##### **Description**

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**Business Context:**

A lot of people in the world share a common desire: to own a vehicle. A car or an automobile is seen as an object that gives the freedom of mobility. Many are now preferring pre-owned vehicles because they come at an affordable cost, but at the same time, they are also concerned about whether the after-sales service provided by the resale vendors is as good as the care you may get from the actual manufacturers. New-Wheels, a vehicle resale company, has launched an app with an end-to-end service from listing the vehicle on the platform to shipping it to the customer's location. This app also captures the overall after-sales feedback given by the customer.

**Problem Statement:**

New-Wheels sales have been dipping steadily in the past year, and due to the critical customer feedback and ratings online, there has been a drop in new customers every quarter, which is concerning to the business. The CEO of the company now wants a quarterly report with all the key metrics sent to him so he can assess the health of the business and make the necessary decisions.

**Objective:**

As a data scientist, you see that there is an array of questions that are being asked at the leadership level that needs to be answered using data. Import the dump file that contains various tables that are present in the database. Use the data to answer the questions posed and create a quarterly business report for the CEO.

**Data Description:**

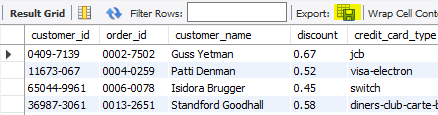
You have data on the vehicles you sell: what is the make, model, and year? What is the price point? Data on your customers, such as where they live and payment methods, data on orders and shipments, such as when the order was shipped and received, what the after-sales feedback was, and so on.

The data dictionary (new\_wheels\_sales.txt), which has detailed descriptions of each column, and the dump file (new\_wheels\_dumpfile.sql), can be found in the same **data** folder. The [new wheels\_proj.rar](https://olympus.mygreatlearning.com/courses/97405/files/9739039/download?verifier=CmJmg2V5KPyP0kHpaKVRTbSNolMba96t76uVePrC&wrap=1) file contains the data folder and the diagram folder which contains the ER diagram.

**Solution Approach:**

* Download the dump file present on Olympus and import it into MySQL.
* You can find the questions that need to be answered for the business in the project guideline document-submission\_myname*.sql*.
* Once these questions have been answered by writing SQL queries, you can use those results to create the Quarterly Business Report. Use the results from the queries**\*** to generate visuals in Python/Excel. A template report, *new\_wheels\_sample\_QBR\_template.pdf,* has been uploaded to this module.

***\*****You can download the results of queries from SQL workbench using the download button as shown below:*

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**Submission Guidelines:**

There are two files that are expected in the submission of this project:

**Script**: This should have the *submission\_myname.sql file which contains the below things-*

**Note:** Use the submission\_myname.sql (project guideline document) and write all the codes in the same provided document and save it as a .sql file, called submission\_myname.sql.

**Slides**: This should have the Quarterly Business Report in the form of a **.pdf**

**Any assignment found copied/plagiarized with other groups will not be graded and will be awarded zero marks.**

Please ensure timely submission as any submission post-deadline will not be accepted for evaluation. Submission will not be evaluated if it is submitted post-deadline.

**Best Practices for SQL Script:**

* The solution script file should be well-documented, with comments (if needed) explaining the functionality of code or the observations and insights.
* It is important to have **no errors** before submission.
* It is recommended that you read the problem statement and go through the criteria and description mentioned in the rubric before starting the project.

**Best Practices for Report/Presentation:**

* The report should be made keeping in mind that the audience will be the CXOs of the Company or Business Stakeholders.
* The presentation **can** contain additional charts apart from the questions answered in the project.
* The key points in the report should be the following:
  + Business Overview of the problem and solution approach
  + Key findings and insights in each section
  + Business recommendations that can drive decisions
* Focus on explaining the key takeaways in an easy-to-understand manner
* The **Quarterly Report** should be submitted as a .**pdf** file

A business report template has been provided for reference. *It is* ***not*** *mandatory to make your presentation in the same style or manner as this sample report. You can get creative!*

**Power Ahead!**