

## September 8th, 2024 - Sunday

MySQL is the database usually used with PHP

“ With PHP, you can connect to and manipulate databases “ - [w3schools](#)

PHP combined with MySQL are cross-platform

- which means you can develop in Windows and serve on a Unix platform - [w3schools](#)

MySQL

- Is a database system used on the web
- Runs on a server
- Ideal for small and large applications
- Very fast, reliable, scalable and easy to use

MySQL stores data in rows and columns and has rules on the relationship between data fields

- Is open source

An open source database is a database application that is free to view , download , modify , distribute , and reuse

- Gives developers the freedom to build new applications using existing database technologies - **Pure Storage**

In a closed source database the source code cannot be accessed , modified , distributed or reused. The company that wrote the code maintains the codebase - **Pure Storage**

MySQL offers full ACID transactions and can handle a high volume of concurrent connections

- [Oracle](#)

**ACID : Atomicity, Consistency, Isolation, and durability** - [databricks](#)

**Atomicity** - each statement is a transaction ( to read , write , update , or delete data ) is treated as a single unit. It's all executed or none at all. This prevents data loss and corruption from occurring

**Consistency** - ensures that changes made in tables are made in consistent ways , this ensures that corruption or errors in your data do not create unintended consequences for the integrity of the table

**Isolation** - When multiple people users are reading and writing from the same table, this ensures that the transactions don't interfere with one and another, each request occurs one on one even though they're all occurring at the same time

**Durability** - ensures that changes to your data made by successfully executed transactions will be saved, even in the event of a system failure

- [Databricks](#)

Due Tuesday September 9th: Research PHP & SQL, write an annotated bibliography to document the work you have done. The annotated bibliography should include at least 3 links, and an explanation of what useful information you found at each link. Additionally, write a hello world program as well as a script that connects to a database. Create a database table named test (Either through a PHP script or a phpmyadmin), create a funny number column and insert funny numbers using php.

How to connect - [w3schools](#)

Hello world - [php](#)

Connect a database - [w3schools](#)

Create a table - [w3schools](#)