

PROG 8460

Midterm

Total: 43 Marks

Due Date: March 22th, 2022 on or before 11:59pm.

Task 1 – Waterloo Museum of Art Data Visualization [15 marks]:

Note: Please use the raw data from Assignment 1.

Q1. Visualize the count of each type of medium of artifacts in the museum. **[3 marks]**

Q2. Create a **filter field** that displays the Department of each objects across each Culture. The method to visualize is up to you. *Please make sure to add a filter field otherwise you will lose marks* **[3 marks]**

Q3. Create a **frequency distribution table (count of all unique values)** for values contained in the field named “Credit Line” **[3 marks]**

Q4. What is the average age across each Culture? *Hint: You will have to use Object Begin and End Date to calculate the age of the object.* **[3 marks]**

Q5. Display the number of different artist nationality types across each Culture. **[3 marks]**

Task 2 – Online Sales Data Visualization [11 marks]:

Note: Please use the online_sales_full.xls for this part of the midterm which can be found under Content -> Midterm.

Q1. Which product had the highest sale amount (\$ value)? *Note: Visualization not necessary.* **[1.5 marks]**

Q2. Which product had the lowest sale amount (\$ value)? *Note: Visualization not necessary.* **[1.5 marks]**

Q3. Visualize the top 3 products with the highest sales and subcategory and product name in the visualization. Method of visualization up to you. **[3 marks]**

Q4. Create a bar graph with Category and the value as Sales. Enhance the visualization by 2 ways we have learned and sort Sales by descending order. **[5 marks]**

Task 3 – Amalgamation [17 marks]:

Q1. Create one or multiple Dashboards to visualize your outputs from Task 1 Q1-Q5. **[5 marks]**

Q2. Create one or multiple Dashboards to visualize your outputs from Task 2 Q1-Q4. **[4 marks]**

Q3. Create 2 separate Stories for Task 1 and Task 2. **[3 marks]**

Q4. Enhance visualization of your Stories by changing the navigator style. **[1 mark]**

Q5. Create a filter to be applied to selected worksheets for Task 1 Story. **NOTE: Make sure the filter can only be applied to Task 1 visualizations only and NOT Task 2 Visualizations.** **[2 marks]**

Q6. Create a filter to be applied to selected worksheets for Task 2 Story. **NOTE: Make sure the filter can only be applied to Task 2 visualizations only and NOT Task 1 Visualizations.** **[2 marks]**

Submissions

In your submission, include the following items:

- Packaged Tableau workbook (.twbx file)
- **NOTE: If you submit a normal Tableau workbook (.twb file) you will receive a mark of zero**

Submit to eConestoga under Assignments section under Midterm. Multiple submissions are allowed before the deadline. If multiple submissions are made before the deadline, I will grade the last one to be submitted.

You are responsible for ensuring that the **submission can be extracted it contains the accurate files**. A good way to check is to extract your work from the archive in a different location on your computer and making sure that everything still works.

There will be no credit given if I cannot see your work. If you must resubmit to correct any errors, the standard late submission deductions will still apply.