Bangladesh Army University of Engineering and Technology (BAUET)
Qadirabad Cantonment, Natore-6431.

Department of Computer Science and Engineering

Integrated Design Project

Student counseling and finance management system

Submission Date: 29-12-19

Submitted By:	Submitted To:
Name: Sheikh Arafa Hossain Yafee Id: 18104052 Name: Jannat Hossain Jothi Id: 18104024 Name: Md. Momenul Haque Id: 18104050 CSE 7th Batch Section: Even.	Md. Mehedi Hasan Lecturer, Dept. of CSE, BAUET. Subrata Kumer Paul Lecturer, Dept. of CSE, BAUET.

Table of Contents

List of Figures

List of Tables

1. Project Overview:

Bangladesh is a development country student's play a big role for this. But in our country students face many problems like Counseling, finance. So, it is a big problem for our development county. That's why we want to solve this problem to develop a management system so our project name is **"Student counseling and finance management system".**

The essence of incorporating guidance and counseling into the university system was to eliminate overwhelming ignorance of many young people on their choices of career prospects and personality maladjustment among university students.

And a student counseling and finance management system designed for creating, connecting, storing, and report many different types of finance transactions, a student counseling and financial management system has some basic purpose: like counting money, up to date student data and transactions update, other information needs.

Quite simply, without some kind of accounting software, an organization would not survive. At the most basic level, every organization needs systems to manage the flow of money in and out of the business. But a truly effective student counseling and financial management system can do more: optimize profitability, measure cash flow, determine tax obligations, ensure compliance, and maintain long-term enterprise sustainability.

2. The Purpose of the Project:

To necessity of Student counseling and finance management system come from those student who waste large amount of time to check fee report and transaction update. As well as those students who face to collect admit card at the eleventh hour of the exam. If we implement it we easily solve these problems.

Counseling is a form of education, which the students receive from their counselors. The essence of incorporating guidance and counseling into the university system was to eliminate overwhelming ignorance of many young people on their choices of career prospects and personality maladjustment among students. The telephone, websites and e-mail, alongside face-to-face facilities, could be alternative services; or they could be portals into a wide, flexible and well-harmonized network of services. The essence of incorporating guidance and counseling into the university system was to eliminate overwhelming ignorance of many young people on their choices of career prospects and personality maladjustment among students. Based on these and more, career officers and counselors were appointed to take the responsibilities in sensitizing students on the needs for effective career choice. However, it is important to develop a system that can be used in the absence of human experts and this has given rise to the adoption of artificial intelligence in guidance and counseling.

Students finance management comprises the planning and implementation of a financial plan, accounting, reporting and the protection of assets from loss, damage and fraud, so that's students can easy finish their official work.

In recent time many researchers work on that type of project. Our country main resource is student. So we need to more focus on developing that kind of efficient system. That helps our student to build pride career.

3.   The Scope of the Work:

Student counseling & finance management system solve many problems like Significance of the Study, Scope of the Study, Aim and Objectives of the Study etc. However, it is important to develop a system that can be used in the absence of human experts and this has given rise to the adoption of artificial intelligence in guidance and counseling.

Student face many problems like submit official paper, semester free problem, admit card collecting problem etc. and students and teacher kill lots of time's both. From collecting admit card student lose their key preparation in exam days. Some time student face problem to find out transaction details. Some time proper transaction not happened, then they helpless to find proper details. In semester registration days, some student loses large amount of time to collecting dues information and face some problem to not attending class to collecting dues report. So, development this system helps for solving those kinds of crucial problems.

 Each and every member works properly and in time. They give full support to implement it and both member done excellent effort to design the system and planning proper way, which amazing to watch. A first we did the main planning. Then we find out the resource with the help of online source. Then design the whole system with patience. In the process of implementation database connect was the hardest part. But we successfully did that. As a group leader I am happy to distribute the work in proper way of other group members. They successfully did the work in time.

4.   Product Scenarios:

As soon as a student gets enrolled and begins his/her sessions, he/she will be assigned to a particular Teacher Counselor by the HOD. It will be a Teacher Counselor's utmost responsibility to ensure that the new incumbent is comfortable in the new environment and is getting acclimatized. The illustrative model could be through building a rapport with the students by way of different activities, games and informal interactions carried out to help build strong Teacher-Taught relationship. The Counselor should ensure that all the Counselees under him/her have filled in all their personal details on e-governance of the University within two weeks of beginning of the Term. The counselors shall have a continuous observation of the academic performance, relation with the peers, behavior patterns and psychological conditions of their counselees, so as to be able to track any irregularity at an earlier stage and suggest corrective actions. There upon, the counselors shall conduct meeting, once in a fortnight, with their counselees, so as to be able to keep a track of their progress in academic, social and personal fronts. These meets need to be recorded with a signature of the Counselor as well as the Counselee.

Account section recorded all the necessity information and give unique user id and password to newly admitted student. Then new student could login and find all information related him. Account section regular up to date all student record within short delay. Batch coordinator teacher can up to date all batch

related information. Student can easily access all information within a login. Student cannot edit any kind of information related him.
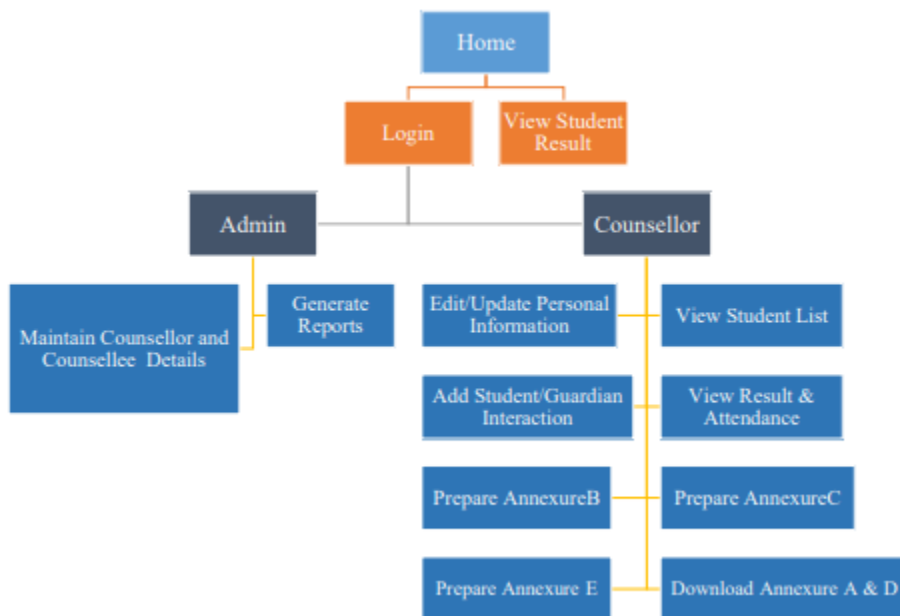

Figure 1: Product Scenarios Example.

All users on the University financial management information system access, university leaders and department heads can department to understand the use of funds by visiting, assistant decision making; General staff such as teachers, students, etc. can access the system to understand the situation of their own costs; The financial personnel and various departments staff carries on the correlation data through the system operation, maintains and so on.

5. People Involved:

Software projects are difficult and they all take careful planning, a talented development team and collaboration of a project's team members, both internally and externally with the software development process. One of the keys to a successful software project is identifying and documenting the software project roles and responsibilities for your project. There is a motto of choosing people to developing system:

Get the right people. Then no matter what all else you might do wrong after that, the people will save you. That's what management is all about.
-– *Tom DeMarco*

Among the key members of a software project are the following some key roles in software development and their corresponding responsibilities.

Here, we distribute the full project into our team members in proper way:

Name:	Student ID:	Work Partitioning:
Sheikh Arafa Hossain	18104052	System Design, Planning
Md.Momenul Haque (Group leader)	18104050	System Development, Database
Jannat Hossain Jothi	18104024	System Design, Planning

Table 1: Project Involved.

Here, **Sheikh Arafa Hossain** works efficiently and gives full effort to design the system. Also play an important role to give key idea to developing the software. She collaborates with **Jannat Hossain Jothi** and design the whole system efficiently. She completes her responsibility in time. She also plays an important part to design the software. They planed whole system with full of patience and hard working. The best part is some time they face critical problem but trying hard and solving each other collaboration. Many times is not happened. At the software design starting days both of them draw all the figures and implement it in J Frame with amazing GUI design. The important part is both of them have great knowledge of designing materials with great color combinations. Which is attracting the client and as well as customers. The not only design efficiently but also maintain professionalism. The main thing is as a group leader I feel great because they complete their responsibility in time with full of support.

On the other hand as a group leader I develop the full system using java swing language with help of Netbeans IDE software and connect with My SQL database connector. On the hardest part is connecting the database and check whether it works properly or not. But we successfully did it. Other two members also play a handy part two developing the system. Many times I am failed to develop the system. But my group members give me full support to solve the problem. As a group leader they are motivating factor for me.

Team leader is a software development role for a person who represents the business or end-users and is responsible for working with the user group to determine what features will be in the product release.

Today there are a whole host of people involved in creating software in most organizations. Modern software development generally has a huge number of specialized roles, and often includes a large number of programmers as well.

For me I would rather have a too small team that does more things for itself and needs fewer support people. I could not work in one of these many programmer turbocharged teams. It doesn't sound fun at all either. I don't know how to compare products built by 3 people taking time versus many people pumping out weekly.

I'd rather do a lot more things and take time to build a decent quality product and not spend a fortune. In the end it matters what is important to you and your company and what you can afford and how willing you are to organize a lot of people or else wait a little longer.

Today people push software out through automated pipelines and release once every week or two. At my job we are lucky to release every two months due to a horrid process despite all the people. If you have a huge number of people who individually are responsible for little but are part of a large organized pipeline with automated testing you can get it out the door really fast, but it costs a lot of money and I am not sure that the end result is necessarily all that good.

In the process of software design and development we try to maintain to create some variation for client and customers. Mainly we develop the software for university students and teachers. So university administration panel are the main client for our software. So, we play full focus on developing amazing efficient software for university student. To get more focus we concentrate on to get good sponsors. We manage a little survey program to test our system. Where we choose randomly some students and survey our system.

System design is the process of designing the elements of a system such as the architecture, modules and components, the different interfaces of those components and the data that goes through that system. System Analysis is the process that decomposes a system into its component pieces for the purpose of defining how well those components interact to accomplish the set requirements.

The purpose of the System Design process is to provide sufficient detailed data and information about the system and its system elements to enable the implementation consistent with architectural entities as defined in models and views of the system architecture.

We do not hire any kind of professional System Analysts and System Designers. Our group members play an important part to analyze and design the system.

6. Mandated Constraints:

List of mandated constraints:

1. **User Login:** A login is a set of credentials used to authenticate a user. Most often, these consist of a username and password. However, a login may include other information, such as a PIN number, passcode, or passphrase. Logins are used by websites, computer applications, and mobile apps. They are a security measure designed to prevent unauthorized access to confidential data. When a login fails (i.e, the username and password combination does not match a user account), the user is disallowed access. Many systems block users from even trying to log in after multiple failed login attempts. Here we design a generalize login page, which can use each admin and as well as administration panel.

2. **Admin and administration section:** Here generally two sections can derive. Administration section handle all university activates and up to date all information in regular basis. Any kind of update handles by administration section. Where admin panel can grab all information when he needed.

3. **Regular up to date information:** An update is new, improved, or fixed software, which replaces older versions of the same software. For example, updating your operating system brings it up-to-date with the latest drivers, system utilities, and security software. Updates are often provided by the software publisher free of additional charge. Software updates are important because they often include critical patches to security holes.

4. **Fee report:** Students must pay the total amount of their semester tuition and other fees on the day they register. Where fee report helps him to find out latest transaction details. Fee report produces all fee related information he/she needed. Students can easily print out those information. Also helps to find out how much dues he/she have.

5. **Counseling:** A crucial element in starting counseling is training to making decisions beforehand. Student Counseling means one who imparts advises to another; Counseling Services include psychological, mental or emotional, Education and Career counseling. At the University level, the idea is guiding and assisting students throughout their study at the institute, providing appropriate assistance at each stage of the student's development, growth or progress. Many people will, at some point in their lives, find themselves in the role of a counsellor without having a true understanding of the concept of counselling or what the role of the professional counselor entails.

6. **Database:** A database is an organized collection of data, generally stored and accessed electronically from a computer system. Where databases are more complex they are often developed using formal design and modeling techniques. SQL (pronounced "ess-que-el") stands for Structured Query Language. ... SQL statements are used to perform tasks such as update data on a database, or retrieve data from a database. Here we use this database in any of the project and HostName is "localhost", by default MySQL user is "root" and no password. If you have any problem, while creating a database using PHPMyAdmin in Localhost let me know by using below comment form. Creating new database on localhost using phpMyAdmin Make sure you start your web server before creating a database. In phpMyAdmin, click on Databases tab. Enter the name of new database that you want created. We also need to select the collation for the database.

7. **ER Diagram:** The ER or (Entity Relational Model) is a high-level conceptual data model diagram. Entity-Relation model is based on the notion of real-world entities and the relationship between them. Entity relationship diagram displays the relationships of entity set stored in a database. An Entity Relationship (ER) Diagram is a type of flowchart that illustrates how "entities" such as people, objects or concepts relate to each other within a system. ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research. Also known as ERDs or ER Models, they use a defined set of symbols such as rectangles, diamonds, ovals and connecting lines to depict the interconnectedness of entities, relationships and their attributes. They mirror grammatical structure, with entities as nouns and relationships as verbs. For example,
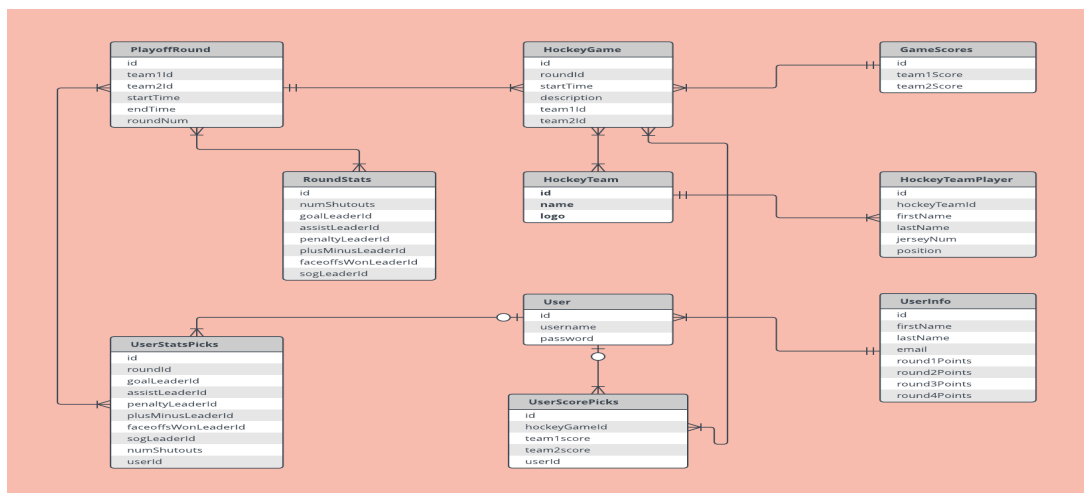

Figure 2: ER Diagram example.

ER diagrams are related to data structure diagrams (DSDs), which focus on the relationships of elements within entities instead of relationships between entities themselves. ER diagrams also are often used in conjunction with data flow diagrams (DFDs), which map out the flow of information for processes or systems. For example,
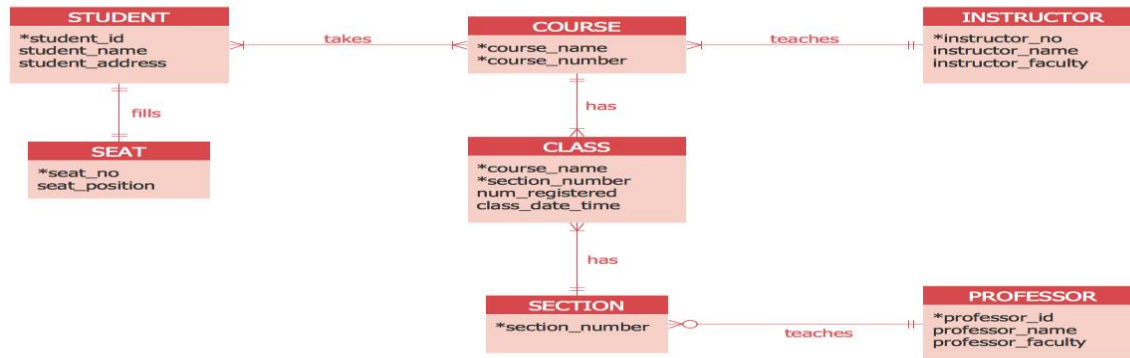

Figure 3: Student ER Diagram example.

7.   Naming Conventions and Definitions:

List of naming Convention and Definition:

1. **Student Counseling:** Student counseling means one who imparts advises to another; Counseling Services include psychological, mental or emotional, Education and Career counseling. As part of the career counseling process, students may be asked to research careers through either reading or interviews with professionals. Counseling, in technical terms, is the admission process which is the last step of a competitive examination. Herein the student gets to create and submit a list of choices. A choice list is a combination of a desired course in a particular institution, and this combination is called "academic program". Counseling Helps. Students seek counseling for a variety of reasons. Counselors support and empower students to develop their potential, improve mental health and wellness, and define and achieve academic and personal goals.
2. **Fee Script:** Where fee script helps him to find out latest transaction details. Fee script produces all fee related information he/she needed. Fee script refers charges made by a university for the administering of a course of study or an examination.
3. **Accountant:** Accountant may refer the finance section, where a section officer may up to date all student related information. Regular update tuition fee or other fee related information. An accountant is a practitioner of accounting or accountancy, which is the measurement, disclosure or provision of assurance about financial information that helps managers, investors, tax authorities and others make decisions about allocating resource.

8. Requirements:

Case Diagrams: A use case describes how a user uses a system to accomplish a particular goal. A use case diagram consists of the system, the related use cases and actors and relates these to each other to visualize. In below diagram arrow indicates the output and input. Where four section included and each section connected to each other.
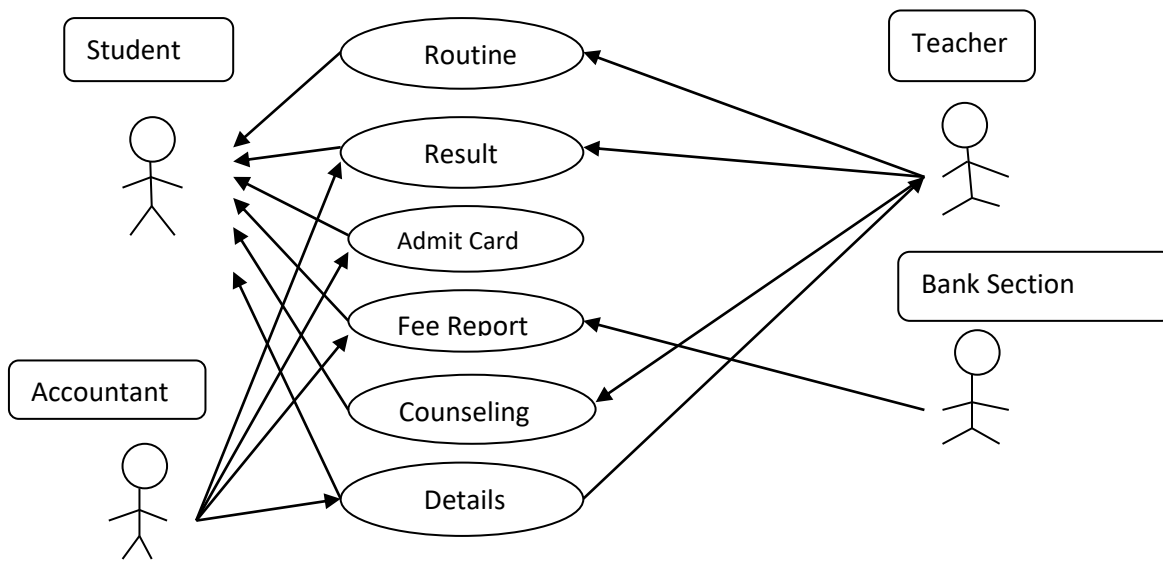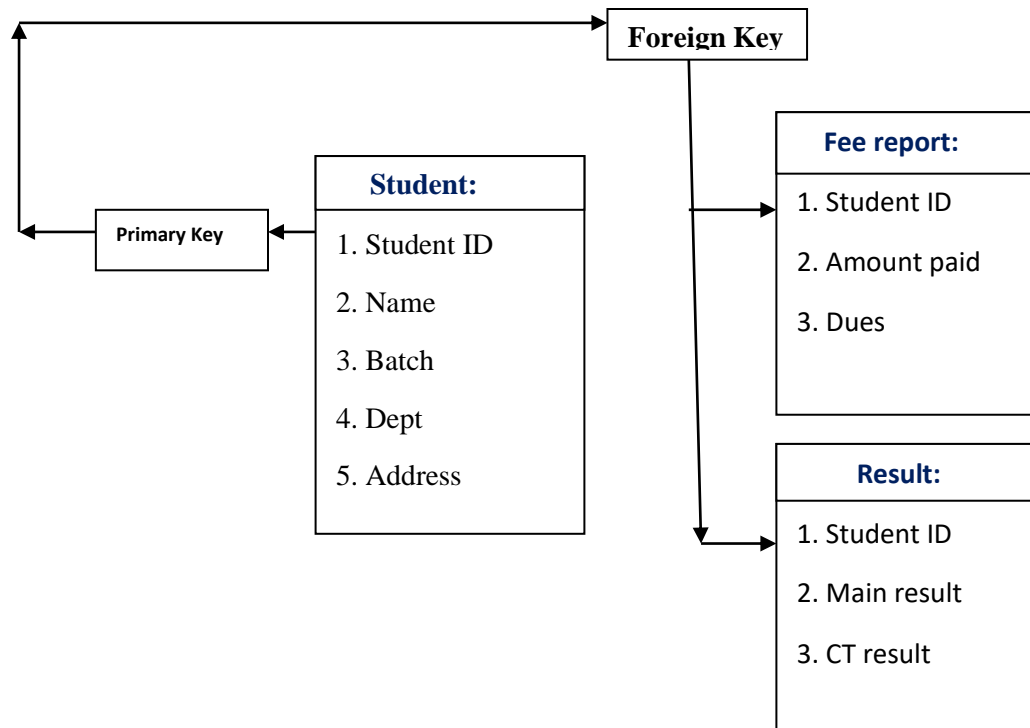

Figure 4: Case Diagram.

System ER Diagram:

Figure 5: ER Diagram.

Data Requirements:

List of data which produce desire output:

1. Student ID.
2. Department.
3. Batch.
4. Main result.
5. CT result.
6. Fee Update data.
7. Hall charge
8. Attendance.

Performance Requirement:

Software works smoothly and efficiently. Each time it produce desire outcome. Database efficiently handled. Not much unexpected run time produce. Each test case produces right output.

Environmental Requirements:

We design our full system in Netbeans IDE 8.2. Our project efficiently works in Netbeans environment. Java JDK 1.8 library include in the system. Also include My SQL connector library. It also efficiently works on system like eclipse or Intellij idea. We also added Xampp connector to connect localhost phpmyadmin. So Xampp must be compulsory to your system to connect database.

9. System Design:

Today, the software design phase has evolved from an ad-hoc, and sometimes overlooked phase, to an essential phase of the development life-cycle. Furthermore, the increasing complexity of today's systems has created a set of particular challenges that makes it hard for software engineers to meet the continuous customer demand for higher software quality. These challenges have prompted software engineers to pay closer attention to the design process to better understand, apply, and promulgate well known design principles, processes, and professional practices to overcome these challenges. Some of the major challenges include requirements volatility, design process, quality issues (e.g., performance, usability, security, etc.), distribute software development, efficient allocation of human resources to development tasks, limited budgets, unreasonable expectations and schedules, fast-changing technology, and accurate transformation from software requirement to a software product. A brief discussion of these challenges is presented below.

a) Requirements Volatility: A major reason for the complexity of software projects is the constant change of requirements. When designed properly, software can be modified or extended easily; however, when designed poor, modifying software can become overwhelming and lead to all sorts of complex problems.

b) The Process: Software Engineering is a process oriented field. Software processes allows engineers to organize the steps required to develop software solutions with schedule and cost constraints.

c) The Technology: Software is meant to be everywhere. From healthcare systems, education, defense, and everyday ubiquitous devices, software is required to operate on a massive and always evolving technology landscape. Besides the operating environment, the technology for designing and implementing today's software systems continues to evolve to provide improved capabilities. Examples of these include modeling languages and tools, programming languages, development environments, design patterns, and design strategies. As new technologies emerge, software engineers are required to assimilate and employ them all at the same time.

d) Test case: At first we face some problem to found appropriate test cases.

10. Current Software Architecture:

Software architecture refers to the fundamental structures of a software system and the discipline of creating such structures and systems. Each structure comprises software elements, relations among them, and properties of both elements and relations.

Here are my AAA principles on defining good current software architecture: Accountable: good software architecture makes each team hold accountability for its corresponding business objective. Amortized: good software architecture promote forward thinking, allows the upfront cost of infrastructure amortized.

We have proposed a suitable Architecture for our project. We produce suitable cost and suitable system for implementation. We produce pipeline based architecter that helps to achieve good runtime as well as data scheduling module.

Software architecture is a sort of plan of the system and is primordial for the understanding, the negotiation, and the communication between all the stakeholders (user-side, customer, management, etc.). It makes it easier to understand the whole system and makes the decision-making process more efficient.

We use freeware software module which is appropriate for all users. Software Architecture. Architecture serves as a blueprint for a system. It provides an abstraction to manage the system complexity and establish a communication and coordination mechanism among components. Selection of structural elements and their interfaces by which the system is composed.

A software architect at Microsoft and similar companies is someone who excels in 'big picture' thinking. They understand what's required to solve a problem in a variety of dimensions. They define needed sub-systems, how they should fit together, and how to make the system reliable and per formant.

Software architecture is about making fundamental structural choices that are costly to change once implemented. Software architecture choices include specific structural options from possibilities in the design of the software. For example, the systems that controlled the space shuttle launch vehicle had the requirement of being very fast and very reliable. Therefore, an appropriate real-time computing language would need to be chosen. Additionally, to satisfy the need for reliability the choice could be made to have multiple redundant and independently produced copies of the program, and to run these copies on independent hardware while cross-checking results.

Software architecture exhibits the following:

Multitude of stakeholders: software systems have to cater to a variety of stakeholders such as business managers, owners, users, and operators. These stakeholders all have their own concerns with respect to the system. Balancing these concerns and demonstrating how they are addressed is part of designing the system. This implies that architecture involves dealing with a broad variety of concerns and stakeholders, and has a multidisciplinary nature.

Separation of concerns: the established way for architects to reduce complexity is to separate the concerns that drive the design. Architecture documentation shows that all stakeholder concerns are addressed by modeling and describing the architecture from separate points of view associated with the various stakeholder concerns. These separate descriptions are called architectural views (see for example the 4+1 Architectural View Model).

Quality-driven: classic software design approaches (e.g. Jackson Structured Programming) were driven by required functionality and the flow of data through the system, but the current insight:26–28 is that the architecture of a software system is more closely related to its quality attributes such as fault-tolerance, backward compatibility, extensibility, reliability, maintainability, availability, security, usability, and other such –ilities. Stakeholder concerns often translate into requirements on these quality attributes, which are variously called non-functional requirements, extra-functional requirements, behavioral requirements, or quality attribute requirements.

Recurring styles: like building architecture, the software architecture discipline has developed standard ways to address recurring concerns. These "standard ways" are called by various names at various levels of abstraction. Common terms for recurring solutions are architectural style,[11]:273–277 tactic,[4]:70–72 reference architecture[13][14] and architectural pattern.[4]:203–205

Conceptual integrity: a term introduced by Fred Brooks in The Mythical Man-Month to denote the idea that the architecture of a software system represents an overall vision of what it should do and how it should do it. This vision should be separated from its implementation. The architect assumes the role of "keeper of the vision", making sure that additions to the system are in line with the architecture, hence preserving conceptual integrity.[15]:41–50

Cognitive constraints: an observation first made in a 1967 paper by computer programmer Melvin Conway that organizations which design systems are constrained to produce designs which are copies of the communication structures of these organizations. As with conceptual integrity, it was Fred Brooks who introduced it to a wider audience when he cited the paper and the idea in his elegant classic *The Mythical Man-Month*, calling it "Conway's Law."

We followed the normal method to design our architecture. We follow the current methodology to design whole process.

11. Proposed Software Architecture:

A software architect needs to interact with clients, product managers, and developers in order to envision, model and provide initial models and designs that can be built. This **role** also may cover the meeting potential or current customers.

The software architecture of a program or computing system is the structure or structures of the system, which comprise software elements, the externally visible properties of those elements, and the relationships among them.

Here, we apply that architecture module to implement our system. Our current software Architecture given
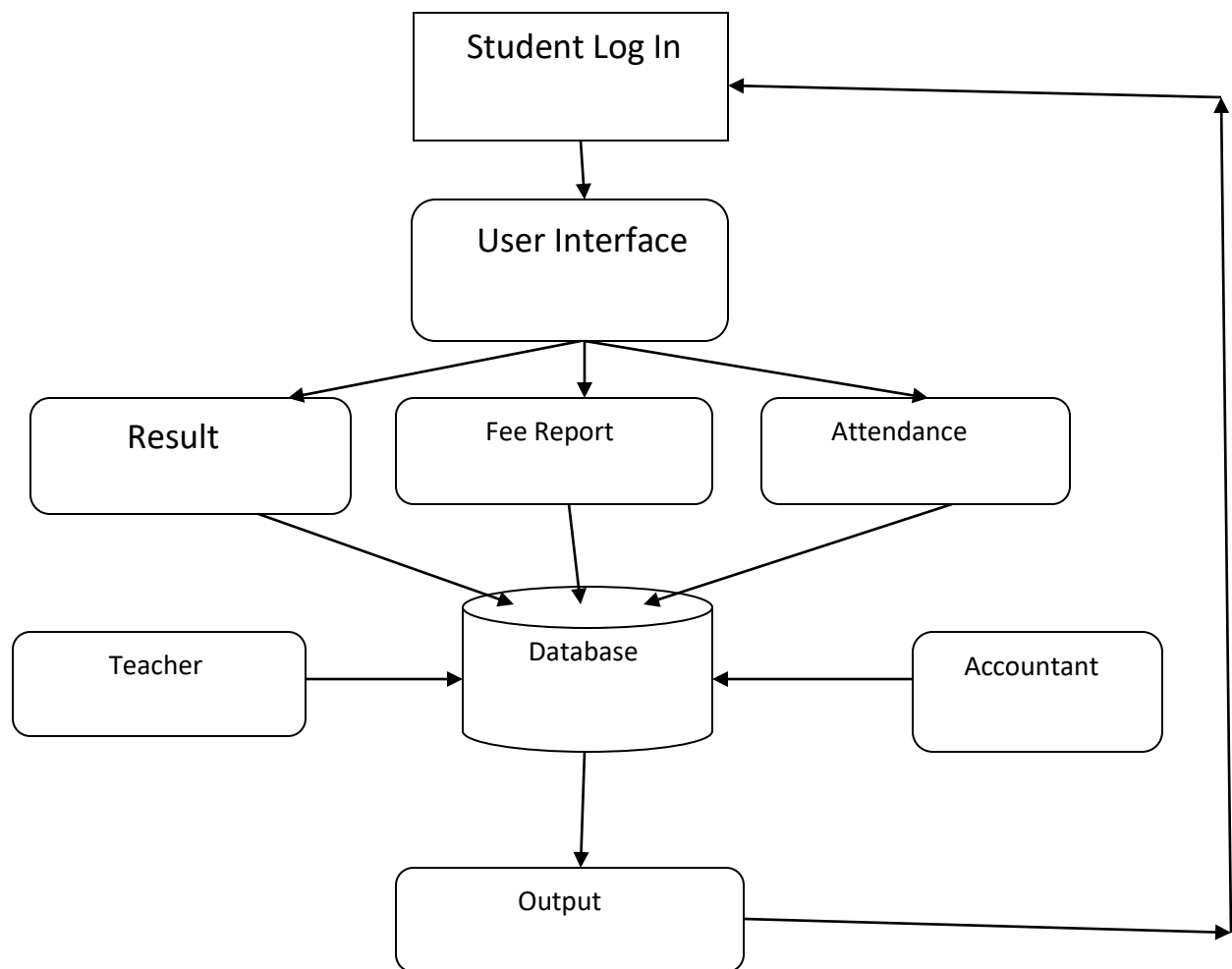
Below with an sample,

Figure 6: Proposed Software Architecture

Here we design our architecture in Indesign and Autocad 2008 software. We face reliable system to implement it. Then we implement it in Jframe module.

12. Detailed Features:

All feature in our project:

a) **Login Page:** A login is a fixed of credentials used to authenticate a consumer. Most regularly, these include a username and password. However, a login may also include other records, along with a PIN range, passcode, or passphrase. Logins are utilized by web sites, laptop programs, and mobile apps. They are a protection measure designed to save you unauthorized access to exclusive statistics. Many systems block users from even looking to log in after multiple failed login attempts. Here we design a generalize login web page, which can use every admin and in addition to administration panel.

b) **Student:** Where only student can access this page. Student makes sure all information is right. Only Student can handle this database. Student cannot update edit or delete data.

c) **Teacher:** Where only teacher can handle this data. Only teacher can handle this data. Teacher can update student attendance, result etc. Also update regular notice.

d) **Bank section:** Bank can only handle this page. Bank regular update regular student transaction. Bank operates all data and data security highly strong there.

e) **Student Finance:** Student Finance Section handle student finance data. Finance section can insert latest student data also update student data.

f) **Fee report:** Student can download all fee related report. Bank section and finance section can update fee report in regular basic.

g) **Result:** Student collect all type of result as well as check rank position in result page. Student finance submit all type of result in each semester end.

h) **Routine:** Techer update routine in regular ways. Student check his/her routine regular ways.

i) **Payment details:** Bank section update all payment details regular basis. Student can print payment script when he/she needed.

j) **Hall Payment**: Hall charge update by student finance and transaction details produce by bank section.

k) **Student Registration:** Student section update new student data when he/she admitted.

l) **Admit Card:** Eligible student can collect admit card in exam time. Here student finance can upload admit card in exam time.

m) **Student Delete:** Here student finance deletes passed student data.

n) **Counseling:** At the University level, the idea is guiding and assisting students throughout their study at the institute, providing appropriate assistance at each stage of the student's development, growth or progress. Many people will, at some point in their lives, find themselves in the role of a counsellor without having a true understanding of the concept of counselling or what the role of the professional counselor entails. A crucial element in starting counseling is training to making decisions beforehand. Student Counseling means one who imparts advises to another; Counseling Services include psychological, mental or emotional, Education and Career counseling.

13. User Interface:

List of user interface:

a) **Login Page:** Login page is the starting page to my system. Where admin put username and password to login next page.

Figure 7: Login page.

b) **Student page:** Student only accesses this section. Student check fee report, admit card other information. Also download some information. Student cannot edit his/her personal information. Student can download admit card in exam time.

Figure 8: Student.

c) **Teacher page:** Teacher page only access teacher. Teacher upload all the important information related to his/her batch. Teacher can upload regular notice and monitor activities.
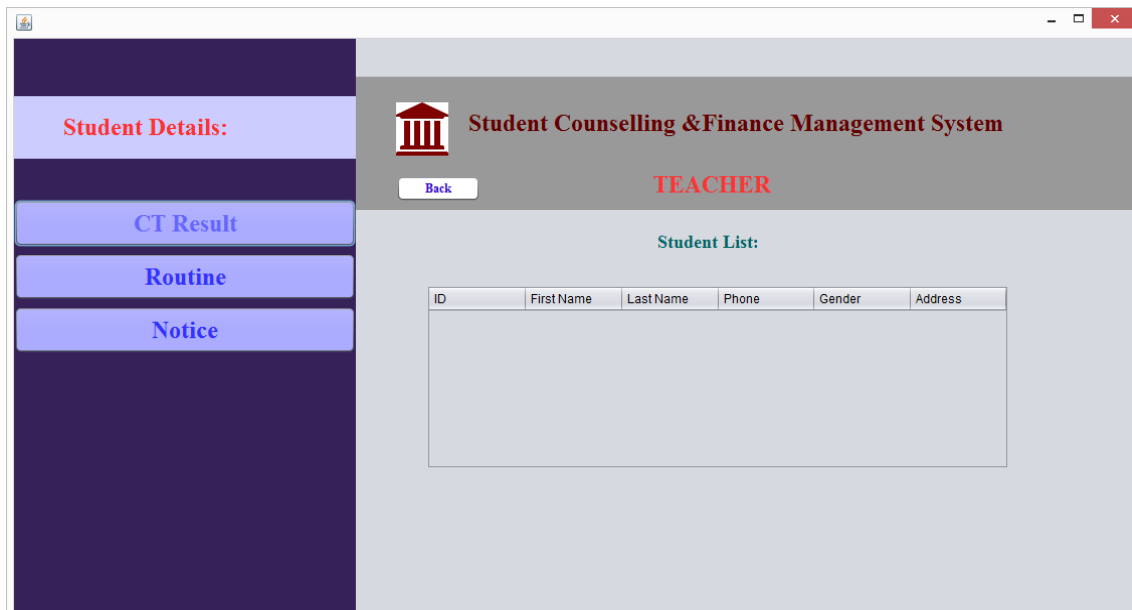
Figure 9: Teacher.

d) **Accountant page:** Accountant page only access finance section officer. Finance section officer update newly admitted student information. Submit admit card and also update and delete student information.
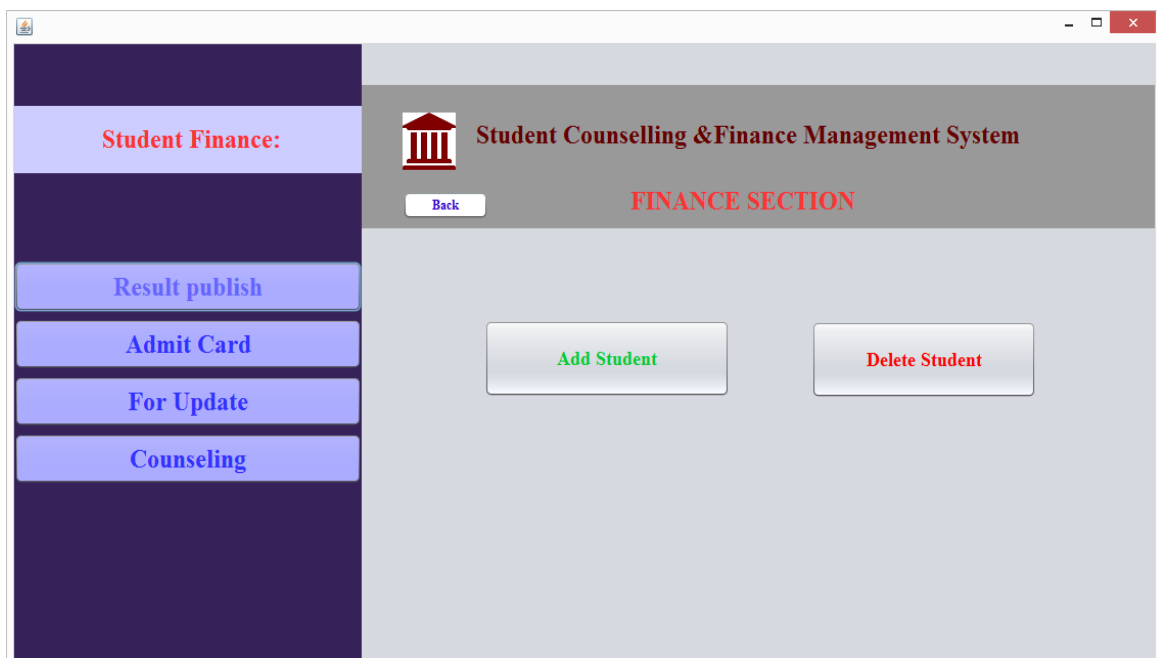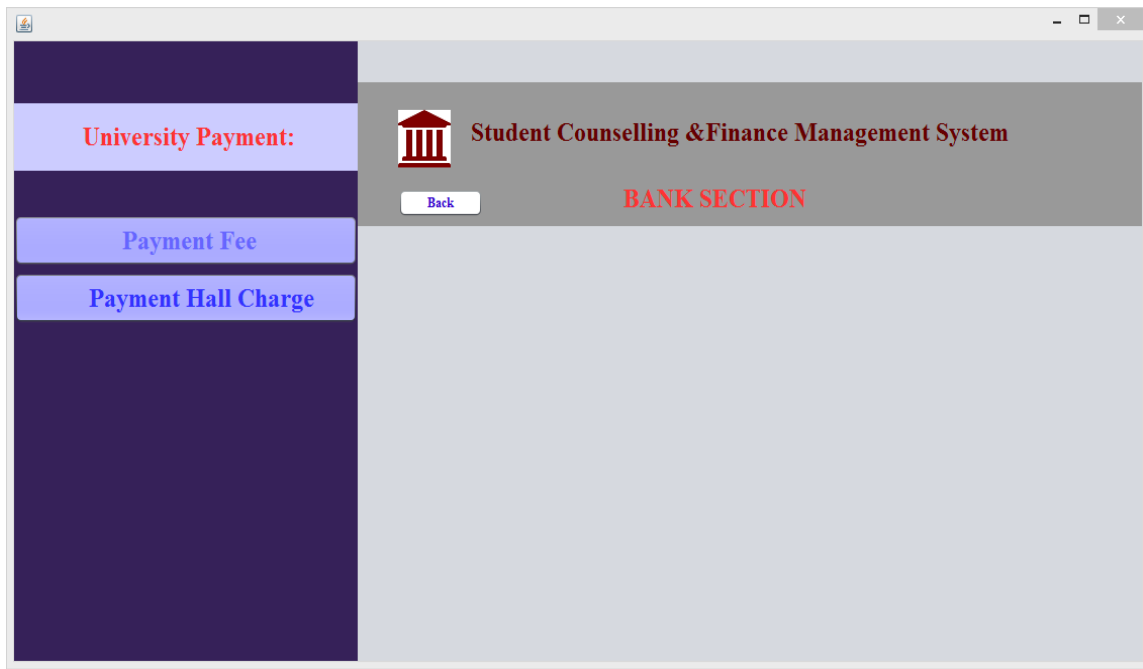
Figure 10: Finance Section.

e) **Bank Section page:** Only bank handle this page. Bank regular update transaction information.

Figure 11: Bank Section.

f) **Student Registration:** Student finance handles this page. Student Finance updates new student information.

Figure 12: New Student.

g) Student counseling page: Teacher gives regular update to monitoring in this page.

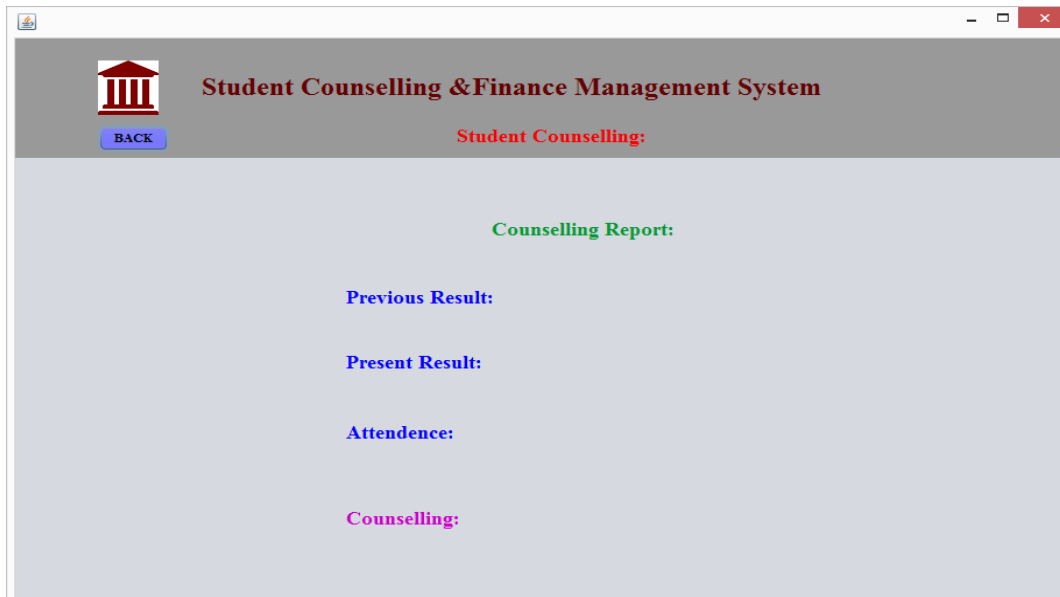**Figure 13: Counseling.**
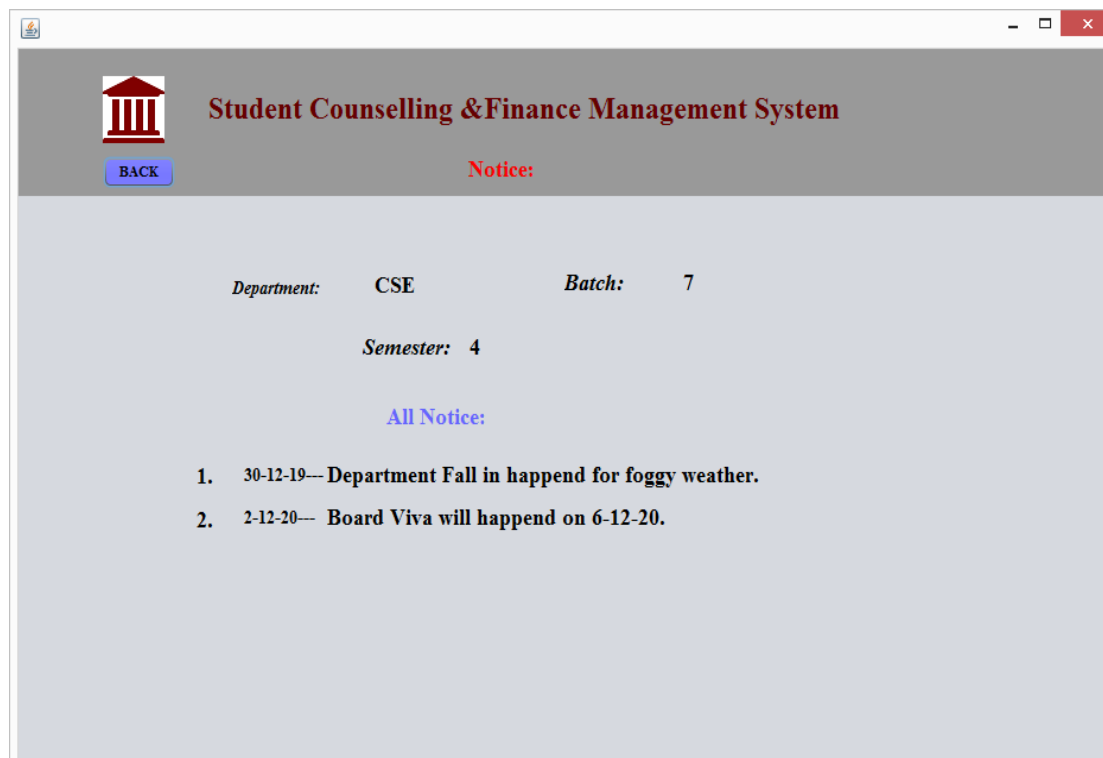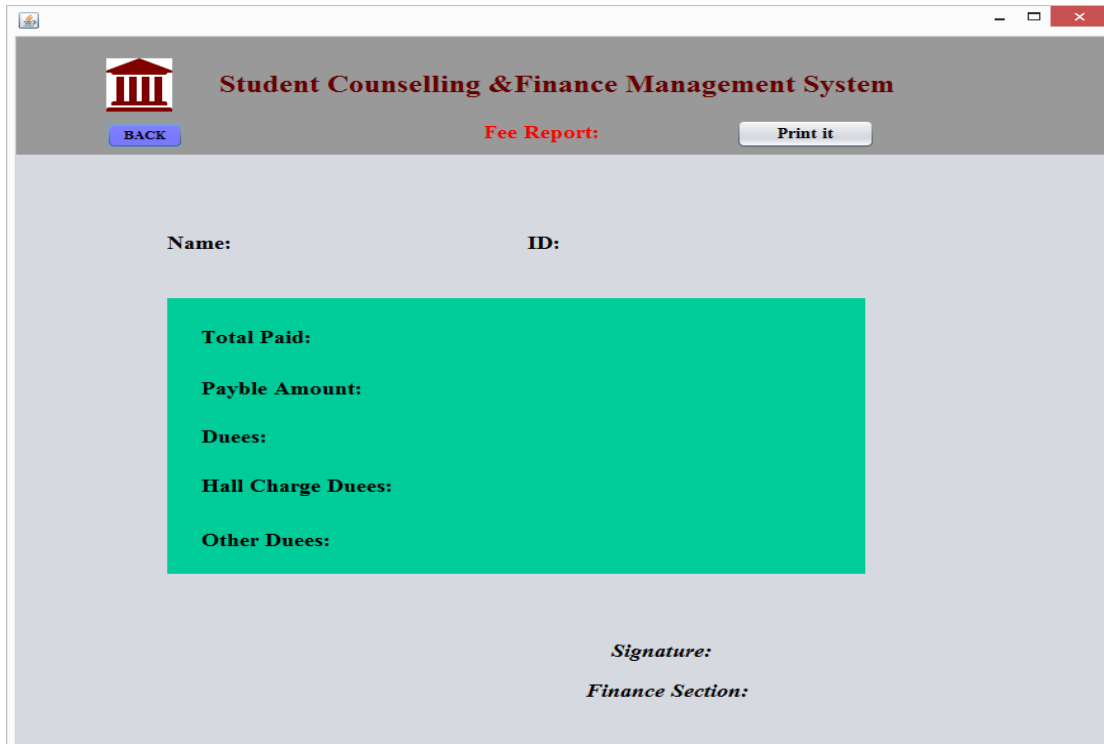
h) Notice page: Here Student Finance upload all notice.

Figure 14: Notice.

i) **Fee Report:** Student Finance upload fee report.
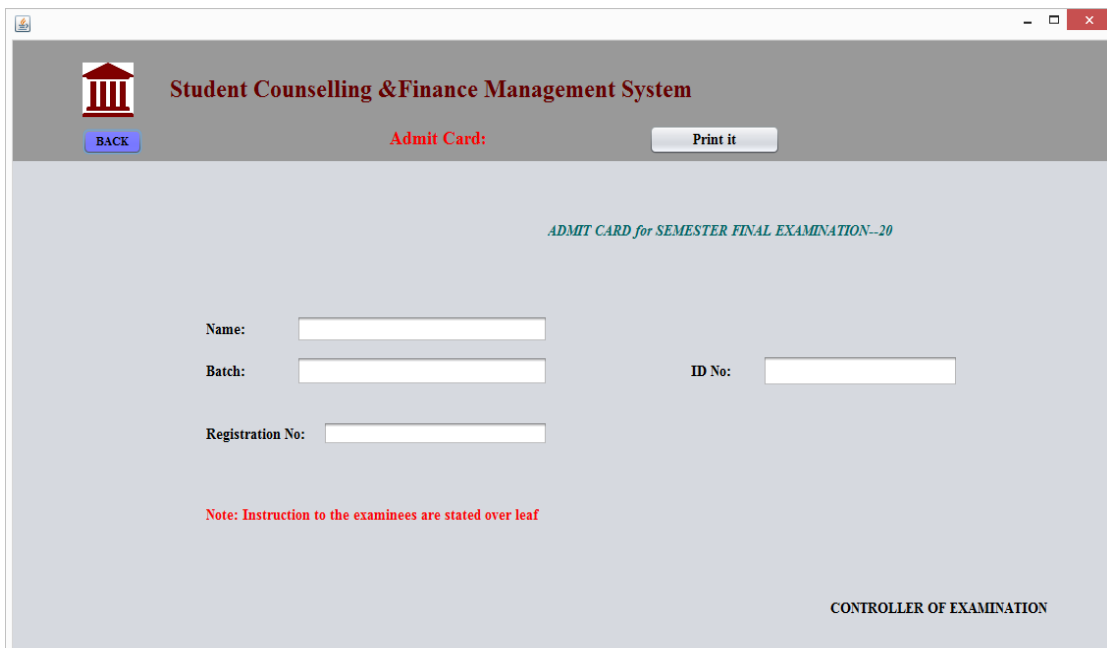
Figure 15: Fee report.

j) **Admit Card:** Student collect Admit card in exam days.

Figure 16: Admit Card.

14. Testing Approaches:

Alpha Testing:

Alpha Testing is a type of acceptance testing; performed to identify all possible issues/bugs before releasing the product to everyday users or the public. The focus of this testing is to simulate real users by using Black Box and White Box *techniques*. The aim is to carry out the tasks that a typical user might perform.

Alpha testing is testing of an application when development is about to complete. Minor design changes can still be made as a result of alpha testing. Developers observe the users and note problems. We successfully completed alpha testing and there are no bug found. No unexpected runtime found. We efficiently build our system.

Beta Testing:

Beta Testing is the second phase of Software Testing in which a sampling of the intended audience tries the product out. Beta Testing of a product is performed by real users of the software application in a real environment. It allows the real customer an opportunity to provide inputs into the design, functionality, and usability of a product.

We arrange a survey program to perform beta test. We successfully did that. Every time it produce right outcome.

15. Test Cases Design and Result Evaluation :

We created different test cases to make alpha test. But we successfully passed all test cases. Sample one of the test cases we have tested.

Test Procedure	Select right user name.
	Generate password.
	Click login button.
Test Data	Generate new student all information. Like ID: 18104001, F Name: Eusuf, L Name: Abdullah, Address: Rajshahi etc.
Expected Result	Console print "save data". And data added in database.

Actual Result	Save data. Successfully added.
Status	Passed
Remarks	This is a sample test case.
Created By	Momenul Haque,
Date of Creation	01/12/2019
Executed By	Monenul Haque
Date of Execution	14/12/2019
Test Environment	OS: Windows 10 Browser: Chrome Software: Netbeans.

Table 2: Testing Case.

16. Risks:

Software risk encompasses the probability of occurrence for uncertain events and their potential for loss within an organization. Risk management has become an important component of software development as organizations continue to implement more applications across a multiple technology, multi-tiered environment.

We did not use any kind of copy write product or image or recording or any kind of template. Our idea is totally unique and totally different approach from other software. So our software is totally risk free and we don't use any kind of limited data. So, we are also risk free from that point of view too.

After launching the product there will be some problem to face. People can claim data collision. Where try to use strong database to handle data collision.

Most organizations don't have a process to directly address the software risk that results from active custom software development. The traditional approach is to rely on testing – regression tests, system integration tests, performance tests and user integration tests.

Many organizations suffer from failed systems even when a vast amount of time and money are dedicated to functional testing methods. The functional approach does identify approximately 90% of the weaknesses that cause system failures; however, it does not account for less apparent issues capable of affecting response times, infrastructure stability, and component functionality issues between application

layers. Software risk analysis solutions take testing one step further by identifying unknown weaknesses resulting from high severity engineering flaws in multi-tiered systems.

Analysis solutions designed to locate these issues before execution provide an opportunity to assess potential occurrences and prevent problems before they blatantly become apparent.

In a complex technology environment, it is not enough to deal with problems as they become apparent. Prevention is key to experiencing flawless performance and getting the most out of systems, applications, and your development team. Exposing the not so obvious weaknesses in an infrastructure by using dependable software risk analysis solutions ensures the proper identification of:

1. System Vulnerabilities
2. Compliance Issues
3. Stability Problems
4. Efficiency Weaknesses
5. Performance Degradation
6. Security Flaws

We handle software security and data hazard approach.

17. Costs:

Software cost estimation is the process of predicting the effort required to develop a software system. As a number of these models rely on a software size estimate as input, we first provide an overview of common size metrics. We then highlight the cost estimation models that have been proposed and used successfully.

Free software is software that can be freely used, modified, and redistributed with only one restriction: any redistributed version of the software must be distributed with the original terms of free use, modification, and distribution (known as copy left). Our software is like free software. No external cost needed. No Internal cost needed. No maintenance cost needed.

In production, research, retail, and accounting, a cost is the value of money that has been used up to produce something or deliver a service, and hence is not available for use anymore. business, the cost may be one of acquisition, in which case the amount of money expended to acquire it is counted as cost.

18. Time Table:

We complete our project within 1.5 month. We manage our time table several days. Here software development process is lengthy one. We maintain our time table according to the work overload.

SL NO:	Work Management:	Days:	Time: (per day)
1.	Software Planning	7-8 days	2 hours
2.	Software Designing	8-9 days	2.5 hours
3.	Environment Setup	1 day	3.5 hours
4.	Software Development	9-10 days	2 hours
5.	Code Generate	4-5 days	3 hours
6.	Software System Designing	3-4 days	2 hours
7.	Software Database Connect	2-3 days	2.5 hours
8.	Software Testing Approach	1 days	2 hours
9.	Software Survey	1.5 days	1 hours

Table 3: Time Table.

19. Discussion:

In the process of implementation we learnt new experience. We learnt different approach of making software. We experienced how to handle database. We learnt software development environment.

_____

_____

_____