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Subject IT221 – Advanced Database Systems Instructor/Professor: JAY MARK F. ARENDAIN, MIS

Year/Section: 2nd Year - A

Assignment No.: 1

General Directions:

a. Read the given questions/statements comprehensively.

- b. Answer the given questions or statements accordingly. Elaborate on your answer by providing concrete examples.
- c. Plagiarism and AI usage are prohibited.
- d. Use Microsoft Word or Google Docs. Set the default font to Arial, size 12, and align the paragraphs to justify.
- e. Save your file as a **PDF** with the filename format LASTNAME_FIRSTNAME_Assignment1 (e.g., RIZAL_JOSE_Assignment1)
- f. Submit your output on or before Sunday, January 19, 2025, by 11:59 PM.

Practical Questions:

1. INSIGHT: As a 2nd-year IT student, why do you need to understand and learn database systems?

Answer: As a 2nd year IT student its important to understand and learn database systems its because DBMS is part of a system that store a data from system if there's no database on system its useless and that's not called system its website because website the data inside of it is fixed cannot add. If the system have a database you can add, edit and delete and also you can perform CRUD (Create, Read, Update and Delete).

- 2. Look for an organization or academic institution. Describe a business/organizational problem in terms of data management and operations that your chosen organization has, which you would like to see solved using a database system.
 - Problem description: This typically refers to a detailed explanation of the problem, providing context, background information, and specifics about the

- issue. It often covers the "who, what, where, when, and why" of the problem, outlining the situation in depth.
- **Problem summary:** This is a more concise overview of the problem. It highlights the key points of the issue in a brief manner, summarizing the essential aspects without going into the detailed background or context. It gives a quick snapshot of the problem.

 Desired Solution using a Database System: refers to the approach or strategy for addressing a particular problem through the design and use of a database system. This solution typically outlines how a database can be structured and utilized to store, manage, retrieve, and manipulate data in an efficient and effective way.

2.1 Problem Description

Answer: What kind of web application system that can solve the digital and paper documents problem of the school clinic?

2.2 Problem Summary

Answer: The problem of the school clinic is not organized digital and paper document so if the school nurse seeking a stuff in their records its hard to find and if the school nurse finds his desire stuff its so much time consuming to find it.

2.3 Desired Solution using a Database System

Answer: The system that we desired to create for the prescribe problem in the clinic is kind of Electronic Health Record System with general objectives The study aims to manage personnel, students, consultations, treatments, medicine inventory, medical history, and online features for students and personnel. It includes online appointments, records, alerts, events, monitoring, online consultation, notifications, accounts, contacts, and reports. The study also includes a dashboard for students and personnel, generates reports, and evaluates the study's efficiency and informativeness.