Data Academy HLT

Tasks	GLH
Core Learning – Data Visualisation	60 – 120 minutes
Portfolio Task – Data Visualisation projects	120 – 240 minutes
Flipped Learning – Machine learning	30 minutes
Enrichment – PowerBI and matplotlib	60 minutes
Technology – Data Visualisation	60 minutes
Wellbeing – Positive Mindset	60 minutes
Soft Skills – Adaptability	60 minutes
Employability – What to wear to interview	60 minutes

*Times are a rough guideline

Core Learning

Portfolio Projects

Flipped Learning

Enrichment

Technology

Wellbeing

Soft Skills

Employability

TECH TALENT ACADEMY

Core Learning 1 – Tableau dashboard

You can complete this task independently or you can work within a group.

Create a dashboard from scratch using a data source of your choice on Tableau Public.

1. Your dashboard should contain at least 3 different visualisations.
2. Once you have created your dashboard, write a summary of your findings.
3. Share your dashboard link with your tutor to access to your dashboard.

You can pick a dataset from

https://www.kaggle.com/datasets

or another source of your choice.

Marking Criteria – Tableau dashboard

	Pass	Merit	Distinction
• **Task**	• Attempts to make one graph from the data source	• Attempts to make more than one graph from the data source	• Made a complete dashboard with several graphics and write a summary of their findings to a accompany the dashboard

Portfolio Tasks –

Portfolio Projects

Tableau for Data Science and Data Visualization

https://www.youtube.com/watch?v=TPMlZxRRaBQ

How to Build Your Own COVID Tracker Dashboard

https://www.freecodecamp.org/news/build-a-covid-tracker-dashboard-using-tableau/

How to Build a Custom Map Visualization in Tableau

https://www.freecodecamp.org/news/cjn-how-to-build-custom-map-visualization-in-tableau/

Remember to upload to GitHub

GitHub

Flipped Learning

Flipped Learning

Use the following resources to support you ahead of next weeks session on the following concepts:

What is Artificial Intelligence , Machine Learning and Deep Learning
Different types of ML algorithms

Watch YouTube videos;

https://www.youtube.com/watch?v=ukzF19rgwfU

https://thecrashcourse.com/courses/machine-learning-artificial-intelligence-crash-course-computer-science-34/

https://thecrashcourse.com/courses/intro-to-algorithms-crash-course-computer-science-13/

Enrichment

Use the following resources to explain concepts in more detail:

Python and Power BI - https://www.freecodecamp.org/news/python-in-powerbi/

Matplotlib - https://matplotlib.org/

Technology

This week, our focus is on **Data Visualisation.**

Data visualisation is the graphical representation of information and data. By using visual elements like charts, graphs and maps, data visualisation tools provide an accessible way to see and understand trends, outliers and patterns in data.

In the world of big data, data visualisation tools and technologies are essential for analysing massive amounts of information and making data-driven decisions.

While stunning, rich visuals can be great tools for communicating ideas, the end benefit of data visualisation is its ability to drive better decision making. Here are a few ways data visualisation helps with strategic decision making:
- See the big picture
- Identify the significance
- Make informed decisions
- Track trends over time

The two main companies leading data visualisation in the workplace are Microsoft Power BI and Tableau. Using your Tech Talent Microsoft account, you can download and try Power BI for free. Follow the step-by-step course to create data visualisations for Kevin Cookie Company.

https://www.youtube.com/watch?v=TmhQCQr_DCA

Technology

Wellbeing

This week, our focus is on **Positive Mindset**.

Positive thinking, or an optimistic attitude, is the practice of focusing on the good in any given situation. It can have a big impact on your physical and mental health. That doesn't mean you ignore reality or make light of problems. It simply means you approach the good and the bad in life with the expectation that things will go well.

The mental benefits of a positive mindset may include:
- More creativity
- Greater problem-solving skill
- Clearer thinking
- Better mood
- Better coping skills
- Less depression

For more information about having a positive mindset, visit the following links:
https://www.webmd.com/mental-health/positive-thinking-overview
https://www.verywellmind.com/what-is-positive-thinking-2794772
https://www.intelligentchange.com/blogs/read/how-to-create-positive-mindset-and-attitude

Wellbeing

Soft Skills

This week, our focus is **Adaptability.**

Adaptability skills are personal or learned qualities that allow you to overcome or adjust to changes in your workplace. These skills allow you to take on new roles or responsibilities without increased adjustment time and allow you to react quickly to changing strategies or ideas. This means that adaptability is important when undertaking new work projects or changing business goals.

Here are some examples of how you can show adaptability in your job:
- Take on new roles and responsibilities
- Suggest and implement improvements
- Embrace surprises with optimism
- Offer alternative solutions to challenges
- Take risks
- Seize upon training opportunities
- Recognise your mistakes and learn when to make adjustments
- Work on tasks that are uncommon to your role and that require you to get creative

For further information about how your can improve your soft skills, visit the following links:
https://uk.indeed.com/career-advice/career-development/adaptability-skills
https://nhglobalpartners.com/adaptability-in-the-workplace/
https://whatfix.com/blog/adaptability-in-the-workplace/

Soft Skills

Employability

Knowing what to wear to an interview gives you the opportunity to present your best self to a prospective employer. Part of that presentation is dressing appropriately for the position you're applying for. Getting this right increases your chances of getting hired, as the person interviewing you is going to evaluate your appearance and include their assessment of your clothing in their recommendation.

There are some clothes that are typically best to avoid in an interview no matter the formality or informality of the business; these may include:

- skirts or dresses shorter than your fingertips
- flip-flops, sandals of any kind or trainers
- shorts of any kind
- clothes that allow your undergarments to show
- shirts with too-high hems or too-low necklines that show more skin than necessary
- heavy perfume or cologne
- polo shirts
- denim jeans

For more information, visit the following links:
https://uk.indeed.com/career-advice/interviewing/what-to-wear-to-an-interview
https://www.reed.co.uk/career-advice/what-to-wear-for-an-interview/
https://www.thebalancecareers.com/how-to-dress-for-an-interview-2061163

Employability