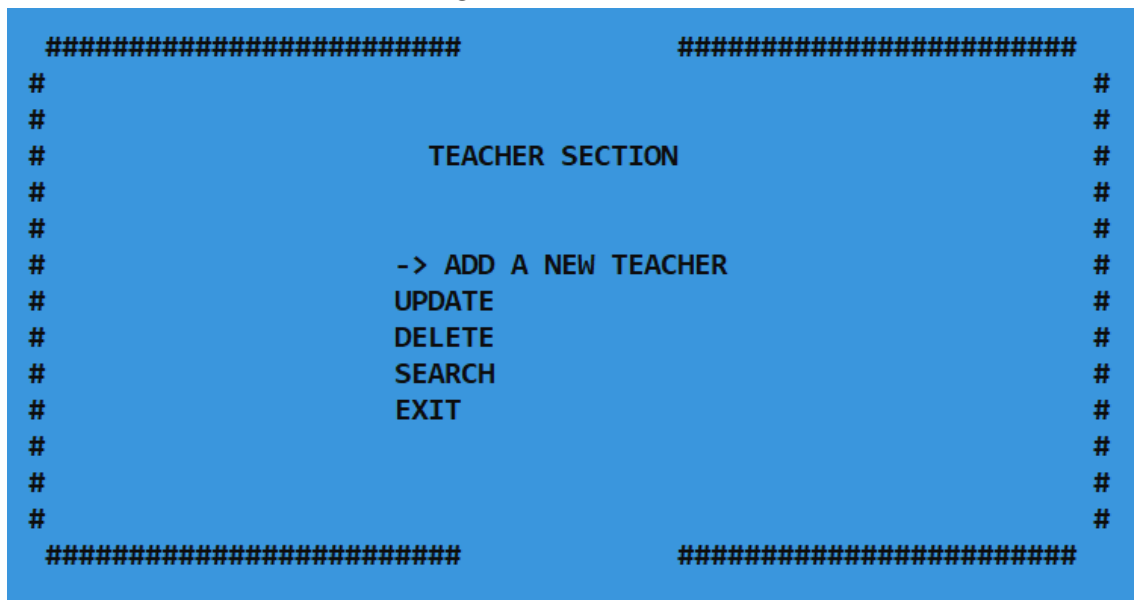


Figure 5.5: Teacher Section

```
#####
```

```
#
```

```
#
```

```
#          EMPLOYEE SECTION
```

```
#
```

```
#
```

```
#
```

```
#
```

```
#      -> ADD A NEW EMPLOYEE
```

```
#      UPDATE
```

```
#      DELETE
```

```
#      SEARCH
```

```
#      EXIT
```

```
#
```

```
#
```

```
#
```

```
#
```

```
#####
```

Figure 5.6: Employee Section

```
#####
```

```
#
```

```
#
```

```
#          STUDENT SECTION
```

```
#
```

```
#
```

```
#
```

```
#
```

```
#          -> ADD A NEW STUDENT
```

```
#          UPDATE
```

```
#          DELETE
```

```
#          SEARCH
```

```
#          EXIT
```

```
#
```

```
#
```

```
#
```

```
#
```

```
#####
```

Figure 5.7: Student Section

```

#####
#
#
#
#
# ENTER FIRST NAME :
# ENTER LAST NAME :
# ENTER GENDER :
# BLOOD GROUP :
# DEPARTMENT :
# UNIVERSITY :
# CGPA :
# POSITION :
# MOBILE NUMBER :
# E-MAIL :
# PERMANENT ADDRESS :
# DATE OF BIRTH (DD | MM | YY):
# JOINING DATE (DD | MM | YY):
#
#
#####

```

Figure 5.8: Data Entry (Student/Teacher/Employee)

```

#####
#
#
#
#
#
# -> FIRST NAME : Sumon
# LAST NAME : Hossain
# ADDRESS : Rajshahi
# GENDER : male
# CONTACT NUMBER: 01798533669
# DOB : 15-11-1987
# BLOOD GROUP : AB+
# DEPARTMENT : Registrar office
# E-MAIL : sumon@gmail.com
# UNIVERSITY : haka college
# POSITION : senior
# CGPA : 2.66
# EXIT
#
#
#####

```

Figure 5.9: Update (Student/Teacher/Employee)

```
#####  
#  
# Course registration now on...  
#  
# Do you want to off?  
# [1] YES. [2] NO  
#  
# Enter choice:  
#####
```

Figure 5.10: Registration

```
#####  
#  
# WELCOME TO NOTICE SCTION  
#  
#  
# -> CREATE A NEW NOTICE  
# UPDATE  
# DELETE  
# EXIT  
#  
#  
#####
```

Figure 5.11: Notice Section

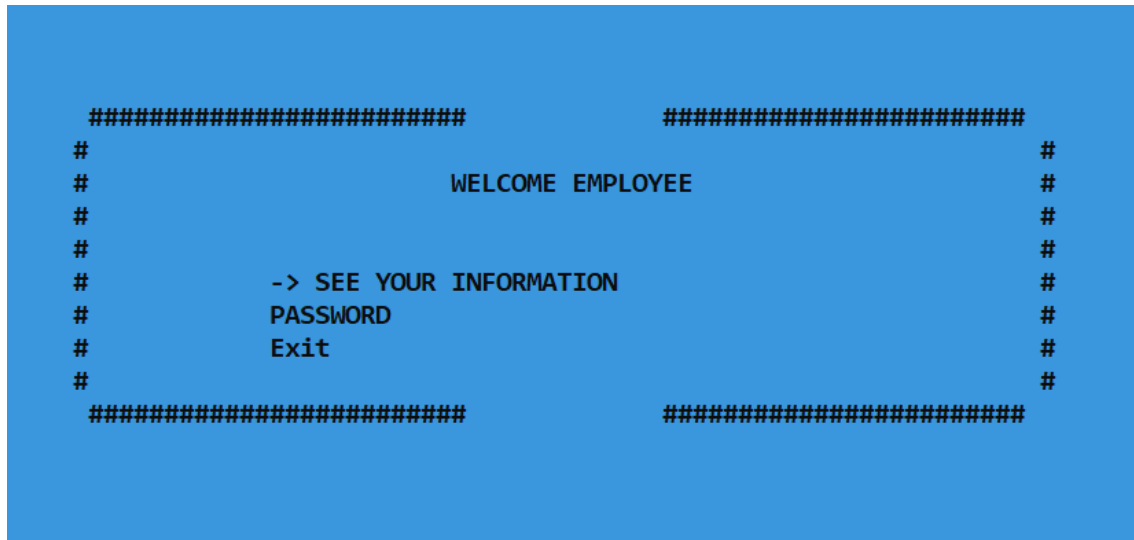


Figure 5.12: Employee

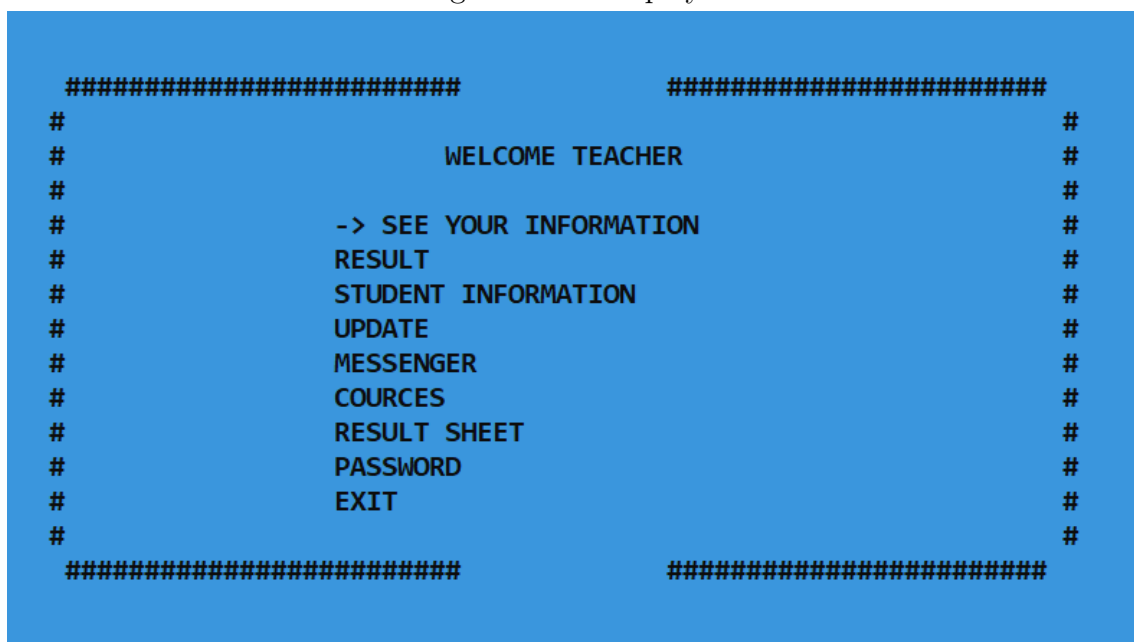


Figure 5.13: Teacher

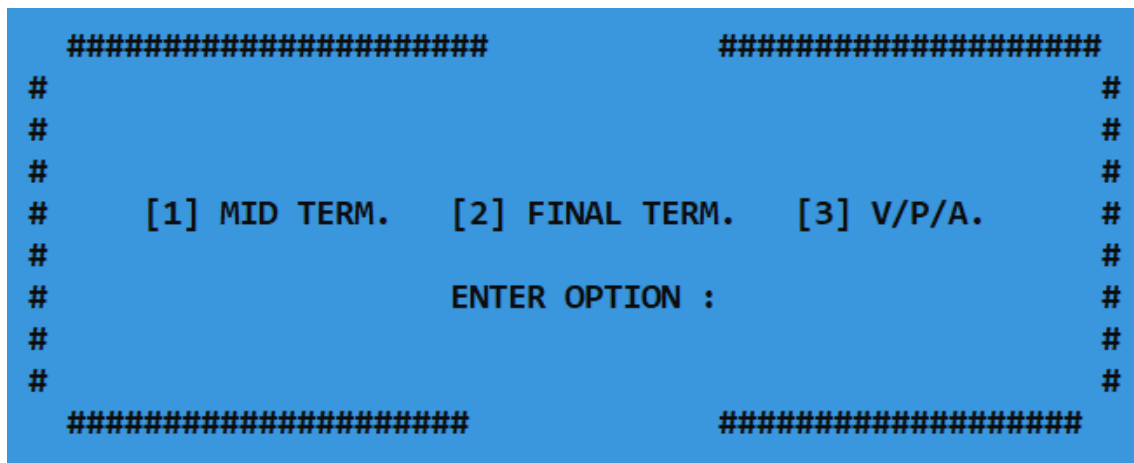


Figure 5.16: Update Result



Figure 5.17: Messenger

```
#####
```

```
#
```

```
#**MESSAGES**#
```

```
#
```

```
[01] Sahinul Islam#
```

```
[02] Iftekhar Ahamed Siddiquee#
```

```
[03] EXIT#
```

```
#
```

```
#
```

```
#ENTER YOUR OPTION :#
```

```
#
```

```
#####
```

Figure 5.18: See message

```
Sumi Khatun : Sahinul kmn aso?
Sumi : Tmr result kmn?
Sahinul Islam : Ji Mam Alhamdulillah.Amr result akhono pai nai mam....
Sahinul : ??
Sumi : Insoallah tartari paba..

[1] REPLY. [2] EXIT.
ENTER OPTION :1

ENTER YOUR NAME :Sumi

ENTER REPLY :Insoallah
```

Figure 5.19: Reply Message

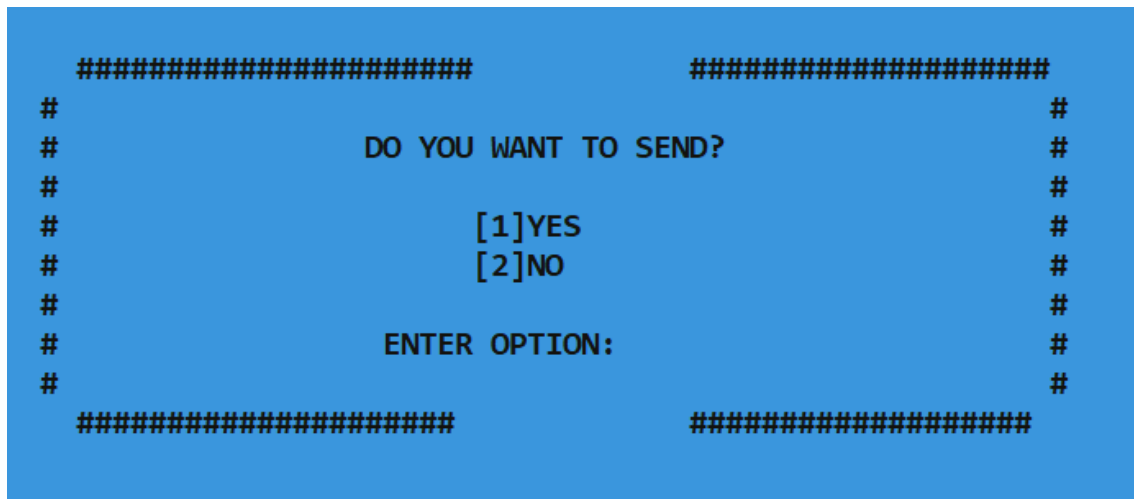


Figure 5.20: Want to Send

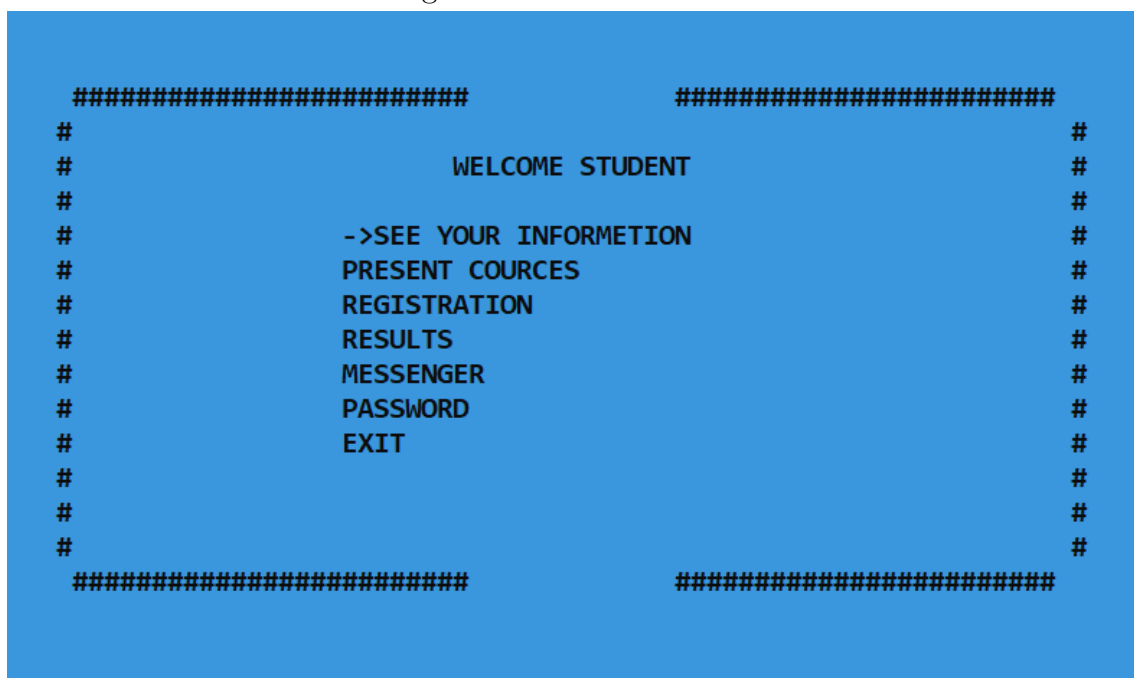


Figure 5.21: User Student

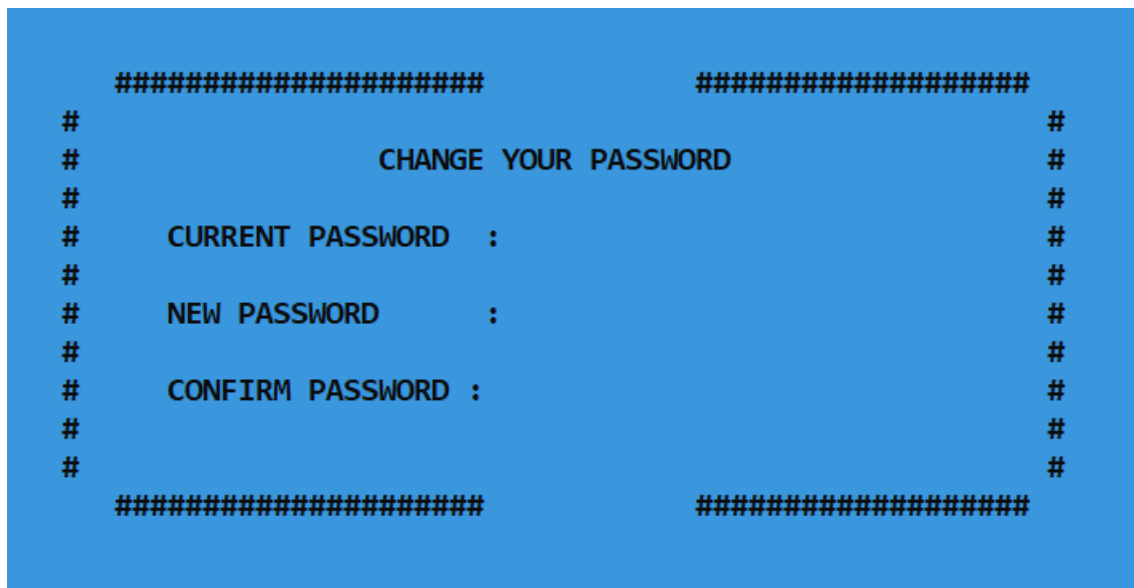


Figure 5.22: Change Password



Figure 5.23: Notice Board

BUBT SUMMER-2020 SEMESTER CSE TOTAL RESULT					

ID	NAME	Digital Logic Design	SPL	Intensive English II	Total
11123020	Arafat Chowdhury	65.00	75.00	67.00	207.00
11162130	Mamunur Rashid	68.00	72.00	63.00	203.00
11193070	Sami Nayem	78.00	84.00	78.00	240.00
11193123	Farhanul Arifeen	84.00	62.00	67.00	213.00
11201009	Radia Binth Rafiq	56.00	60.00	70.00	186.00
11201042	Rajib Hossain	68.00	72.00	63.00	203.00
11201085	Fatema Reya	70.00	72.00	73.00	215.00
11201092	Muntasir Rahman	78.00	62.00	69.00	209.00
11201110	Fuad Hasan	68.00	76.00	73.00	217.00
11201113	Rajon Datta	63.00	72.00	75.00	210.00
11201114	Musfiq Uddin	65.00	73.00	67.00	205.00
11201125	Kazi Sawpnil	75.00	67.00	90.00	232.00
11201128	Zawad Mahmud	78.00	87.00	96.00	261.00
11201171	Dip Saha	77.00	80.00	78.00	235.00
11201216	Tasmina Hossain	72.00	78.00	83.00	233.00
PRESS ENTER TO EXIT.....					

Figure 5.24: Section Result

Chapter 6

Conclusion and Future Work

6.1 Conclusions

A good university management system ensures improved academic delivery, working efficiency and better student achievements. It provides several benefits for candidates, staff and the organization. As the education landscape is experiencing a steady change, it has become essential for Universities to use an innovative university management system to overcome present and future issues. How much a university is developed is usually dependent on UMS. At the present time, if we notice, we can see how much work can be done in a very short time. In that case ums will bring a tremendous success . With the help of UMS, a student's address, roll, section, blood group, mobile number can be saved. In this way a student can complete his varsity work in a very short time and can find out any of his data varsity. And every student admission, registration and semester course update etc. are all recorded in a specific folder with the university In the past, we used to keep a record of how many employees there are in a university. But now with the help of UMS, all its data can be easily saved in a very short time and any data of any employee can be found and updated and deleted at any time How much the university can improve depends largely on the varsity teachers. With the help of UMS, all the records of teachers can be saved and the salary of each teacher and the number of teachers can be counted and new teachers can be added and deleted. Which is possible through UMS. Exams at every university, holidays and varsity event dates etc. which we get a lot of great benefits through UMS.

With the help of UMS, the university will be able to view data from anywhere in the world. Which brings success to a varsity. If I wanted to write down any data, we would have to face a lot of problems. UMS plays a very important role in this regard.

6.2 Future Scope of Our Project

UMS will play a very important role in the future. Each student will be able to login to their software through their own software remotely by internet using University ID and password. From their profile you will be able to see the university's own class routine as you wish, you will be able to know all the information related to their own admission. Students will be able to see how many books they have brought from the library and how many books they have brought and related data And students will be able to learn about the Present Course and the Previous Course Future Course. However this project UNIVERSITY MANAGMENT SYSTEM only covers the implementation of the student, university's records and their various activities. The data accumulated in this project is used periodically to provide different types of managerial information. This overall project is basically written in function and can be used in conjunction with other program, for future development for UNIVERSITY system. We have provided many data function through which any one can know about any student giving student id number. The project is using the modern trend OOPs that gives a better design to the software, which help in maintaining code in terms of reusability, modifiability, etc. When we build it as web based everyone can access their profile remotely.

Chapter 7

Bibliography

At the end, the following bibliography is in no way complete. However it is an attempt to list a few number of sources and references when we have used for the development design of the project in this elegant form.

7.1 Books

Teach Yourself C

by Herbert Schildt