**Coursework Specification: Data Analysis and Visualisation Module**

**Coursework: Exploring and Visualising Real-World Data**

**Deadline: Friday, 11th April 2025 11:59PM**

**Coursework Overview:**

In this Coursework, students will apply their data analysis and visualisation skills using Tableau to explore a real-world dataset of their choice. The objective is to analyse the dataset, derive meaningful insights, and create an interactive Tableau dashboard to visually communicate those findings.

**Coursework Objectives and Marking:**

1. **Data Selection (10%)**
   * Choose a real-world dataset of interest.
   * Provide a brief rationale for selecting the dataset.
2. **Data Exploration (15%)**
   * Conduct exploratory data analysis using Tableau.
   * Identify key features, trends, and patterns in the data.
3. **Data Cleaning and Transformation (15%)**
   * Clean and pre-process the data for analysis.
   * Apply necessary transformations using Tableau.
4. **Visualisation Design (20%)**
   * Design a set of visualisations to effectively communicate insights.
   * Utilise appropriate chart types, colours, and labels.
5. **Interactive Dashboard (20%)**
   * Create an interactive Tableau dashboard.
   * Implement filters, parameters, and actions for user interactivity.
6. **Data Storytelling (10%)**
   * Craft a narrative that guides the viewer through the data.
7. **Presentation (10%)**
   * Prepare a brief presentation summarising key findings.
   * Showcase the Tableau dashboard and explain design choices.

**Coursework Guidelines:**

1. **Dataset Selection:**
   * Datasets can be sourced from public repositories, government datasets, or any other reliable sources.
   * Ensure the dataset is substantial enough to allow for meaningful analysis.
2. **Submission Format:**
   * Submit the Tableau workbook (.twb or .twbx) containing the dashboard.
   * Include a document or slides for the presentation.
3. **Documentation:**
   * Provide documentation on data cleaning and transformation steps.
   * Include a description of each visualisation and its purpose.
4. **Presentation:**
   * The presentation should not exceed **10 slides.**
   * Clearly articulate key insights and takeaways.
5. **Plagiarism:**
   * **Plagiarism is a serious offense in academia. All submissions will be checked for plagiarism. Students should submit their own work, copied, or downloaded work will lead to zero marks.**

**Deadline:**

* **Coursework Submission Deadline: Friday, 11th April 2025 11:59PM**

**Feedback and Grading:**

* **Feedback:** Feedback will be provided on each aspect of the coursework.
* **Grading:** The coursework contributes **50%** to the overall module grade.