

CS 240: MySQL Overview Transcript

[00:00:00] In this video, we'll cover the my SQL or my SQL database management system.

Start visual description. The professor demonstrates the MySQL database management system, explaining its significance and usage in the CS 240 project. End visual description.

[00:00:06] My SQL is the database that we use on the project in CS 240.

[00:00:14] My sequel is one of the most popular databases in the world.

[00:00:17] It, it was invented around 1995.

[00:00:21] It was created and um eventually, it became very popular, and it was, it was purchased by a company named Sun Microsystems and eventually uh Sun Microsystems was, was acquired by Oracle. And so currently Oracle is the company that owns my sequel, but it is an open-source database. Um It, it's super popular for that reason and uh it's used for a wide variety of applications on, on many platforms.

[00:00:54] So the first thing you're going to want to do is download and install my sequel on your computer, whether it be a laptop or a desktop system.

Start visual description. The professor shows how to download and install MySQL on a computer, highlighting the steps to access the MySQL Community Server and the importance of choosing the correct version. End visual description.

[00:01:03] And um we're going to use what's called my SQL community server.

[00:01:08] And anytime they call something community typically that means it's free. And so, we're going to use the free version of my SQL.

[00:01:14] So we don't have to pay.

[00:01:16] And so really the first thing you need to do is go to the link that's shown on this slide and, and download the my sequel installer.

[00:01:26] So we'll go to that link right now.

[00:01:38] And so this is the download page you'll see here that um you can select the version of my SQL that you want to use.

[00:01:46] And currently the latest version is 8.4 0.0 that might change by the time you see this video.

[00:01:52] So typically people download the latest version if, if that will work on their system.

[00:01:59] Uh Typically, if you're using Windows or Linux, you just download the most current one.

[00:02:04] Now, sometimes on the Mac, if you have a Mac, uh that's running Mac Os, a lot of times uh people have to download an older version of, of my sequel because um each, each version of my sequel on the Mac is, is really built to run on certain versions of the operating system.

[00:02:22] And so it may be the case that your, your computer is old enough that it won't run the current version of my sequel.

[00:02:29] And so you may have to, to go back and, and download a previous version or an older version.

[00:02:34] So to figure out what version you need to download, you'll want to figure out what version of Mac Os you have on your, on your system and then you can just Google around and, and, and try to figure out what version of my sequel will run on the, the particular version of Mac Os that you've got.

- [00:02:51] And if you need to download an older version of my sequel, you can go to the archives tab here and that will bring up uh the option to download all kinds of old versions.
- [00:03:02] I mean, they go way back so you can find pretty much any version of my SQL that you need.
- [00:03:07] And so go ahead and figure out what works for you.
- [00:03:10] In my case, I have a Windows system. So, I just download the, the uh the windows installer and just install it from there.
- [00:03:18] So it's pretty simple uh to do that.
- [00:03:22] So that'll give you the basic uh database. Now, my SQL, once you install it on your computer, it runs as a background service or a background Daemon depending on what operating system you're on.
- [00:03:35] Uh they call it different things, but basically, um the my SQL server runs in the background.
- [00:03:41] And so it's, it's configured to automatically start when you boot your computer.
- [00:03:46] So even if you're not logged in the My SQL server is, is up and running as soon as you boot your computer.
- [00:03:52] And so when you install my SQL, you should make sure that you install it as a, a background service if you have that, that option given to you.

Start visual description. The professor explains the process of installing MySQL as a background service, ensuring it runs automatically when the computer boots up. End visual description.

[00:04:04] Now, in addition to the basic my SQL server installation, there's a couple of other tools that you're going to want to download and install and so the first one, the first tool um is called the MySQL client shell.

[00:04:19] And this is a, a console based or terminal based program that lets you connect to your my SQL server and log into it and then run SQL commands against your database.

Start visual description. The professor introduces the MySQL client shell, a terminal-based program for connecting to the MySQL server and running SQL commands. End visual description.

[00:04:31] And as a software developer, you're going to need a tool like this so that you can connect your database so that you can look at the data that's in your database and try to figure out um what state your database is in because sometimes your program might not work, right.

[00:04:46] And you need to log into your database and look at it and figure out what's going on.

[00:04:49] And so, um in this case, you ought to download and install the MySQL client shell.

[00:04:55] And so for that, you can go to this link here and we'll do that real quick as well.

[00:05:06] And so it's, it's pretty similar to the download and install for um the My SQL server itself. In this case, you um probably want the most current version.

[00:05:16] But again, on Mac Os, you may need to download an older version to match the version of the, the my SQL server that you installed.

[00:05:23] So download and install the my sequel shell and we'll talk more about how to use that um in a minute.

[00:05:35] And then um there's actually another tool I want to have you download as well. Let's go back here.

[00:05:45] It's called the where is it at? It's called the workbench.

Start visual description. The professor discusses the MySQL Workbench, a graphical interface tool for logging into the database and manipulating its contents, emphasizing its user-friendly nature. End visual description.

[00:05:52] So you want to download the MySQL workbench as well.

[00:05:55] It's right there at the, the same uh URL as the, the MySQL client program.

[00:06:03] Um The workbench is, is another program you can use to log into your database and look at its contents and manipulate it.

[00:06:10] But the advantage of the, the workbench is that it has a graphical interface.

[00:06:14] And so if you prefer to use a, a graphical user interface rather than a terminal based interface, then you can download and install the uh the workbench.

[00:06:23] And so I would recommend that you download and install all three of those uh things. They're all here on this page called my sequel community downloads.

[00:06:34] So that, that's uh where we downloaded everything that we just did.

[00:06:40] OK? So, once you've got everything downloaded and installed, the next thing uh you need to learn how to do is how to start and stop your my SQL server because there may be times when you want to shut it down.

[00:06:55] And of course, if you ever shut it down, you'll need to start it back up whenever you want to use it.

[00:06:59] And, and so typically in a production environment, the database server would be running all the time.

[00:07:05] But if you, when you're running my sequel on your, your own computer for development purposes, um you're going to probably want to shut it down and start it up only when you're, you're using it, perhaps not that you have to, you can let it run all the time if you want.

[00:07:19] And so um there's a good article that, that uh is linked to from this, this slide and what this article describes is how to start stop and restart my SQL server.

[00:07:33] And it's not like super hard to do this, but it does require certain commands.

[00:07:40] Um that might not be obvious. And so, what you can do is you can go through this article, and it shows how to stop the MySQL server on Windows, Linux and Mac Os. And then it also shows how to start and restart my SQL server on uh all those platforms as well.

[00:07:57] And so what you ought to do is just go to this article and find um this section that talks about how to start and stop my sequel on your operating system and then just follow the, the commands that are there and they're pretty straightforward, but uh learn how to do that because you'll want to know how to do that.

[00:08:14] An example that would be on my system. I'm running Windows.

[00:08:17] And so um on Windows, my SQL server runs as a background uh service.

[00:08:25] And so in Windows, I can go to the, the service control panel and it shows me the list of all the background services that are running on my computer.

[00:08:35] And you can see that there's quite a few.

[00:08:37] And if I just look for my sequel right there. It says my SQL 880 is, is currently running and if I want to stop it or restart it, I can right click on it and do that.

[00:08:50] So that's how you do it on Windows is through this uh services control panel.

[00:08:54] But on Mac Os and Linux, it, it's different. So, look for the instructions relevant to you in the article that I just, just showed you.