Data Journal

Date: Feb 22	**Course/topic:** Course 1: Data, data everywhere
Prompt:	What does the word “data” mean to you?
Journal Entry:	When I think of data, I think of records and information. Data is a digital record. It could be a record of a sale, GPS records of where a car has been, or posts of images and pictures on social media. Data in itself isn’t useful, because there’s so much of it. However, enough data usually contains information and patterns. This information is valuable, and data analysts are the ones who extract it.
Other thoughts or questions:	The amount of data that is created each year gets bigger and bigger! Data is important! Nowadays, companies that don’t use their data are at a disadvantage to those that do.

Date: Mar 7	**Course/topic:** Course 2: Ask Questions to Make Data-Driven Decisions
Prompt:	How to make data-driven decisions?
Journal Entry:	A data analyst helps guide business decisions by asking the right questions and providing data-driven insights. To make effective decisions, it’s important to define a clear problem statement and understand what kind of data is needed to answer it. Good questions lead to better analysis and ultimately to better decisions.
Other thoughts or questions:	If the data is incomplete or biased, it can lead to poor decisions. Could event-driven approaches help avoid this by triggering analysis only when meaningful actions or changes happen?

Date: Mar 13	**Course/topic:** Course 3: Prepare Data for Exploration
Prompt:	How is data generated and selected for analysis?
Journal Entry:	Every day, data is created through transactions, sensors, social media, and many other sources. Analysts must decide which data is relevant to the problem they are solving. It's important to distinguish between structured and unstructured data, and to understand the data formats and types before beginning analysis.
Other thoughts or questions:	Choosing the wrong data at the beginning can lead to misleading results later. How can we better evaluate the quality of incoming data sources?

Date: Mar 21	**Course/topic:** Course 4: Process Data from Dirty to Clean
Prompt:	Why is data cleaning important for analysis?
Journal Entry:	Clean data is essential for accurate analysis. Messy or inconsistent data can lead to errors and false conclusions. SQL queries and functions are useful for cleaning data from databases, while spreadsheet tools and BigQuery can help transform and organize it.
Other thoughts or questions:	Sometimes, cleaning feels more complex than analyzing. Is there a systematic way to speed up the cleaning process for large datasets?

Date: Mar 31	**Course/topic:** Course 5: Analyze Data to Answer Questions
Prompt:	How do you combine data to get insights?

Journal Entry:	Data is often spread across different tables or formats. To answer business questions, analysts need to aggregate and join data. Using SQL and spreadsheet formulas, we can merge datasets and summarize values to find trends, patterns, and insights.
Other thoughts or questions:	How do we make sure we don't introduce errors when combining multiple sources of data?

Date: May 10	**Course/topic:** Course 6: Share Data Through the Art of Visualization
Prompt:	Why is data visualization important?
Journal Entry:	Visualizing data helps communicate complex ideas clearly and effectively. Tableau allows us to create interactive and meaningful dashboards that highlight important insights. Good visuals can make data accessible to everyone, even those without technical backgrounds.
Other thoughts or questions:	How can we balance visual appeal with data accuracy when designing dashboards?

Date: May 25	**Course/topic:** Course 7: Data Analysis with R Programming
Prompt:	How can R help in data analysis?
Journal Entry:	R is a powerful language designed for data analysis. It allows analysts to organize, clean, and manipulate data efficiently. With R, we can automate repetitive tasks and use statistical functions to derive insights quickly.
Other thoughts or questions:	How do we choose between using R and spreadsheet or SQL tools for a specific task?

Date: Jun 01	**Course/topic:** Course 8: Google Data Analytics Capstone: Complete a Case Study
Prompt:	What is the value of completing a case study?
Journal Entry:	A case study simulates a real-world analytics problem. It helps me apply everything I've learned — from preparing and cleaning data to visualizing and presenting results. It also gives me a portfolio piece to show employers.
Other thoughts or questions:	How can I choose a case study topic that will stand out to recruiters?

Date: Jun 01	**Course/topic:** Course 9: Accelerate Your Job Search with AI
Prompt:	How can AI support your job search?
Journal Entry:	AI tools can help refine my resume, suggest better wording, and even tailor applications to specific jobs. They can also assist in building an online presence by recommending keywords and highlighting achievements. These tools save time and help present me more professionally.
Other thoughts or questions:	How do I make sure my applications still sound authentic when using AI-generated suggestions?