**Why MySQL is the Best Choice Over Other DBMS**

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CPT 310: Database Systems and Management

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October 17, 2022

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An organization has a lot of options to consider when choosing a relational database management system (RDBMS). The limitations of the applications that will use the database in some situations may make the decision easier. This is typically not the case, and in any particular circumstance, a variety of database platforms may all be able to offer a solution.

**Scalability and Flexibility**

The MySQL database server offers great scalability, with the ability to run huge data warehouses holding terabytes of information while having the flexibility to manage deeply embedded applications with a footprint of just 1MB. With support for all variations of Linux, UNIX, and Windows, platform flexibility is a persistent aspect of MySQL. Naturally, MySQL's open-source status also allows complete customization for individuals wishing to add particular requirements to the database server.

**Optimal Performance**

DBAs can configure the MySQL database server, particularly for individual applications thanks to a unique storage-engine architecture, which produces outstanding performance results. MySQL can fulfill the highest performance requirements of any system, whether the intended application is a high-speed transactional processing system or a high-volume website that handles a billion queries per day. MySQL provides all the necessary tools for today's crucial business systems, including quick load utilities, unique memory caches, complete text indexes, and other performance-enhancing features.

**Strong Data Protection**

Because protecting corporate data assets is database professionals' top priority, MySQL has outstanding security features that guarantee complete data protection. When it comes to database authentication, MySQL offers strong procedures to guarantee that only permitted users can access the database server, with the ability to deny users all the way down to the client machine level. Additionally, support for SSH and SSL is offered to guarantee safe and secure communications. Powerful data encryption and decryption features guarantee that sensitive data is shielded from unwanted access, and a granular object permission architecture makes sure that users only see the data they should be able to see.

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| Entity | Attribute |
| Customer | customerID  name  address  email |
| Product | productID  name  description  price |
| Order | orderNum  productID  paymentID  orderDate  shipDate |
| Payment | paymentID  customerID  cardNum  expDate  ccv  zip |

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