Republic of the Philippines
City of Olongapo
GORDON COLLEGE
Olongapo City Sports Complex, Donor St., East Tapinac, Olongapo City
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Information Management 1
LECTURE

Title: Introduction to SQL   **Module No: 4**

I.   INTRODUCTION

In order to progress well-meaning database, we need to recognize the theory of SQL. SQL or structured query language that can help to manage the proper implementations and operations of the entire database itself. It will also support in setting up constraints and distinctive inconsistencies within a certain databases.

II.   LEARNING OBJECTIVES

After studying this module, you should be able to:

- Understand all about SQL.

- Identify and understand the different SQL commands.

- Understand and identify what SQL can do.

III.   TOPICS AND KEY CONCEPTS
A. SQL INTRODUCTION

SQL

➢ SQL stands for Structured Query Language

➢ A standard language for accessing and manipulating databases

➢ It is an ANSI standard

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B. WHAT CAN SQL DO?

What can SQL do?

- ➢ SQL can execute queries against a database

- ➢ SQL can retrieve data from a database

- ➢ SQL can insert records in a database

- ➢ SQL can update records in a database

- ➢ SQL can delete records from a database

- ➢ SQL can create new databases

- ➢ SQL can create new tables in a database

- ➢ SQL can create stored procedures in a database

- ➢ SQL can create views in a database

- ➢ SQL can set permissions on tables, procedures, and views

SQL is a Standard – BUT…

Although SQL is an ANSI standard, there are different versions of the SQL language.

However, to be compliant with the ANSI standard, they all support at least the major commands (such as SELECT, UPDATE, DELETE, INSERT, WHERE) in a similar manner.

Most of the SQL database programs also have their own proprietary extensions in addition to the SQL standard!

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RDBMS

Stands for Relational Database Management System

RDBMS is the basis for SQL, and for all modern database systems such as MS SQL Server, IBM DB2, Oracle, MySQL, and Microsoft Access.

The data in RDBMS is stored in database objects called tables.

C. SQL COMMANDS

Some important SQL Commands

- ❖ SELECT - extracts data from a database

- ❖ UPDATE - updates data in a database

- ❖ DELETE - deletes data from a database

- ❖ INSERT INTO - inserts new data into a database

- ❖ CREATE DATABASE - creates a new database

- ❖ ALTER DATABASE - modifies a database

- ❖ CREATE TABLE - creates a new table

- ❖ ALTER TABLE - modifies a table

- ❖ DROP TABLE - deletes a table

- ❖ CREATE INDEX - creates an index (search key)

- ❖ DROP INDEX - deletes an index

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IV. TEACHING AND LEARNING MATERIALS RESOURCES

- PC Computer || Laptop || Smartphone
- Internet Connection
- Browsers
- Any available Programming Software
- GC-LAMP
- Google Classroom
- Google Meet
- Facebook Group
- Facebook Messenger
- For online activity sites:
    - ✓ https://www.blogger.com/about/?r=1-null_user
    - ✓ https://www.wix.com/html5bing/hiker-blog?utm_source=bing&utm_medium=cpc&utm_campaign=ms_en_e_1_NEW^bl_blogging_rest&experiment_id=blogging^be^79714673617818^blogging&msclkid=983ab99d6f3e1cb92c8de6b674948445

V. LEARNING TASKS

A. ENGAGE

Activity 1: Blogging

A blog is a discussion or informational website published on the World Wide Web consisting of discrete, often informal diary-style text entries. Posts are typically displayed in reverse chronological order, so that the most recent post appears first, at the top of the web page.

Materials Needed: PC/Laptop/Smart phone, Internet Connection and Browser

Instruction: Based on your own understanding, kindly define the following terminologies:

A. WHAT IS SQL?

Your answer will be in a form of a blog.
Kindly create your own title for each post.
Each post must contain at least 2 to 3 images.
Only one blog site per student.
You can create your blog using the following online sites:

https://www.blogger.com/about/?r=1-null_user or

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https://www.wix.com/html5bing/hiker-blog?utm_source=bing&utm_medium=cpc&utm_campaign=ms_en_e_1_NEW^bl_blogging_rest&experiment_id=blogging^be^79714673617818^blogging&msclkid=983ab99d6f3e1cb92c8de6b674948445

Rubric:

Completed the activities and understood the topic based on the given answer	Outstanding 50 points	Very Good 40 points	Good 30 points	Fair 20 points	No Work Output

B. EXPLORE & EXPLAIN

Answer the following questions:

1. What are some sql commands?

_____
_____
_____
_____
_____
_____
_____
_____
_____

2. What is the difference between drop and delete command?

_____
_____
_____
_____
_____
_____

Rubric:

Each correct answer will be given 10 points. Total score = 25 points	Question 1	Question 2	Total Score

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C. ELABORATE & EVALUATION

Answer the following questions: **Identification**

_____**1.** Extracts data from a database.

_____**2.** Inserts new data into a database.

_____**3.** Modifies a table.

_____**4.** A standard language for accessing and manipulating databases.

_____**5.** Can set permissions on tables, procedures, and views.

Rubrics:

Each correct answer will be given 5 points. Total score = 25 points	Question 1	Question 2	Question 3	Question 4	Question 5	Total Score

VI.   REFERENCES

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- http://w3schools.com/sql
- http://www.tutorialspoint.com/java