Student information system

Profession, Student

ACKNOWLEDGEMENT First of all we would like to thank program director Mr. Satya Bahadur Shrestha and our subjectteacherMr. Keshav Poudel for providing us with an opportunity to do our project work on " Student Information System" as part of our syllabus. We are heartily indebted to our subject teacher Mr. Keshav Poudel for his constant support and guidance throughout this project. It was his valuable suggestions that helped us to cope up with emerging obstacles during the development of this project. Group Members Ashish Shahi Sanjay Maharjan Sulashyana Shrestha TABLE OF CONTENT

INTRODUCTION Introduction about the Project Nowadaystechnologyhas reached its highest level and is in the phase of developing more with the new innovations. Student's Information System (SIS) is an important aspect of any educational institute. The information about the student's overall performance is important as to generate student's progress report.

Still different colleges record student's performance report on the paper. Although records can be recorded on the paper manually, but this process is time consuming activity. With the advancement of technology, computerized techniques are more useful and consume less time compared to paper work. Hence computerized techniques should be used in colleges to record and access student's data which is more effective and efficient to use. The Student Information System is aimed to computerize the record keeping system as to make the job easier for the college administrators. 1. 2 Objectives

The main objective of this project is to develop software that helps in easy access of the information about the student, their overall performance in one click. Our system is focused to make a web based SIS which makes the work of measuring student's performance easier and efficient. The main intention is to provide a system with suitable efficiency and accuracy while maintaining its main objective to access student's performance report. * Ensures that end users have input the design process. * Accomplish projectgoalsand objective within defined budget and time parameters. To implement a computer based program as to make the work effective and efficient. Scope of the Project As discussed above this project is based on developing software that is capable of finding student's performance report. The system will be able to show student's performance report. This system will help to reduce the effort to record the entire student's performance data in files. This system will save time and increase efficiency. This project is purely based on the research and along with the study and requirement of this project inacademicfield. 2. SYSTEM STUDY 2. 1 Existing System

The existing system of managing SIS in the college is based on the file recording system. The recording method of this system is totally based on file system and the data about the students are recorded in a file and to search the performance graph about a student the files are to be searched according to the student's semester. 2. 2 Disadvantage The existing system is very time consuming and is not effective as it is based on the file recording system. To search one student's report all the existing files are to be searched. Modification and updating process is hazard, which is time consuming and inefficient. . 3 Proposed System The system we are about to make is a web based system dealing with the Student Information System. Particularly it is based on the activities related to the recording and accessing the student's performance report. The proposed system is a computerized system which will be much more effective than the filing system. 2. 4 Advantage of the Proposed System As the system is a computerized system, it will reduce the effort to record the student's progress report on the files. It will also save time in recording, managing and accessing the student's data. 2. 5 Problem Definition and Description

In any academic institute student's information is an important aspect as it is related to the institute and the student studying in it. The student's information about their overall performance in their academiccareeris essential and it is to be recorded in a proper way, so that the necessary information can be access when required. Our system Student Information System (SIS) is focused make a computerized system that records the student's performance information. The main intention is to provide a system with suitable efficiency and accuracy while recording, managing and

accessing the recorded data along with appropriate speed. SYSTEM ANALYSIS 3. 1 Packages Selected The package used in the development of our system is Java Net Bin. 3. 2 Resources Required 3. 2. 1 Hardware Requirement Hardware: PC compatible with a Intel Pentium- III processor RAM: 1-GB RAM Hard disk: 20-GB 3. 2. 2 Software Requirement Operating System: Windows 2000 Professional Software: jdk 1. 7. 0_02, jre 7 Front End: Java Back End: MySQL 3. 3 Feasibility Study We made our estimation on whether the system is able to satisfy the user's need using the software/hardware technologies being used in the developing the system.

We made our study on the basis of cost effectiveness of the proposed system from the business point of view. Considering the time and cost the feasibility study were made and further detailed analysis was done. The study is based on the following: * Whether the system contributed to the main objective of the project * Whether the system can be engineered using current technology and within budget and schedule constraints. 3. 3. 1 Operational feasibility We made our study on the basis of the operational factors of the system. Our system is feasible on the operationalenvironmentas well.

The users who are going to operate on this system will able to understand the system and can use it easily by some training. 3. 3. 2 Technical feasibility The hardware and software used in this system are easily available in the current technical environment so it is easy to use and feasible with our system. Due to technical feasibility further changes can be performed easily. 3. 3. 3 Economic Feasibility Our system is economically feasible as it is under our budgetary constraints. This system is cost effective because * The tools

and technologies used for this system are free for non commercial use. This system provides quality of information and the ease of access to the information required. The system can prove effective and efficient and can establish itself as valuable assets for the one who implements it. 3. 4 Functional Requirement The system provides a web base where a large number of pages are crawled for a particular domain and are stored. The statement of services that our system provides as the systems functional requirements are as follows * The administrator would be able to insert, delete, modify and update the records based on student's the performance. The system would be able to display all the recorded performance information about the student. 3. 5 Non-Functional Requirements * Usability Our system will provide the web interface to the end users with the optimum user- friendliness so that they can get accustomed while operating the system. * Reliability The system developed will be able to meet the expectations of the user as well as, it would be reliable to matchup with the existing products * Performance Our system shall return the matched documents from its web base within considerable amount of time. Security Our system provides a web interface, so in order to make the system secure, any user needs to get authenticated. This would help the system be free from spamming and other kinds of attacks. 3. 6 Project scheduling | Gantt Chart| | | | | Days| 1-5 days| 6-10 days| 11-15 days| 16-20 days| 21-25 days| 26-30 days| | | | | | | | Activities| | | | | | | Planning| | | | | | Feasibility study| | | | | | | System analysis| | | | | | | System design| | | | | | | Coding| | | | | | | Testing| | | | | | | |

Implementation| | | | | | | The above Gantt chart represents the activities conducted by our team members and the days required to complete all the activities. The activities performed were planning which required five days, feasibility study which required ten days from day 6 to day 15, database design, and interface design required ten days from day 11 to day 20, coding would require ten days, testing would require five days from days and lastly implementation would also require five days from days.

As this project is based on the design of the Student Information System, coding system testing and implementation was not conducted but duration was separated for these activities as well. 4. SYSTEM DESIGN 4. 1 System Design 4. 2 Design Description 4. 2. 1 Use Case The use case defines a goal oriented set of interaction between external actors and the system under consideration. Actors are parties outside the system that interact with the system. In SIS actors are the users. Use case diagram of Student Information System Insert records Delete records

Update records Search required record View records record Administrator User 4. 2. 2 Sequence diagram for " Student Information System" 2. Accept password 1. Enter Password Display System Information System Login System 3. System Access 4. Display Record 5. Display require information to the user User Fig: Sequence Diagram for Student Information System 4. 2. 3 Architectural Process Diagram Fail Pass Add Delete Edit Edit Delete Submit Exit Report Action Exit Operation Performance Info Student Info Student Informationon 4. 3 Entity Table: Table name: Student

Attributes| Data type| Length| Constraints| S_Id| Integer| 20| Primary Key| S_name| Varchar| 20| -| S_semester| Integer| 20| -| S_phone| Integer| 20| -|

Table name: Result Attributes| Data type| Length| Constraints| S_name| Varchar| 20| -| S_marks| Integer| 20| -| Table name: Login Attributes| Data type| Length| Constraints| Username| Varchar| 20| -| Password| Varchar| 20| -| Time| Varchar| 20| -| Table name: Administrator Attributes| Data type| Length| Constraints| Admin_Id| Integer| 20| Primary key| Admin_name| Varchar| 20| -| 4. 4 Entity Diagram

Student S_name S_Id S_phone S_semester Fig 4. 3. 1. Entity diagram for student Result S_name Marks Fig 4. 3. 2. Entity diagram for result Username Password Time Login Fig 4. 3. 3. Entity diagram for login Admin_Id Admin_name Admin Fig 4. 3. 4. Entity diagram for Admin 4. 4. 1 ER-Diagram of " Student Information System" Login Admin Student Result Attend Performs Records Performs 4. 5 Context Diagram: Update info Marks Student details Administrator Student information system Student Id Semester result Student Login details 5. TESTING 5. 1 Testing

Our system has been tested throughout the design of the system. As testing is important part of the system development process, we have tested the system throughout the design phase rather than testing the system after the complete development. The following tests are to be done during the system development 5. 1. 1. Unit Testing We will have to test each and every small units of our system. The source code of our system would be divided into modules, which in turn would be divided into small parts called units having their specific behavior.

From the unit testing we will come to know if the combination of the units leads to the fulfillment of the software requirements or not. 5. 1. 2. Integration Testing In this testing we will combine the modules and test it as

a group. Modules would be typically code modules, individual applications, client server application in the network, etc. Integration testing follows unit testing and precedes system testing. 5. 1. 3. System testing As there are the possibilities of different unexpected errors to occur after integration so the system testing would be done.

The system would be tested to check whether it met its requirements and ensure the known and predictable results. System testing would be based on the process description, emphasizing pre-driven process links and integration points. 6. CONCLUSION 6. 1 Summary of the Project Managing student's performance information is a very important activity of any educational institute. This project is aimed to develop a computerized Student Information System that helps to make recording and accessing the information easy and effective. Subsequent numbers of lectures were reviewed before starting the project.

Then further steps were taken such as system study, system's feasibility and many others considerations. Though the system needs some improvements and future enhancement is also a challenging task, the overall outcome of the project is expected in its design considerations. Enormous knowledge has been gained throughout the project. The importances of background research, system study, requirement analysis different methodologies were learnt. Also implementing techniques, testing have been exercised. Thus we hope our system provides appropriate nformation to the users according to the chosen service and would help to reduce unnecessary time managing the repots on the paper. 6. 2 Future Work Our Student Information System has many aspects that can be upgraded with future works. There are

different future possibilities that the system can enhance its features in terms of the technology and design. In order to make even more effective and efficient use of the system the user interface can be developed in a more interactive way and technological changes can be made. As per the time, knowledge and necessity the system scan be made better in future.