ABSTRACT

This project is the design and implementation of a Graduate Student Information System for the College of Science and Technology at TAMU-CC. This database system provides for the maintenance, retrieval, and reporting of student information from admission to a graduate program through graduation. It is implemented with a graphical user interface to a relational database system as the back-end data repository.
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INTRODUCTION

Prior to this project the College of Science and Technology (the college) used a disjointed information system of three discrete parts to manage and assist graduate students matriculating at TAMU-CC:

1) The IBM mainframe-based Student Information System. This system housed both academic and demographic data. Data in this system includes name, address, etc., GPA, GRE data, date transcript received, etc. After input by the University Registrar these data are available to the college.

2) A "home grown" PC-based system, developed in dBase III, that contains data duplicated from the system described above plus additional pertinent student information.

3) A PC-based system, developed in WORDPERFECT, that was used to produce a printed copy of a degree plan.

The system, while partially automated, required manual data entry for the data in parts 2 and 3. There was no automated data sharing among any of the three parts and no system for degree audits.

The main printed output from the system was the student’s degree plan. Sample degree plans are presented in appendix B. The formats of the degree plans are diverse; indeed, they are almost unique.

The reporting capabilities were minimal; only a list of students eligible to graduate. This report was generated by the IBM mainframe-based student information system.

The growth of the college's enrollment was taxing the ability of both the system and the degree counselor to adequately service the student community. Gathering pertinent data for each student was a tedious and time consuming process.
The project proposal proposed to consolidate parts 2 and 3 and, to the extent possible, automate data transfer from the IBM mainframe system.

This project was worthy for acceptance as a graduate project for the following reasons:

1) It was clearly related to the student's area of concentration;

2) It was an area of interest to the student;

3) The proposed implementation environment, described below, was, and is, a new state of the art development environment;

4) No previous project at TAMU-CC had used the proposed development environment;

5) The University was at the time the proposal was written, installing the new development environment with plans to integrate it as subject matter in the Graduate curriculum.

6) The student had no prior experience with the proposed development environment; therefore, the project would be a true learning experience (little did I know).