

Chapter 2 - Hands-on Assignment

Instructions

1. Answer the below question in the boxes provided.
2. Please submit the assignment through TalentLabs Learning System.

Question 1

Give **two** examples of how Big Data is used in your everyday life? (1 mark)

1. Advertisement
2. Traffic Data

Question 2

What data could you collect about your everyday life? For example, how your wakeup time changes from day to day or the number of calories you burn. Think of **six** other examples of data that you could collect about your day life. It can be collected by writing it down, making a spreadsheet, using a smart watch, phone data or anything else you can think of! State these six examples below and the methods of collecting them:

(6 marks)

- Example: Daily wakeup time – smart watch
1. Number of steps walked – smart watch
 2. Screen watch time – smartphone/laptop
 3. What cuisine did I eat – writing down on a paper
 4. How long do I shower – stopwatch
 5. How much money did I spend – counting my initial and balance money
 6. How much progress did I completed for the course – course completed progress bar

Question 3

Using your answers to Question 2.2, state what type of data you would need to collect (datetime, string, etc) for each one of your examples and whether the data would be qualitative or quantitative: (2 marks)

Example: Daily wakeup time – datetime – quantitative

1. Number of steps walked – integer - quantitative
2. Screen watch time (in seconds) – float - quantitative
3. What cuisine did I eat – string - qualitative
4. How long do I shower (in seconds) - float - quantitative
5. How much money did I spend – float - quantitative
6. How much progress did I completed for the course – integer - quantitative

Question 4

Explain how you would store your data from Question 2.2 and explain the reason for your decision: (2 marks)

I would store my data using Direct solution, storing it inside a local storage is enough as my data is not big and can be easily secured by myself.

Question 5

Throughout Questions 2.2 – 2.4 you have been building up information that could go into a metadata file. Explain the benefits of making a metadata file: (2 marks)

It can help me provide the context of the file, increase data reliability, maintain consistency, helps new users quickly understand the information, and lastly improves third party trust.

Question 6

Using your answers from Questions 2.2-2.4 you can now make a metadata file. In the box below please write up the information that would go into the file. Make sure to include all the necessary parts that would normally be found in metadata files (such as the what, the when, the why, etc.). Use **both** a **description** of the data collection process as well as a **table** to describe the columns of your data. (6 marks)

Dataset containing data that I could collect from my everyday life routine.

The data was collected by Faris Hamy on 01/08/2024.

The data was collected via smartphones, smartwatch, writing it down on a paper, stopwatch, counting money balance and the visual of completed course progress bar.

Column	Data Type	Description
Time/money spent	Float	Screen watch time (in seconds), shower duration (in seconds), money balance
Progress	Integer	Steps taken, course completed
Types of food cuisine	String	Types of food cuisine eaten