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| **CSC-220– Database Management System- Assignment [[1]](#footnote-1)** | |
| CLO-1 | Deadline: 8th April 2022 |
| Class: BSE-4A/4B | Total Marks 5 |

**Q1.A person wants to store information (names, addresses, etc.). The volume of data compels him to buy a database system. To save money, he wants to buy one with the fewest possible features, and he plans to run it as a stand-alone application on his PC clone. Indicate which of the following DBMS features he should pay for; in each case, also indicate why he should/should not pay for that feature in the system he buys.**

**Solution**

**A security facility**

A security facility is necessary in case if the person don’t want to share information with anyone else. Even though he is running it on his stand-alone PC, a rival Ducksters could break in and attempt to steal his information/database. The database’s security features would foil the intruder.

**Concurrency control**

It is not needed in case if and only if a person uses the database. If database is used by anyone else instead of a person, then concurrency control is needed.

**Crash recovery**

Crash recovery is essential for any databases; person would not want to lose his data if the power was interrupted while he was using the system.

**A view mechanism**

A view mechanism is needed. Person could use this to develop “Custom screens” that he could conveniently bring up without writing long queries repeatedly.

**A query language**

A query language is necessary since he must be able to analyze the dark secrets of his victims. In particular, the query language is also used to define views.

**Q2. What are the major capabilities of DBMS and why is a relational DBMS so powerful?**

The major capabilities of DBMS are listed below –

* Data Storage
* Data Retrieval
* Data Update
* Security
* Data Independence

**Powerful Relational DBMS**

* The Relational DBMS is more powerful due to the reasons made sense of underneath,
* In the RDBMS model the information will be put away as even configuration, though, table is only an assortment of lines and sections.
* The RDBMS model will give undeniable level security by utilizing validation and authorization.
* RDBMS keeps up with exactness and consistency of the information with the assistance of information trustworthiness component.
* RDBMS upholds the information controls by utilizing DML services.
* RDBMS gives quicker rate recovering the information by utilizing list system.

1. [↑](#footnote-ref-1)