**Grandfield College Scenario**

**TOPICS**: business/school, faculty and staff, machine, software, version, license, software uninstallation date, machine retired date

**HISTORY:** Pertaining to the Grandfield College, the law requires that any business, including a school, track its software. It is important to know what software the school owns, in what versions, and what the license agreement for that software is. There are several different licensing schemes. The least restrictive is a "site" license that allows an institution to have a copy of the software on any machine on the business property. Other licenses specify a certain number of active copies for an institution but don't worry about which machine or user has the copy. The more restrictive licenses do specify one copy per specific machine or user.

Whatever the license agreement for particular software, it is essential for the institution to know which software is installed on which machine, where that machine is located, and which users have access to that machine. It is also important to track when the software is uninstalled from a machine, and when a machine is retired.

An additional useful feature of any software-tracking database would be to track software requests from users to determine (1) if a copy of the software is available and (2) if it is something that should be purchased. All installations are reviewed and must be approved.

For now, the school just wants the database to track faculty and staff computers and software. Software for student machines is a separate and complex issue and will be treated as a separate project at a later time.

**STATEMENT OF SCOPE:** The Grandfield College database will provide a thorough repository for the school to track the software installed on faculty/staff computers and machines. In order to ensure compliance with licensing, the database will manage user software requests and software installation/uninstallation. The database will also track details from the license agreements, software versions, machine locations, and access from users.

**OBJECTIVES:**

* Centralized tracking of faculty/staff computers
* Accurately track and manage software versions and license agreements
* Manage user requests for software changes and retiring a machine

**TASKS AND TIMELINE:**

**1.** Gathering Data: This task will consist of a questionnaire and observations.

**Time Allotted:** 2 weeks.

**Deliverable:** Draw up a list of all staff and faculty members, including all their computers and machines.

**2.** Analyzing Data: The data gathered will be analyzed to determine preliminary data modeling.

**Time Allotted:** 4 weeks.

**Deliverable:** Review each questionnaire to determine what software, version, and licensing agreement is being used by faculty/staff and determine if any machines have been retired.

**3.** Normalization: The data model will be completed with entities and relationships normalized.

**Time Allotted:** 1 week.

**Deliverable**: Entity Relation Diagram for Review.

**4.** Building the Physical Database: The data model will be translated to the relational database management system. Tables, columns with specific data types, and relational and other constraints created.

**Time Allotted:** 2 weeks.

**Deliverable:** The schema of the database for review.

**5.** Testing and Security: Sample data will be entered and each of the business rules and requirements will be tested. General database security and security related to business rules will also be tested.

**Time Allotted:** 3 weeks.

**Deliverables:** Documented test results.

**6.** Database Completion and Installation: Final changes and corrections are made. Sample data will be removed, and the database installed on a server. Final testing for server access and connections.

**Time Allotted:** 2 weeks.

**Deliverables:** The working database.

Total time between beginning and end of project: 14 weeks.