Assessment Brief

Module Title:	Tools for Data Analytics
Module Code:	B8IT106
Assessment Title:	Continuous Assessment – Tableau and SQL
Assessment Type:	Tableau and SQL Practical Assignment
Individual/Group:	Individual
Assessment Weighting:	30%
Issue Date:	Part 1 - 06/10/2019; Part 2 – 13/10/2019
Due Date/Time:	**Deadline – 11:55 pm on Sunday 20/10/2019**
Mode of Submission:	MOODLE

Learning Outcomes to be assessed

1. Ability to analyse datasets Tableau and SQL

Part 1: Tableau (50 Marks)

1. Using **EMart** dataset from lectures, create the following four worksheets. Apply year filter to worksheets 1,2 and 3, and apply category filter to worksheet 4. None of the worksheets should contain more than one chart.

Worksheet 1: N most profitable states on map (with user control to alter value of N) [10]

Worksheet 2: Total sales and profit by customer (state level of granularity) [5]

Worksheet 3: Total sales and profit by region [5]

Worksheet 4: Yearly sales vs targets by product category [10]

2. Combine the four worksheets into a dashboard and implement action filter between Worksheet 1 and Worksheet 2. [5]

3. Prepare a Story, containing three meaningful insights extracted from visualizations/dashboard. Present only those insights that you believe will be most valuable to the management of *EMart* for future decision-making. [15]

Part 2: SQL   **(50 Marks)**

Using *sellers, cars, regions* tables from lectures:

1. Provide a single SQL query that outputs the following ten columns for all sellers who sold 'Korean' cars in Eastern & Western United States after 2009. The column names in bold are the columns that you'll have to create yourself. -

   a. first_name

   b. last_name

   c. car

   d. gender

   e. region

   f. selling_date

   g. price   [10]

   h. **avg_price**, containing average selling price of each Korean car sold in Eastern & Western United States after 2009.   [10]

   i. **price_label**, containing 'Above Average' labels for prices above avg_price, 'Below Average' labels for prices below avg_price, and 'Average' labels for prices equal to avg_price.   [10]

   j. **comment**, containing 'Verified' labels for all records.   [10]

2. Using the table created in previous question as data source, provide a SQL query that displays the following output containing count of Female and Male sellers: [10]

	Female	Male
1	6	3

Students must submit: -

1. Tableau Workbook File (.twb) for Part 1 of the assignment

2. Microsoft SQL Server Query File (.sql) for Part 2 of the assignment

Submission Guidelines

1. A zipped folder including Tableau Workbook (.twb) and MS SQL Server Query File (.sql) should be submitted online by 11:55 pm on Sunday 20/10/2019.

2. Follow the naming convention:

Tableau file should be named as –

CA1_StudentNumber_Firstname_Surname.twb

SQL file should be named as -

CA1_StudentNumber_Firstname_Surname.sql

Zipped Folder should be named as –

CA1_StudentNumber_Firstname_Surname.zip

Assessment Criteria

Each Tableau visualization will be graded according to the following criteria:

1. Data quality (visualization showing correct data at correct level of granularity; use of correct joins and blends; correct use of filters/actions) [Weightage – 70%]

2. Ease-of-understanding (Choice of chart, titles, labels, colors; presence of filter controls) [Weightage – 30%]

Story will be graded only on the quality of derived insights.

Each SQL query will be graded according to the following criteria:

1. Quality of code (correctness and completeness) [Weightage – 50%]

2. Quality of output (correctness and completeness) [Weightage – 50%]

General Assessment Submission Requirements for Students:

1. Online assignments must be submitted no later than the stated deadline.

2. All relevant provisions of the Assessment Regulations must be complied with. Students are required to refer to the assessment regulations in their Student Guides and on the DBS Quality Assurance Handbook Guide.

3. Extensions to assignment submission deadlines will be not be granted, other than in exceptional circumstances. To apply for an extension please contact the course administrator.

4. Students are required to retain a copy of each assignment submitted.

5. Assignments that exceed the word count will be penalised.

6. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying). Please refer to the referencing guidelines on Moodle for information on correct referencing.

Late Submission
- Assignments submitted after the deadline published in the assessment specification, including any extension, are deemed to be 'late' and are penalized as follows:
- Where an assignment is submitted between 1 and 14 days late 2 a day marks are deducted.
- Where an assignment is more than 14 days late it is annotated at the discretion of the lecturer, but no marks can be awarded.
- Where the assessment is undertaken in a group, the piece of work should be submitted in its complete entirety, and any penalty for late submission incurred applies to all group members.