Task 1 Activity B: The Design – The Data Requirements

Student Evidence Review:

Task 1b Data Dictionary:

Field Name	Data Type	Data Format	Field Size	Description	Example
article_id	Integer	x...	11	Article id	1
article_name	Medium text	-	16,777,215	Article title	How to deal with asthma
article_category	Varchar	-	255	Category of the article	Health issues
publisher_name	Varchar	-	255	Name of the person who published the article	
published_date	Date	YYYY-MM-DD	-	Date of when the article was published	2004-12-26
published_time	Time	HH:MM:SS	-	Time of when the article was published	04:30:00
content	Long text	-	4,294,967,295	Content of the article	Asthma can be improved by...
accessibility_id	Integer	x...	11	Accessibility preference id	2
user_ip	Varchar	-	255	IP address of the user	181.252.15.132
feature_1	Bit	x	1	True or false statement using binary to save user's accessibility panel preferences. This represents if the feature is being used or not.	1
feature_2	Bit	x	1	True or false statement using binary to save user's accessibility panel preferences. This represents if the feature is being used or not.	0
feature_3	Bit	x	1	True or false statement using binary to save user's accessibility panel preferences. This represents if	1

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Lead Examiner Commentary:

The student has an intricate grasp of the data requirements for the solution. This is evident not just in their selection but in the meticulous way they've implemented them:

Variables:

Each variable declared and used in the solution isn't just functionally relevant but resonates with the problem's essence. This ensures clarity and relevance, fostering a streamlined codebase.

Data Structures:

Demonstrating a deep-rooted understanding of algorithmic efficiency, the student has judiciously opted for data structures that align perfectly with the operations to be executed. This not only optimises processing time but also enhances resource management.

Data Types:

The student demonstrated exceptional attention to detail in selecting the most suitable data types, optimising memory usage and preserving data integrity.

One of the standout attributes of the student's work is the clarity brought about by their naming conventions. Each variable, data structure, and even constant, resonates with its purpose, making the code highly legible and maintainable. This attention to detail ensures that any developer, whether part of the initial development or not, can quickly comprehend the code's purpose and function, signifying a hallmark of distinction-level work.

Error-Handling Master:

Perhaps the most commendable aspect is the student's approach to error handling. They've showcased an ability to pre-empt potential pitfalls and have instituted error-handling procedures that not only catch these exceptions but guide the system or the user to rectify or understand them. This robustness ensures the system remains stable and reliable, even when faced with unforeseen input scenarios or process breakdowns.

The student's work demonstrates a good understanding of effective data management and software robustness. Their diligence in maintaining clarity, optimising resources and ensuring system resilience categorically positions their

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