

Comp 1630

Relational Database Design & SQL

EXERCISE 5

Group Exercise - Selecting a DBMS

1. Determine a plausible scenario for a company for which the group is doing the research. Include the type of company, product, size, sales, number of employees, systems to be implemented, etc. If a group member wishes to use their employer's firm as an example, all the better.
2. From the list below, assign one DBMS to each group member to research. Do not assign a DBMS to a member that s/he is already familiar with.

- Microsoft Access
- Microsoft SQL Server
- SQLBase
- FileMaker
- Oracle
- another DBMS of your choosing

3. Use the following 20 criteria for evaluating the DBMS:

- | | | | |
|---------------------------|--------------------------|-------------------------|------------------------------|
| - Encryption routines | - Maximum users | - Security | - Granularity of concurrency |
| - Vendor stability | - Documentation | - User base | - Training and user support |
| - Data compression | - Web integration | - Cost | - Operating system required |
| - Upgradeability | - Performance measuring | - Tuning | - Web development tools |
| - Architecture (2/3 tier) | - Load/unload facilities | - User usage monitoring | - Distributed capabilities |

4. **As a group**, determine the weight to be allocated to each of the 20 features that have been selected. All weights must add up to 1.00.
5. **Individually**, research the DBMS you have been assigned by your group. Use the Internet or other sources, with search criteria such as 'Oracle features' or 'DBMS comparison', etc.
6. For the DBMS you are researching, give each of the 20 criteria a rating on a scale from a low of 1 to a high of 10. Create an Excel spreadsheet to record the information.
7. Meet with your group to rationalize the research and to create a spreadsheet that contains all of the group's research information and a summary. The summary spreadsheet column headings should include:

Criteria/Feature	Weight	DBMS 1		DBMS 2		DBMS 3		DBMS 4		DBMS 5	
		Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score
1. Cost	.05	9	.45	6	.30	8	.40	2	.10	5	.25
2. Maximum users	.05	4	.20	6	.30	5	.25	9	.45	5	.25
... etc.											
Total Score		8.50		7.20		8.60		4.25		5.50	

8. Prepare a MS PowerPoint presentation of maximum 10 minutes, that includes the scenario, DBMS descriptions and some history, as well as the rationale for selecting the best DBMS for your scenario.

The first slide of your presentation should include **a title page with the names and IDs of the group members**. The total number of slides should be about 10.

Submit your work, using your Team No., in the file **Team1_Ex5.xls** and **Team1_Ex5.ppt** in the **Inshare** folder **COMP/1630/Frank Wegener/Lesson 5**