Instructions

For decades, relational databases remained essentially unchanged; data was segmented into specific chunks for columns, slots, and repositories, also called structured data. However, in this Internet of Things (IoT) era, databases need to be reengineered because the very nature of data has changed. Today’s databases need to be developed with the needs of IoT in mind and have the ability to perform real-time processing to manage workloads that are dynamic. For example, relational databases should be able to work with real-time data streaming and big data (an example was presented in the unit lesson).

Scenario: eHermes wants their personnel to be able to view security video footage in real-time and provide them with the ability to query video footage for viewing. Choosing a database solution such as MongoDB would allow eHermes to store mobile self-driving video footage in the same database as the metadata.

To do this, eHermes needs a way to manage the demands of real-time data streaming for real-time analytics. Conduct some research for a NoSQL database application such as MongoDB or Cassandra that could meet this need. How would switching to a real-time database solution help eHermes remain competitive? Create a PowerPoint presentation that does the following:

● Provides a brief introduction to IoT.

● Presents an argument to the eHermes CEO that switching to a more dynamic database structure (NoSQL real-time database) will meet the demands of IoT.

● Introduces some features of the database you chose, whether it is MongoDB, Cassandra, or another database.

● Describes how switching to a more dynamic database will give eHermes a competitive advantage?

Your presentation must be a minimum of six slides, and you must use at least two academic resources.

Be sure to follow the 7x7 rule (no more than 7 words per line and no more than 7 lines per slide). You are required to use speaker notes to discuss the bullet points on your slides.

Any information from a resource used must be cited and referenced in APA format.