BUS 464 Business Data Management
Homework - Data Warehousing - II

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In this assignment you will gain exposure to an industrial strength OLAP tool from Microstrategy. Underlying the OLAP tool is a datawarehouse. For this you will need to register as a user of the Teradata University Network (TUN).

- Browse to `www.teradatauniversitynetwork.com` for an introduction to the website.

- Click on Register. Get a userid and password [1].

- Log in and browse again to `www.teradatauniversitynetwork.com/`

- Click Software ➜ Microstrategy ➜ Microstrategy 9 Analysis Modules. You are now at the web interface of the Microstrategy Data Warehouse.

1. Creating managerial reports using OLAP tools: Complete the attached assignment titled 'MSTR9_AdventTechnologyAssignment.pdf' on Canvas. It has three questions. Read the assignment for help with navigation on the Microstrategy web interface. The reports required can be created by specifying the correct parameters on the OLAP tool.

   Once you create the desired reports, click Tools ➜ Report Details Page to view the SQL queries for each of the three questions. Copy these queries to a text editor to complete the next steps.

2. Next you will create the same reports using SQL by copying/pasting the SQL code from the Microstrategy DW to the SQL interface on TUN.

   (a) Register for Access to the SQL Web Interface for the Microstrategy DW:
       - On the main TUN webpage click Software ➜ Teradata Database
       - Click on Register to Use Teradata SQL Assistant/Web Edition in our Course `tunweb.teradata.ws/tunstudent/register.aspx`. The Course Password is wmc3317. Create a user ID and password for yourself. You could keep it the same as for the main TUN registration you completed above. Now you are ready to use SQL Assistant on TUN.

   (b) Browse to `tunweb.teradata.ws/tunstudent/`. Click on Login to SQL Assistant. Click on Select default database as db_samwh9 - do not click OK yet.

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[1] You may need to use a Student Access Password if it asks for one. The password is 'DataDive'

(c) Underneath click on Database Descriptions. Find db_samwh9 and store the pdf manual on that link. Study the data model under Logical Data Model for 10 minutes with your group members. Observe the schema (tables, attributes and the relationships). You will see the model is huge and depicts a real database model.

(d) Go back to the browser and click OK to enter the SQL Assistant interface. You can query the data warehouse here called db_samwh9. You can run simple queries to examine the data and the structure of the tables.

(e) Execute the three SQL queries you created in 1 on this interface to check the results. Confirm that the results are the same as in 1.

(f) Click on the '+' sign on the left panel next to db_samwh9 and inspect the table schemas. Take any one of the three queries and explain in plain English how it works to give you the desired result.

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