## How to create schema with cardinality in Workbench

Before you dive deep to write down the SQL commands for a question, it is often helpful to understand the schema of the data base first. The schema helps you find which table you should refer to and how many joins you need to fetch a specific column. Here is how to automatically generate the schema in Workbench.

Step 1: Log in the Workbench with your username and password.

Please refer to <u>Quick Guide to Install and Set Up MySQL Workbench</u> for details if you have questions about how to log in. After logging in, you will see this interface:

| MySQL Connections $\oplus$ $\circledast$ | Q Filter connections | Shortcuts          |
|--|----------------------|--------------------|
| mis2502<br>mis2502a<br>mis240            |                      | MySQL Utilities    |
| time     dataanalytics.temple.edu/3006   | 306                  | Database Migration |
|  |                      | MySQL Bug Reporter |
|  |                      | Workbench Blogs    |
|  |                      | Planet MySQL       |
|  |                      | Workbench Forum    |
| Models 🟵 🗟 🛇                             |                      | Scripting Shell    |
| Sarkae Juli                              |                      |                    |

## Step 2: Create a new model

Click in the little plus (+) sign besides the "Models" to create a new model. And you will be directed to a new interface.

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## Step 3: Reverse engineer

Go to the "Database" menu, select "Reverse Engineer" (Figure 3-1) and you will be directed to a new window (Figure 3-2).





| 0 0  |   | Reverse Engir   | neer Database                        |  |
|--|---|---|--------------------------------------|--|
|  | Set Parameters  | for Connecting to a D   | BMS                                  |  |
| <ul> <li>Connection Options</li> <li>Connect to DBMS</li> <li>Select Schemas</li> <li>Retrieve Objects</li> <li>Select Objects</li> <li>Reverse Engineer</li> <li>Results</li> </ul> | Set Parameters of<br>Stored Connection<br>Connection Method<br>Hostname: da<br>Username: m<br>Password: | for Connecting to a D<br>n: mis2502a<br>d: Standard (TCP/IP)<br>Pa<br>ataanalytics.temple.edu<br>241<br>Store in Keychain | BMS rameters SSL Ac Port: 3306 Clear | <ul> <li>Select from saved connection settings</li> <li>Method to use to connect to the RDBMS</li> <li>dvanced</li> <li>Name or IP address of the server host - and TCP/<br/>IP port.</li> <li>Name of the user to connect with.</li> <li>The user's password. Will be requested later if it's not set.</li> </ul> |
|  |   |   |                                      | Go Back Continue   |
|  |   |   |                                      |  |

Figure 3-2

This is again a similar interface for you to connect to the SQL server with your username and password (your login information should be there automatically. If not, use your username and password to connect).

You can keep clicking the "Continue" button until you reach the interface to choose which database you want to create schema for (Figure 4). I will select "moviedb" and keep clicking "Continue" (at certain steps, the button becomes "Execute", just click to go on) button. Keep everything else as default and finally click the "Close" button. You will end up with the Shcema of the database "moviedb" (Figure 4-2).



Figure 4-2