

Assignment



Semester: 02

COMP 102 • INTRODUCTION TO DATABASE

Department : Faculty of Information & Communication Technology

Semester : 2

Commence Date : Week 2
Deadline Date : Week 4

Individual Assignment 10%

Prepared by: Mr. Kamil Approved by AQA:

Signature: Signature:

Verified by: Mr. Kamil

Signature:

RULES AND REGULATIONS:

- You are NOT allowed to work with any other students, or do your work based on information that is available from the Internet, or any other source other than your group and make sure you do citation.
- You are NOT allowed to work together to get a detailed solution, to copy a solution, or to give away a solution to other Students.
- Do NOT let other students see your solution.
- Do NOT email your solution to anyone other than the Lecturer.
- If someone cheats (**Plagiarism**) by using your work, you will be penalized.

CASE: Consider the case study below:

You have recently been hired as a data base expert for a consulting organization. As one of your first assignments, you have been asked to redesign an existing database that captures data on the different projects under way, the employees who are assigned to each project, their job titles and hourly charge rates, and the number of hours they have devoted to each project. The users are not happy with the existing database for several reasons. The person who implemented the database has been unable to set a primary key because of the nature of the database, and feels it is a shortcoming of MS Access. The individual who maintains the data feels that she is often duplicating information when adding new rows of data. The data resides in a table created in MS Access.

Question 1 [40 Marks]

- a. Identify the entities and their attributes. [15 Marks]
- b. Design the tables for the data requirement using a data dictionary: [25 Marks]
 - 1. The table should have the field name and the datatype.
 - 2. Identify the primary keys and foreign keys in each table.

Question 2 [30 Marks]

- a. Define the following:
 - 1. Database Management System.
 - 2. Types of Implementation Database Models
 - 3. What is Database Design and two importance of a good database design [15 Mark Each]

b.Draw ERD to show the relationship of your tables using any model [15 Marks]

Question 3 [30 Marks]

- a. Name three (3) types of Database Applications [10 Marks]
- b. What is the main difference between File Systems and Databases? Support your answer with the aid of a simple diagram. [20 Marks]

Outcomes

On successful completion of this assignment, students will be able to:

- Understanding the practical aspect of MS Access on how to create tables and their attributes.
- Helps to identify entities and their relationships.
- Also enhance them on how to prepare data dictionary.

Submission:

This assignment must be submitted on time or before the due date (week 4) Format: Minimum of 5 printed pages for the report, Font (Tahoma 11), line spacing (1.5)