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FSW-140

Reflection Assignment

* **After you reflect on this course, which topic, activity, or assignment was the most challenging? What did you learn by creating or doing this activity?**

At the beginning of this course, it was all overwhelmed but throughout the course, it started to make more sense. It was very easy to understand the syntax of MySQL until I was required to join two tables and show my data on the browser. So to me, the joint statement was the most difficult one In this course.

Paying attention to small details in the syntax of MySQL was one thing I learned. How to control my database and show the data on the browser was a very good addition to my skills.

* **What insights have you gained as a result of this course?**

Confident in myself as this is a very useful skill to know how to interact with a database and getting information from or sending to the database.

**Having now learned about both relational and non-relational databases, reflect on your experiences with both. Talk about the following:**

* **Difference between the two**.

MySQL is a relational database that is based on tabular design whereas NoSQL is non-relational in nature with its document-based design. MySQL is being used with a standard query language called SQL whereas NoSQL like databases misses a standard query language.

* **Common and famous examples.**

A relational database is structured, meaning the data is organized in tables. Many times, the data within these tables have relationships with one another or dependencies. A non-relational database is document-oriented, meaning, all information gets stored in more of a laundry list order.

* 1. Amazon AWS offers a wide variety of services, including its ownrelational database engine known as Amazon Aurora and, of course, Amazon RDS.
  2. Facebook has one of the largest MySQL database clusters anywhere and is the world's largest users of Memcached, an open-source caching system.
* **The reasoning for choosing one over the other.**

SQL databases provide great benefits for transactional data whose structure doesn't change frequently (or at all) and where data integrity is paramount. It's also best for fast analytical queries. NoSQL databases provide much more flexibility and scalability, which lends itself to rapid development and iteration.

* **The benefits of MySQL.**

Reduced Total Cost of Ownership. MySql is one of the most popular open-source database management systems that allow you to manage a relational database.

* Data Security. ...
* On-Demand Scalability. ...
* High Performance. ...
* Round-the-clock Uptime. ...

**Disadvantages of MySQL.**

* MySQL does not support a very large database size as efficiently.
* MySQL does not support ROLE, COMMIT, and Stored procedures in versions less than 5.0.

**The benefits of NoSQL.**

When compared to relational databases, NoSQL databases are often more scalable and provide superior performance. In addition, the flexibility and ease of use of their data models can speed development in comparison to the relational model, especially in the cloud computing environment.

**Disadvantages of MySQL.**

NoSQL is not suitable for storing structured data. NoSQL databases allow storing non-structured data. NoSQL is a new data format to store large datasets. NoSQL provides an alternative to SQL databases to store textual data