CS 240: MySQL Console Client Transcript

[00:00:00] As previously mentioned, the my SQL console client is a terminal based program that you can run in in a shell-like bash or some other shell. And it lets you um connect to your my SQL server. It lets you log into it and then it lets you peruse your database tables to see what data is in them.

Start visual description. The professor demonstrates the MySQL console client, a terminal-based program that allows users to connect to their MySQL server, log in, and peruse database tables. The screen shows a terminal interface with commands being typed. End visual description.

[00:00:21] And it also lets you modify your database and the tables there in to uh be whatever you want them to be.

[00:00:27] But it is a terminal based interface that's shown on this slide.

[00:00:30] And some people really like this kind of interface, they prefer a command line interface.

[00:00:34] Um One advantage of this kind of interface is it, it's always pretty much always available no matter how you log into the machine.

[00:00:41] And you, you can almost always do a command line tool running Gooey based tools or graphical tools is, is sometimes hit and miss depending on how, how things are configured.

[00:00:52] So this kind of shows you the uh what the console client looks like.

[00:00:59] Now, um what we'll do here is I'll actually run my SQL S on my Windows system and that will run the, the console client.

[00:01:13] And then uh so I'm now running the console client, and I'm not connected to a database yet, so I can't really do anything.

Start visual description. The professor runs the MySQL console client on a Windows system. The screen displays the terminal with the client running but not yet connected to a database. End visual description.

[00:01:20] Now, one thing you'll notice here is it says Js in yellow, that means it's in JavaScript mode, there's actually different modes, you can put this client into it, it defaults to javascript mode.

[00:01:30] And what that means is that by default, you can write JavaScript scripts that operate on your database in, in this shell.

[00:01:38] And there's also a Python mode where you can write Python scripts that operate and interact with your database.

[00:01:44] Um but I don't want to do that. I want to use SQL. And so, the first thing I'm going to do now that I'm in the, in the my sequel shell is I'm going to put it in SQL mode.

[00:01:55] So to do that, you run slash SQL. So, in, in this interface commands begin with slash and so slash SQL will put it in SQL mode.

Start visual description. The professor switches the MySQL console client to SQL mode by typing the command "/SQL". The terminal interface updates to indicate that it is now in SQL mode, ready to accept SQL commands. End visual description.

[00:02:07] And so what that means is now, I can actually just type in regular SQL commands to interact with my database like uh you know, select statements, insert, update statements and so forth.

[00:02:18] And so that's, that's uh a mode that you'll probably want to be in frequently.

[00:02:23] Now, I can't really do anything until I, I connect to the database.

[00:02:26] So let’s, let’s see how to do that.

[00:02:27] So to connect to the database, I’m going to just run slash connect.

Start visual description. The professor demonstrates how to connect to a database using the command "/connect" followed by a connection string that includes the username, domain name, and port number. The screen shows the terminal with the connection string being typed and the prompt for the password. End visual description.

[00:02:31] And then I need to give um, a connection string that specifies my username.

[00:02:37] So in my case, I’m logging in as the root user, but you would use whatever username you’re using on your database.

[00:02:43] And uh, I’m going to specify what machine it’s running on.

[00:02:48] And in my case, it’s running on my local computer.

[00:02:50] So I’ll just put local host, but you could put any, uh, domain name that uh you want there. And then I’m going to put a colon and then I’m going to put the port number that the uh my SQL server is listening on.

[00:03:05] And so that’s the format there.

[00:03:08] So I put username at sign domain name of the server call and port number and it’s going to ask me for my password.

[00:03:17] So I’ll type that in.

[00:03:21] And so now I’m logged in or connected to my server.

[00:03:26] Now, um in my sequel, you can have multiple databases inside one instance of my SQL, they call them schemas.

[00:03:35] Um But oftentimes they're also called databases.

[00:03:37] So inside my SQL server, I can actually have multiple separate databases.

[00:03:42] And, and so before you can actually start running commands, you need to specify what database you want to use.

[00:03:49] And so in my case, I'm going to use the pet shop database that goes with our pet shop application.

[00:03:55] So in this case, I'm going to run slash use and I'm going to specify pet shop. That's the name of the database.

Start visual description. The professor uses the command "/use petshop" to specify the database to be used. The terminal interface updates to show that the "petshop" database is now in use. End visual description.

[00:04:07] So now I'm, I'm using pet shop, and you can see that in, in the prompt. It says pet shop.

[00:04:14] Now, if I didn't know the names of the databases of my server, I could run the command called show databases.

[00:04:24] And that'll actually uh just show a list of all the databases that are available uh to choose from. So, here's pet shop down here and one thing up here is, is I forgot to type in the semicolon at the end of the show databases command.

[00:04:37] And so um that's why this arrow came up and they wanted me to finish the command.

[00:04:42] So I had to type in a semicolon.

[00:04:43] So typically you'd want to put a semicolon at the end of whatever command you're typing into this, this shell.

[00:04:51] OK? So now that I’m in, I’m, I’m using this pet shop database, I can run another command sh called show tables.

[00:05:02] And that shows me a list of all the tables in my database.

Start visual description. The professor runs the command "show tables" to display a list of all tables in the "petshop" database. The screen shows the terminal with the list of tables, including the "pet" table. End visual description.

[00:05:04] Now, the pet shop database only has one table named pet.

[00:05:09] And uh after that, I can start running SQL commands on my database. So, I can say select star from pet that would be the SQL command.

[00:05:22] And so you can see here, it just shows me the results of my query by, by showing that the table of data that came back.

[00:05:28] And so at this point, I can type in any SQL command that I want.

[00:05:32] I can look at the database, I can modify it. I can do whatever I want to do.

[00:05:38] Now, sometimes you might uh forget what commands are available inside this shell.

[00:05:43] So if you want to get help, you can type slash help.

[00:05:48] Gives you a list of all the commands you can run.

[00:05:49] You can also run slash question mark, which is equivalent to slash help, and you get the same thing.

[00:05:57] Um And then when I’m finished using the shell, I can type in the command slash quit.

[00:06:04] And that kicks me out of the shell. So, this is a really useful tool.

[00:06:08] I encourage you to, to learn how to use it.

[00:06:10] Even if you decide to use the, the, the workbench, the my SQL workbench instead of this one.

[00:06:16] For most of your work, I would recommend that you at least get uh somewhat familiar with the, my sequel console shell so that uh you can use it if you ever need to.