

## Learning Log: Start a data analysis checklist

## Instructions

You can use this document as a template for the learning log activity: Consider how data analysts approach tasks. Type your answers in this document and save it on your computer or Google Drive.

We recommend that you save every learning log in one folder and include a date in the file name to help you stay organized. Important information like course number, title, and activity name are already included. After you finish your learning log entry, you can come back and reread your responses later to understand how your opinions on different topics may have changed throughout the courses.

To review detailed instructions on how to complete this activity, please return to Coursera: <u>Learning Log: Start a data analysis checklist</u>.

<b>Date:</b> Jan/5/2023	Course/topic: Course 5: Analyze data to answer questions
	Learning Log: Start a data analysis checklist
Create your checklist	Start a high-level checklist of tasks you need to complete during analysis using the steps you have already learned:
	<ul> <li>Understand the Problem domain by using Structured thinking (Scope of Work: SOW)</li> <li>Ask SMART Questions (Specific, Measurable, Action-Oriented, Relevant, Time-bounded)</li> <li>Avoid asking close-ended, vague &amp; lack of content and leading questions.</li> <li>Prepare</li> <li>Gather data from various sources</li> <li>Avoid Data Bias when gathering the data (e.g., Sampling bias)</li> <li>Understand Data formats (e.g., structured/unstructured data)</li> <li>Provide Data ethics (Ownership, Transaction transparency, Consent, Currency, Privacy, Openness)</li> <li>Process</li> <li>Clean data (e.g., data format, correct numbers of text string, no duplicates), Consider Data errors when cleaning data (e.g., Insufficient data)</li> <li>Free of Dirty data (Knowing what Dirty data is, and how to deal with it)</li> <li>Ensure data by doing Verification &amp; Documentation to allows other peoples in the team to understand what we have fixes on the project)</li> </ul>



	<ul> <li>Organize the data in a way that is easy to reference (Easy to see and access)</li> <li>Format and adjust the data by using SORT and FILTER function</li> <li>Get input from others (to ensure your analysis and learn from others)</li> <li>Transform data (perform a calculation, identify patterns from the analysis)</li> <li>Share</li> <li>Provide a great Visualization that describes the essential information from your analysis</li> <li>Communicate the results with team</li> <li>Act</li> <li>Take a result in action (e.g., implement changes)</li> </ul>
Reflection:	Write 3-5 sentences (60-100 words) answering the following questions:
Questions and responses:	<ul> <li>Did making a checklist help you better understand the data analysis process? Yes, it reminds me about what I have learned recently, so that I can pack and digest it easily.</li> <li>How can you adapt your checklist to fit each new project? I can adapt my checklist when working on a real dataset by using those concepts. For instance, in Ask step, I can ask a clear question by using SMART question like "In December 2022, what is the total salary of each branch of Major Cineplex in Thailand?", "Which movie has the highest-ranking movie in January 2023?" to analyze the Thailand Major Cineplex's Cinemas.</li> </ul>