

**Data Technician**

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| Name: |
| Course Date: |
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# Day 1: Task 1

Please research the different versions of Tableau, compare and contrast them below and explain the limited functionality on ‘Tableau Public’.

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| Different Tableau versions | According to the website, Tableau offers multiple different types of licenses/products, each with different features, capabilities, and price points. I will shortly explain the primary versions below:   1. **Tableau Cloud** – a fully hosted cloud-based enterprise-grade analytics platform used for creating and hosting visualisations, data sources, flows. 2. **Tableau Server** – a self-hosted platform, either in a public cloud or on-premises, used for creating and hosting visualisations, data sources, flows, and that could have multiple sites. 3. **Tableau Public** – free platform to explore, create, and publicly share data visualisations online. It provides a free version of Tableau Desktop. 4. **Tableau Desktop** – provides the tools needed to access, visualise, and analyse data. You need to publish on Tableau Server, Cloud, or Public to be able to share.   Tableau Public, although free, has got many limitations around data, privacy, and storage. Tableau Public only connects to certain types of data, mainly Excel, CVS and text files, Google Sheets, and some statistical files, i.e. SAS, and spatial files. Tableau Public workbooks are limited to 15 million rows per workbook.  Everything you work on in Tableau Public, has to be published publicly on your profile, which then means that there is no privacy around your work. Also data refresh has to be done manually. |

# Day 1: Task 2

Using the *EMSI\_JobChange\_UK* dataset, create your own dashboard, I want to see a bar chart showing percentage change and a UK based map showing the key city locations impacted.

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| Paste your print screen here | Percentage change showing the all the cities with value above 0%. |

# Day 2: Task 1

Using the Spotify data set, conduct an analysis to find trends and key information that could be used by an organisation for future projects.

There is no set scope for the analysis, simply to find trends and document them below:

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| Paste your print screens here |  |

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| What did you find? | In the graph Popularity and Duration, the slope is not very steep, which does not indicate that, necessarily, the longer the duration of the songs, the more popular they are. Sure, it does contribute to popularity, but it is not a main factor in determining it. However, in the graph Popularity and Danceability, we can see that the more danceable the songs are, the more popular they are as well.  We can see that some genres are popular due to both Danceability and Duration, which suggest that genres build around rhythm and are moderately timed, tend to capture broader audiences. Examples of genres that are popular, danceable, and moderately timed, are Hip-Hop, R&B, Soul, Reggaeton. |

# Day 2: Task 2

Using the Health, conduct an analysis to find trends and key information that could be used by an organisation for future support.

There is no set scope for the analysis, simply to find trends and document them below.

* Data can be lifesaving and is being used more within the NHS, reflect on how this data could support decision making for the NHS.

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| Paste your print screens here |  |
| What did you find and any reflections on how the NHS could use this? | From the Scatter Ploth Chart, we can see that the BMI highly affects life expectancy, i.e. generally, the higher the BMI value, the higher the life expectancy.  Moreover, if we look at the Cancer Rate Chart, along with the AVG Life Expectancy by Countries map, we can see that, although China dominates the Cancer Rate Chart by a large amount (20M), it still has a relatively high Life Expectancy Rate, at 71.86. In the Cancer Rates Chart, the first African country that appears is Nigeria (383,535), however, in the map, Nigeria is coloured a in a purple shade, with a Life Expectancy Rate of 46.86. This generally means that cancer rates do not affect the life expectancy as much as it seems like, and there are other factors that have higher impact on life expectancy.  NHS could cross-reference data from other healthcare systems in other countries and see what is increasing the life expectancy there. |

# Day 3: Task 1

Please complete Lab 1 ‘Get Data in Power Bi Desktop’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

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| Paste your completed lab here |  |

# Day 3: Task 2

Please complete Lab 2 ‘Load Transformed Data in Power BI Desktop’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

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| Paste your completed lab here | Lab was completed after this, forgot to take screenshot before pressing Lab Complete. |

# Day 4: Task 1

Please complete Lab 8 ‘Design a Report in Power BI Desktop’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

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| Paste your completed lab here |  |

# Day 4: Task 2

Please complete Lab 12 ‘Create a Power BI Dashboard’. Once complete, paste a print screen below and in the collaboration board.

“Teaching is the best way to learn, so please listen out for support requests from the class and we’ll work through the challenges together”

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| Paste your completed lab here |  |

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| **Course Notes** |

It is recommended to take notes from the course, use the space below to do so, or use the revision guide shared with the class.

We have included a range of additional links to further resources and information that you may find useful, these can be found within your revision guide.

**END OF WORKBOOK**

**Please check through your work thoroughly before submitting and update the table of contents if required.**

**Please send your completed work booklet to your trainer.**

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| **Information** |