TBW Assignment 1

21K-3153

Themes:

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| **Theme** | **Source 1** | **Source 5a** | **Source 5b** | **Source 7** |
| **Definition** | This project will implement an information system to retrieve students’ general data and thus, enable Dean, Deputy Dean (Academic), Head of Program and Academic Advisors to access students’ academic status and study plan which will indicate the courses they must undertake next during the whole duration of their study.  This system enables the calculation of student GPA and CGPA. | A Student Information System (SIS) is basically a software solution that enables educational institutions to digitize and consequently manage student information more efficiently. More specifically, it’s a system that allows educational institutions of all stripes to make all student information — that was previously stored in legacy systems — available online. | The Student Information System is a resource that offers a self-service solution for students to get their administrative tstasks done in one place.  Equally, it can support faculty and staff by helping to simplify and integrate work processes. | An SIS can automate many administrative tasks, from registration and enrollment to financial aid and student accounts receivable. |

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| **Theme** | **Source 1** | **Source 2** | **Source 3** |
| **Technologies and Methodologies** | The interfaces and its coding have been created using Visual Basic 6.0, while the database were stored in Microsoft Access 2000. | . The research followed a design science approach, including surveys to argue for the relevance of the system and used evaluations of different versions of the system using a mobile system acceptance model (MSAM).  **We have developed a system based on the concept of web services which is implemented on Android mobile application as well as on PC that communicates with the database residing on a remote server.** | So here we are using this HTML to make our web pages more effective as well as efficient and to make our web pages dynamic, we are using Java script. CSS gives the option of selecting various style schemes and rules according to the requirements and it also allows the same HTML document to be presented in more than one varying style. Javascript, PHP, SQL |

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| **Theme** | **Source 1** | **Source 2** | **Source 5a** | **Source 5b** |
| **Detailed Usage** | This information is important as students must always maintain their CGPA *z* 2.00 so that they are not under Probation. For those in Probation for two consecutive semesters, getting CGPA < 2.00 will mean that they will be dismissed. | By reducing the problems, we create a web based application for managing the admission of the students. This is an online system which includes an admission form and also generates the fee payment vouchers. It also allows scanning and uploading of students’ documents and saves these documents by assigning a permanent unique. | Registering students to classes, forming [timetables](https://www.dreamclass.io/2020/upgraded-timetable-management/), tracking [attendance](https://www.dreamclass.io/2021/monitor-attendance-with-a-student-attendance-management-system/) and storing performance records — such as [grades](https://www.dreamclass.io/2021/create-your-school-gradebook-using-dreamclass/) and [assessments](https://www.dreamclass.io/2021/student-assessment-with-a-student-academic-management-system/) — are only a subset of the tasks and processes that can be facilitated with such a system. | Since the SIS can be used as a digital dropbox, it's ideal for parents who want to access information on their child, communicate with the school, and even make payments. |

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| **Theme** | **Source 3** | **Source 4** | **Source 7** | **Source 5a** | **Source 5b** | **Source 2** |
| **Purpose and Benefits** | The purpose is to design a college website which contains up to date information of the college. That should improve efficiency of college record management.  *B. OBJECTIVES*  providing the online interface for students, faculty etc.  increasing the efficiency of college record management.  Decrease time required to access and deliver student records.  to make the system more secure.  Decrease time spent on non-value added tasks.  . | This paper assists in automating the existing manual system. This is a paperless work. It can be monitored and controlled remotely. It reduces the man power required. It provides accurate information always. Malpractice can be reduced. All years together gathered information can be saved and can be accessed at any time. The data which is stored in the repository helps in taking intelligent decisions by the management.  All the stakeholders, faculty and management can get the required information without delay. This system is essential in the colleges/hostels and universities. | * **Streamlined administrative tasks** * **Improved data accuracy:** * **Enhanced communication with students** * **Improved student success and retention** * **Improved institutional performance:** | In doing so, [using the system], they manage to automate related administrative and academic processes, thus making them much more efficient. On top of that, they also succeed in supporting students’ needs — both inside and outside the classroom — in the best possible way. | The ability to standardize data formats between divisions means a more unified and clear data readout at a glance, ultimately saving time. Data integrity, privacy, and security can all be protected in an open-access environment. | Its purpose is to provide more user-centric information services to students. |

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| **Theme** | **Source 6** |
| **Categories** | * **On-premises:** This traditional approach involves installing the software on the institution's servers and maintaining the system in-house. It requires significant IT resources and expertise to manage, including hardware and software installation, upgrades, and maintenance. * **Cloud-hosted:** This type of SIS involves hosting the software on a remote server and accessing it through the internet. This essentially means using a web application that users can access from anywhere they have an internet connection instead of using a desktop app or intranet-based app. * **SaaS (Software-as-a-Service):** This type of cloud-hosted solution allows institutions to access the SIS software through the internet. The software is hosted and maintained by the vendor, and institutions pay for the services they need. SaaS SIS vendors also provide regular software updates and maintenance. |

The Student Information System (SIS) is a large-scale software meant to digitize previously analog student information [5a], calculate GPAs and CGPAs [1], automate administrative tasks [7] and simplify work processes [5b]. With interfaces built on Visual Basic 6.0 [1], web pages designed in HTML & CSS [3] and a database stored in Microsoft Access 2000 [1], the SIS is available on both PC and Android devices [2].

The software has multiple functionalities including registering students to classes, forming timetables, storing grades [5a], providing academic data to parents [5b], scanning and uniquely identifying documents [2] and many more.

Meant to provide faster access to student records, an easy-to-use online interface and increased security [3], the SIS reduces manpower by automating administrative and academic processes[5a], saves time by standardizing data formats to make data more readable[5b] and provides clarity by making more information services accessible to students.

Moreover, an automated, online system ensures that correct information is available to faculty, reducing the chance of errors during record keeping [7]. The software’s advanced capabilities make it possible to track each student’s academic progress, including their retention rate to provide the appropriate guidance when necessary [7]. All in all, the SIS brings numerous benefits to both the institution and its members, whether students or faculty.

This software is currently being developed even further as SaaS for higher level institutions at varying degrees of development. The traditional, resource intensive approach involves installing it in the institution’s servers, maintained by the institution itself. Cloud-hosted and SaaS models move away from this, with Cloud-hosting uploading the software online, meant to be accessed from anywhere. SaaS allows the institution to pay for the software while the vendor takes on maintenance responsibilities.[6]

Whichever model is chosen, the SIS is an invaluable software to all academic institutions with features that hugely benefit both faculty members and students.