**DBAS 1001**

**Introduction to Database Management**

**Assignment # 1**

**Definitions:**

**Database Management System (DBMS)** – a database management system is a system that facilitates the process of storing data and retrieving information. Some examples of software DBMS are MS Access, MS SQL Server, IBM DB2 UDB, MySQL, Oracle.

**Database** – a database is an organizational plan for the storage of data necessary for the performance of some business function(s). These plans are usually represented visually in an Entity Relationship Diagram (ERD). Some examples of databases could be an inventory control system, an accounts receivable system, an appointment scheduling system, a point of sale system.

**Your Work:**

Read each scenario. In groups, take fifteen minutes to discuss (argue about) the two scenarios. Based on your reading and the discussion, individually prepare a memo from you to me, giving your name and student number and group number, the date, and the subject line “DBAS 1001 Assignment One”. In the body of the memo, **supply and justify** answers for each scenario for the following questions:

* Is there a Database Management System?
* Is there any need for a Database Management System?
* Is there a Database?
* Is there any need for a Database?

The First Scenario: Percy’s Automotive is a membership-based self-service auto repair facility. The site is a former garage with two service bays and an office. Each service bay is fully equipped with all of the tools and equipment necessary to perform auto service. The office has a desk with a telephone and a low-end PC that has Windows 7 installed and an internet connection. There is a washroom, a couch, several chairs, and a coffee machine in the office. Members each have a key to the facility, and reserve one-hour time blocks to use the service bays by writing on a calendar hanging on the wall of the office. The facility is available for members’ use 24X7 including holidays. Members share the overhead costs of the facility as bills arrive in the office. Members have been complaining that they have no way of knowing, except through personal contact at the facility, who the other members are and how to contact them – there has been questionable internet-sourced material left on the computer desktop, tools have been found broken and missing, the service bays and the office have been found in states of disrepair. Many of the members feel that it is unfair to share the costs related to these complaints, and that the members responsible should pay the entire cost. Unfortunately, the only way to determine who is responsible is by looking at the calendar to see who was in – problems with this are:

* sometimes there are so many reservations in a day that you cannot make out whose name is actually there;
* sometimes members come in to use the facility and if there is an available bay, they use it without entering a reservation onto the calendar;
* members do not have to log in to use the computer;
* there is presently no way to record who has paid their share of any overhead cost – some people pay right away, some are late, some are really really late, some “forget” to pay.

The Second Scenario: Frankie is a laundry fanatic. In his bedroom is an extremely large dresser with three drawers. Each drawer has four partitions. In the top drawer he keeps pairs of socks, never single socks – warm socks in the leftmost partition, lighter socks in the next partition. The third partition has only warm underwear, the fourth contains more flimsy underwear – neatly folded and aligned. In the middle drawer Frankie keeps items of clothing he wears above the waist, like shirts, blouses, tank tops, sweaters, body armour. This drawer’s partitions are arranged according to season – the tops he wears only in Spring, Summer, Winter and Autumn. The bottom drawer is likewise arranged by season, but this time the drawer’s contents are items of clothing that Frankie wears below the waist such as yoga pants, shorts, jeans, and tights. Frankie is completely satisfied with this arrangement, but his partner, a professional ball hockey player, complains that the enormous dresser takes up too much valuable bedroom space.

DBAS 1001

ASSIGNMENT ONE MARKING RUBRIC

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| --- | --- | --- | --- |
| MARKING POINTS | 0 | 1 | 2 |
| Memo Format | Not used | incomplete | Complete |
| Professionalism | Illegible spelling; poor paragraph structure; poor grammar: affecting user acceptance of the finished work | Errors exist that do not affect user acceptance of finished work | Finished work has a level of professionalism acceptable to standards as negotiated with the client or his/her representative |
| Existing system details | Not present | incomplete | As applicable, enough details regarding existing system to form conclusions regarding requirements |
| Requirements | Not stated | Incomplete or inaccurate | Sufficient and clear requirements regarding outputs needed by client, including stage of development required i.e. design, prototype, implementation, testing |
|  | 0 | 1..9 | 10 |
| Analysis | Not present | Incomplete or inaccurate | Evidence of a logically thought through design process matching developed solution |
|  | 0 | 1 | 2 |
| Recommendation | Not present | -1 point for each logic error and -5 points for not matching analysis | Solution executes successfully, satisfies all stated requirements, and matches analysis |
| Totals | 0 | 1..19 | 20 |