

# CSE 4020/5260

## Database Systems

Instructor: Fitzroy Nembhard, Ph.D.

### Modeling ER Diagrams in MySQL Workbench



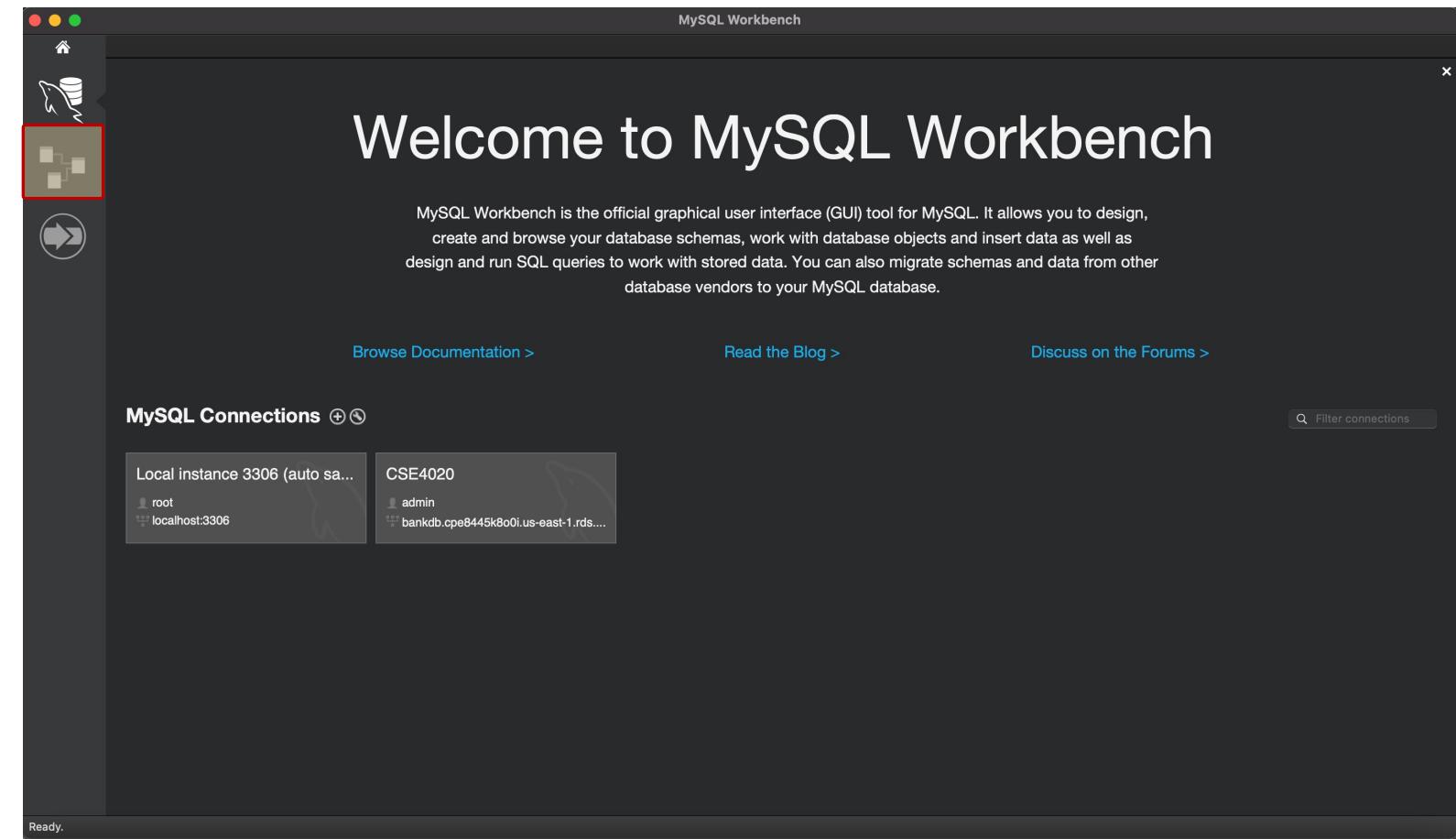
# Creating an ER Diagram in MySQL Workbench

- The following slides will show you how to create an ER Diagram in MySQL Workbench, how to change the ER notation, export diagrams, and reverse engineer a database to an ER model.



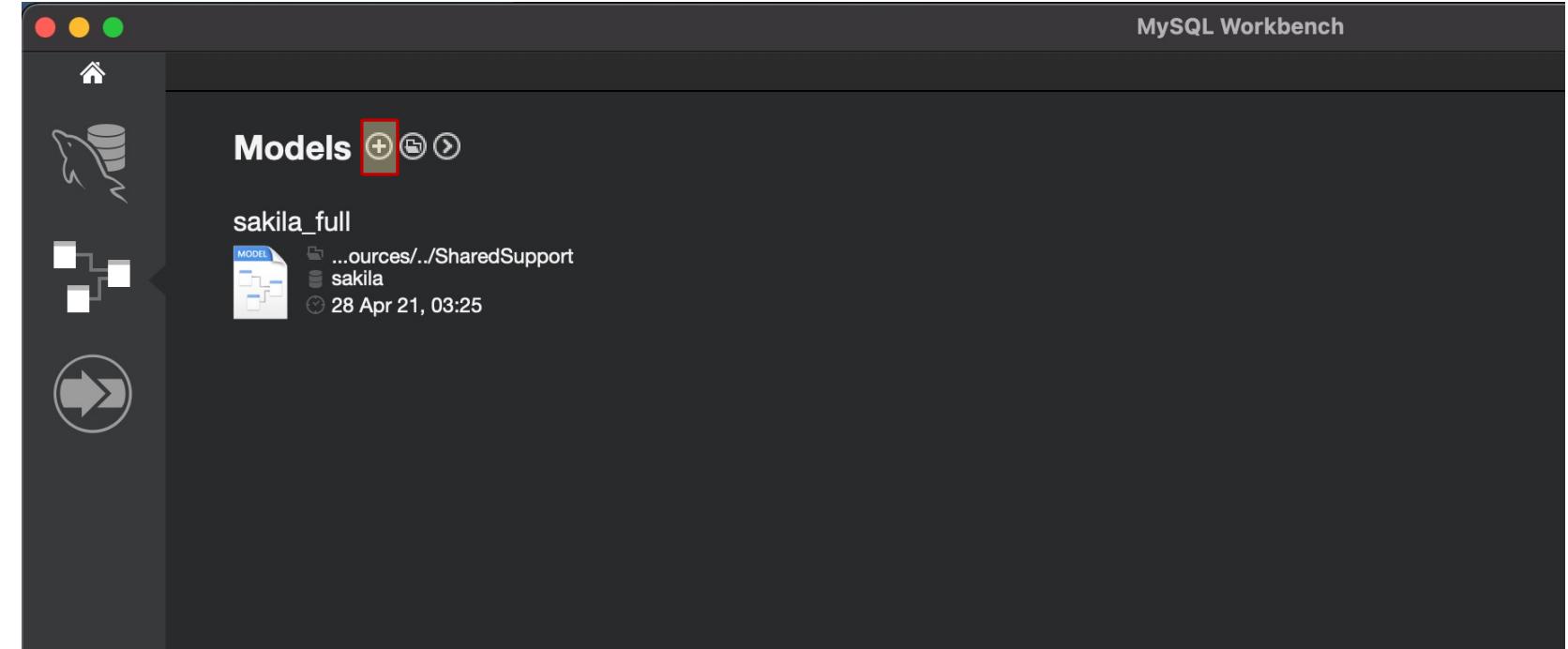
# Creating an ER diagram in MySQL Workbench (1)

Click the ER Icon to create a model



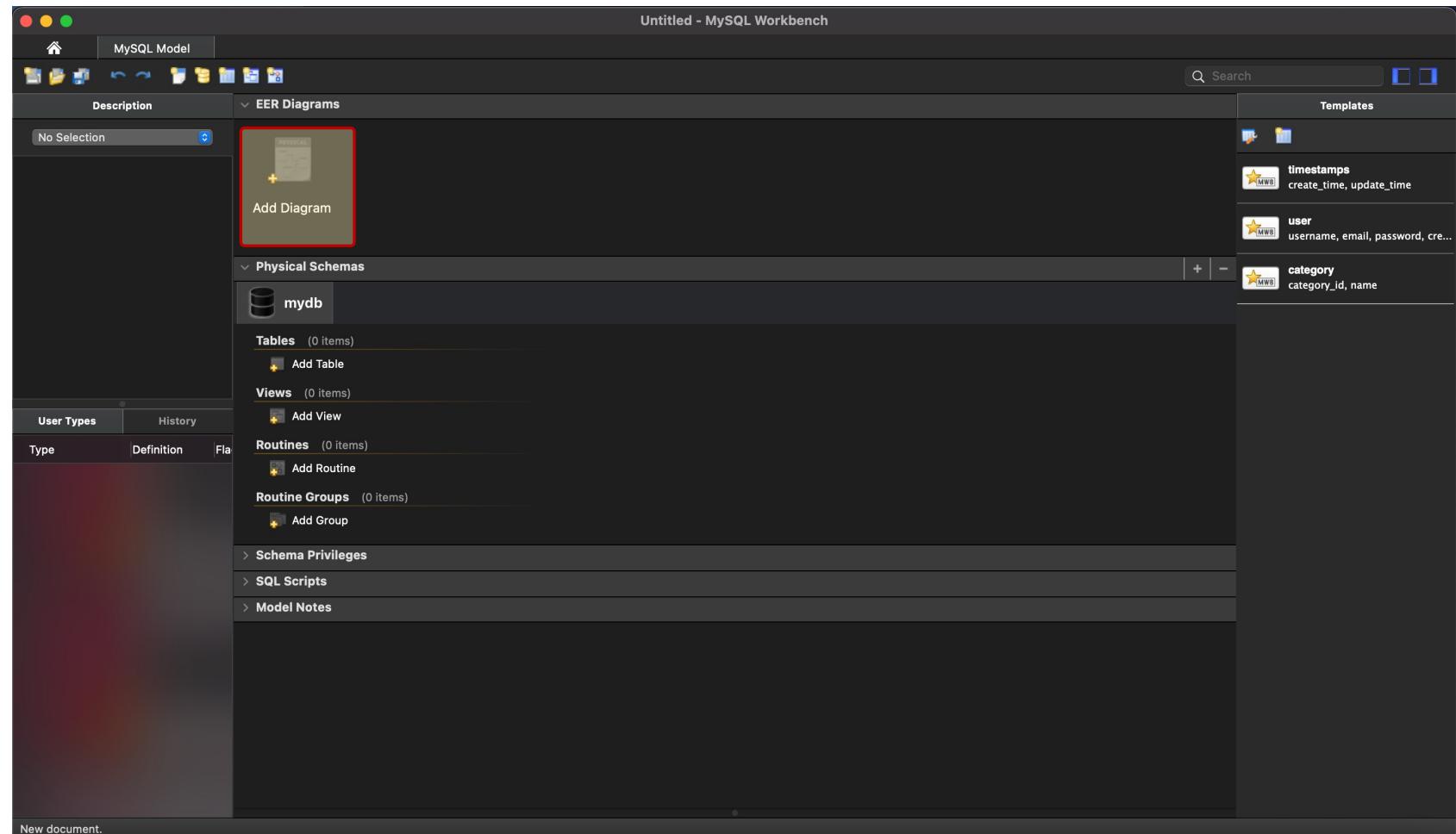
# Creating an ER diagram in MySQL Workbench (2)

Click the + Icon to create a model



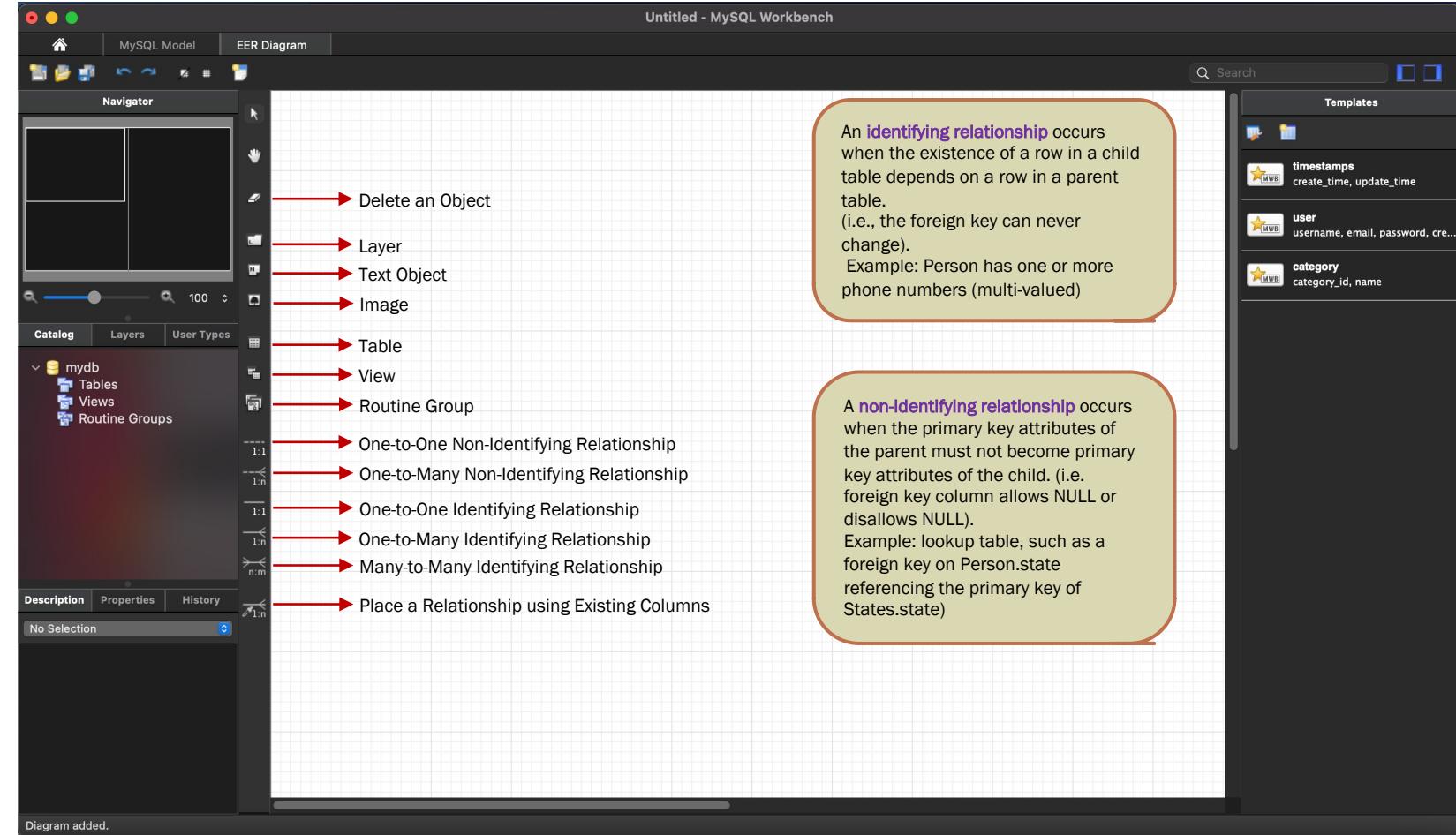
# Creating an ER diagram in MySQL Workbench (3)

Click the Add Diagram Icon to create a model



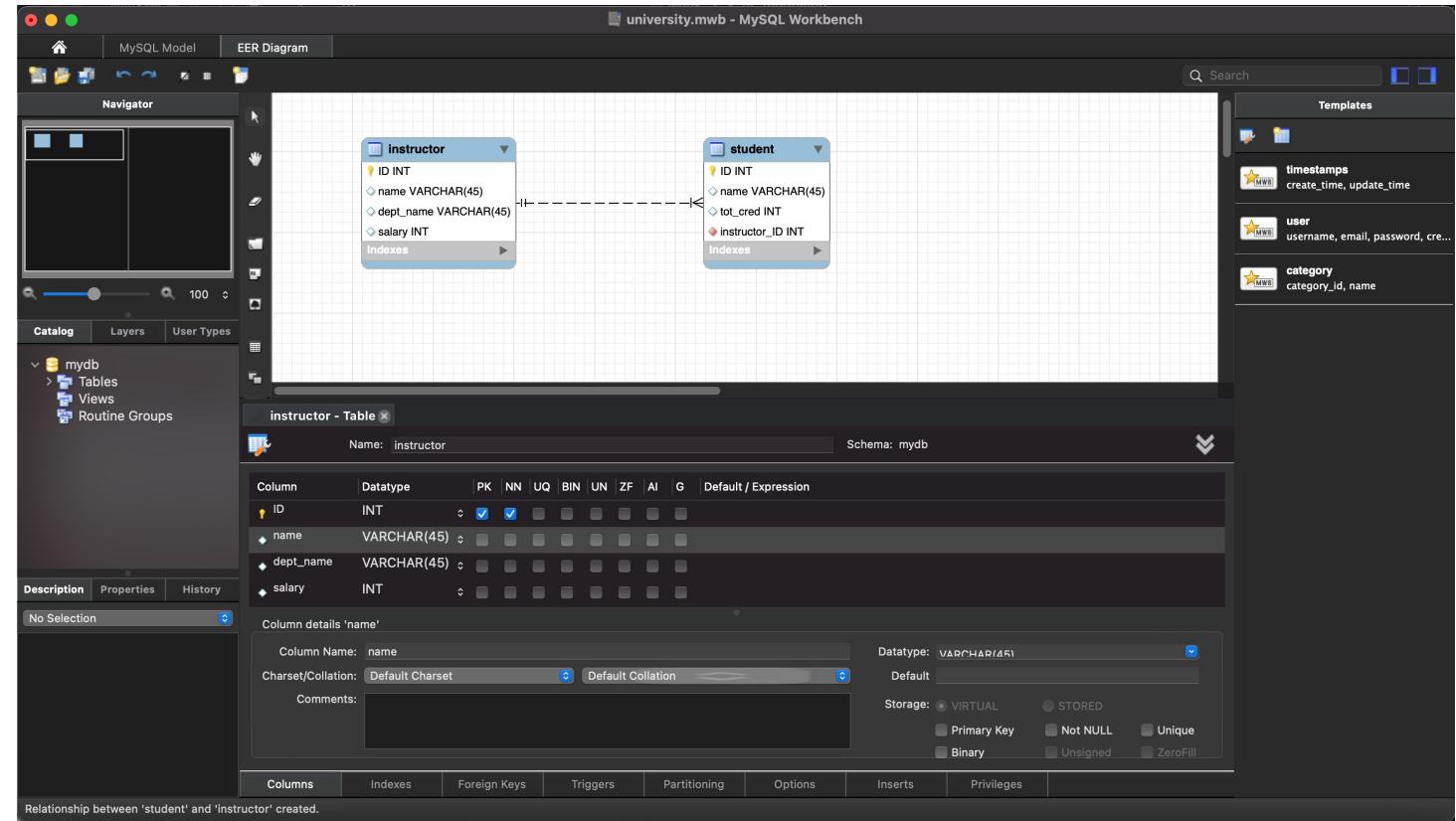
# Understanding the Icons

Browse the collection of icons/objects



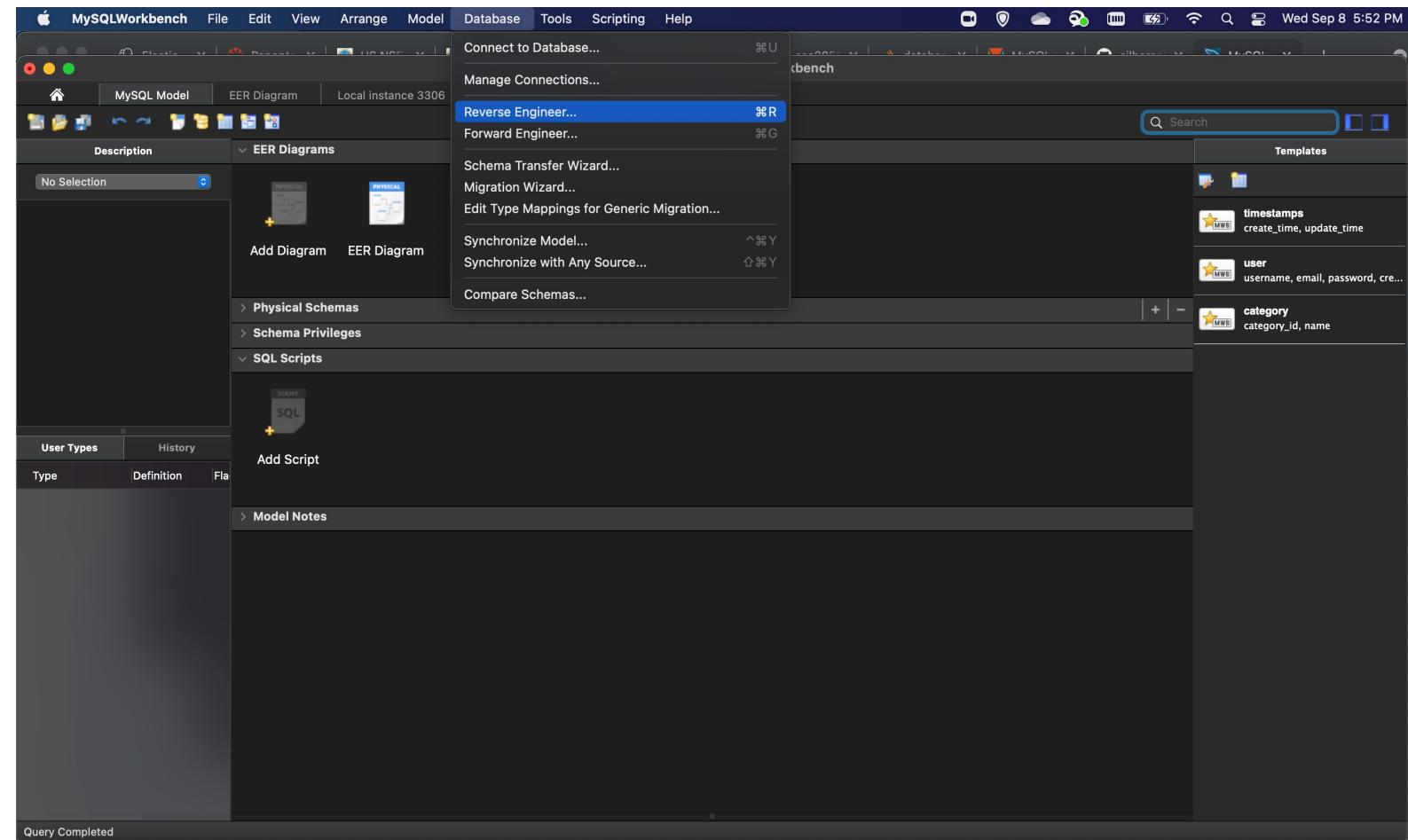
# Creating a Model

Add tables and relationships using the respective icons.



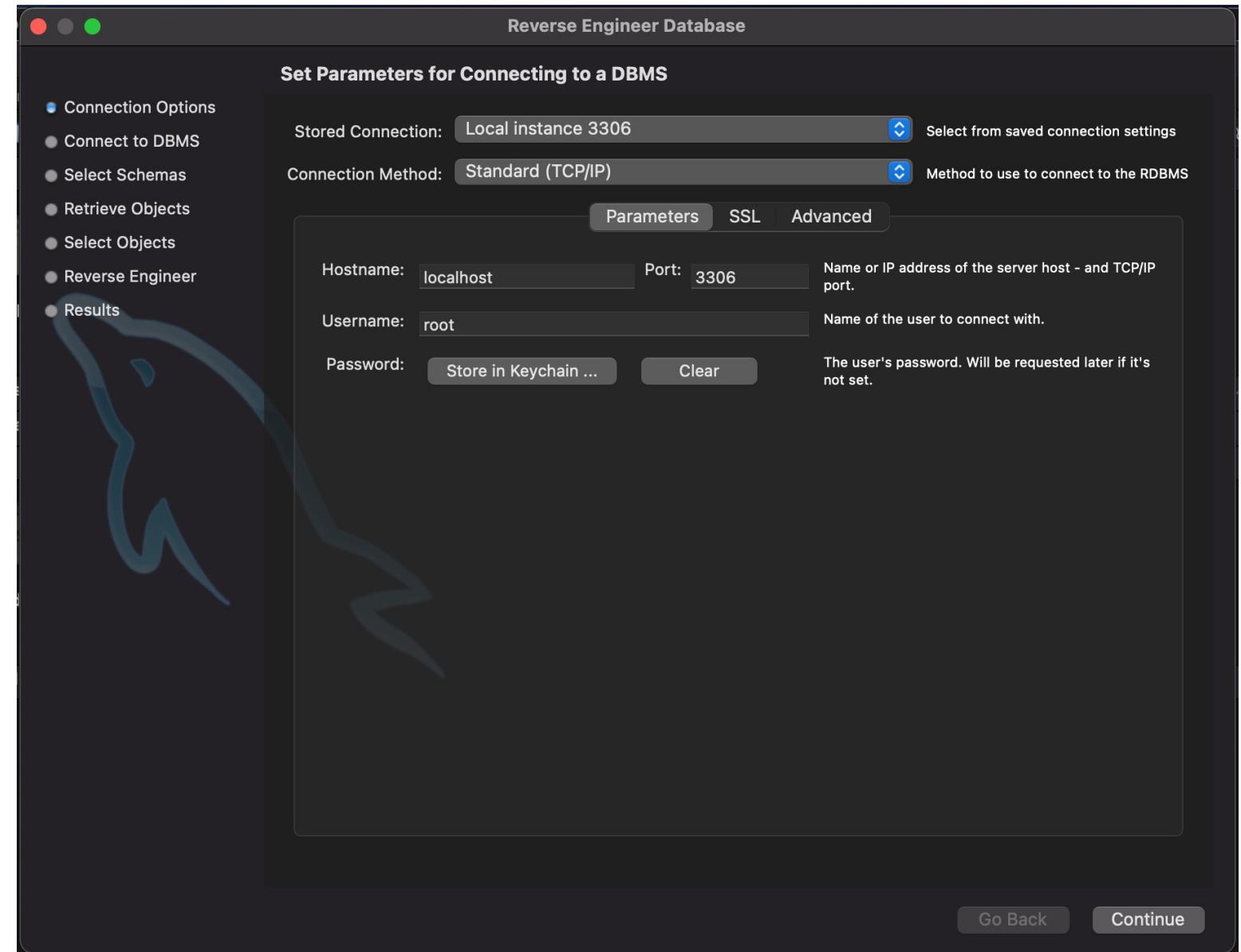
# Reverse Engineering a Database to a Model (1)

You can reverse engineer an existing database in MySQL to an ER model.



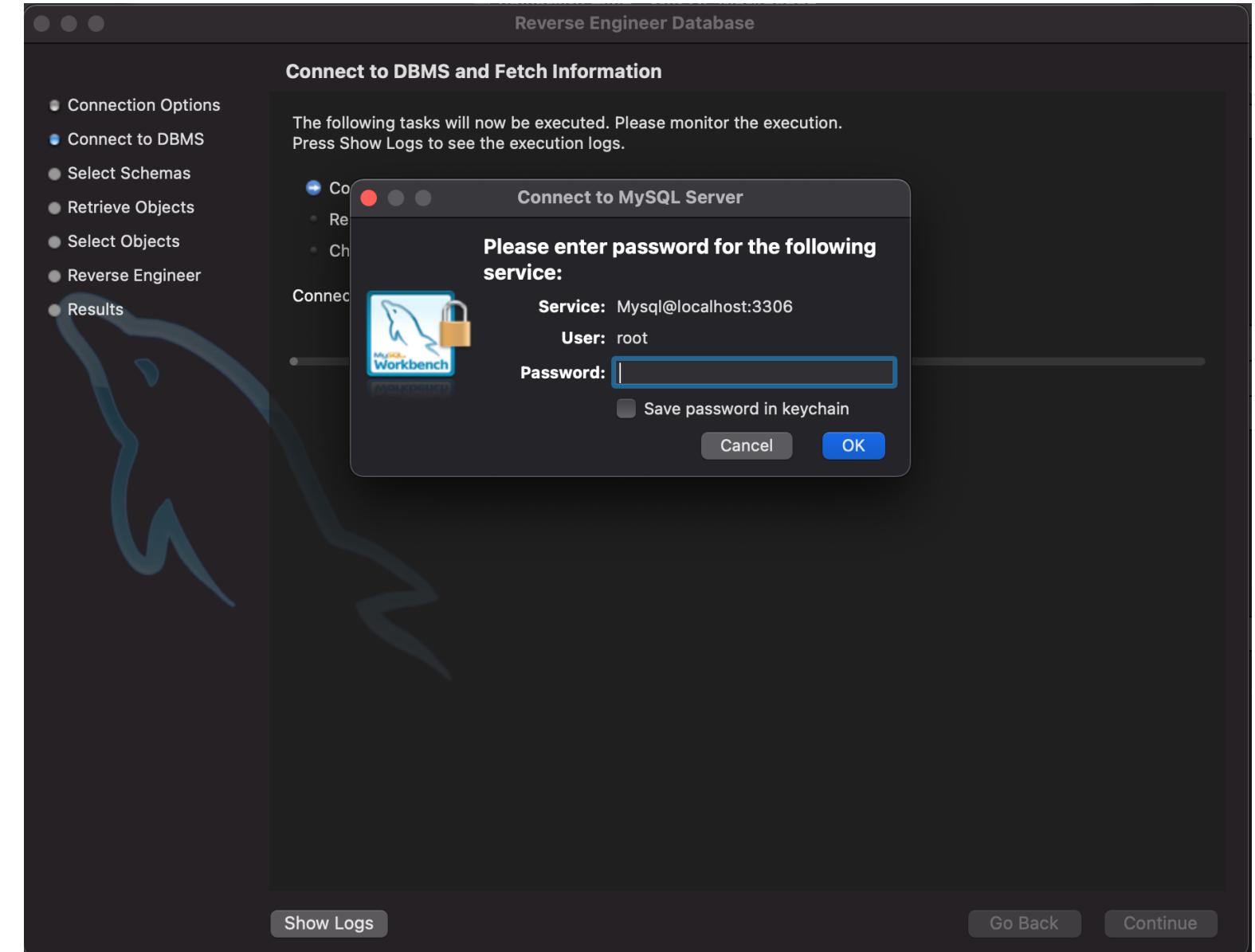
# Reverse Engineering a Database to a Model (2)

Enter the connection parameters and click Continue.



# Reverse Engineering a Database to a Model (3)

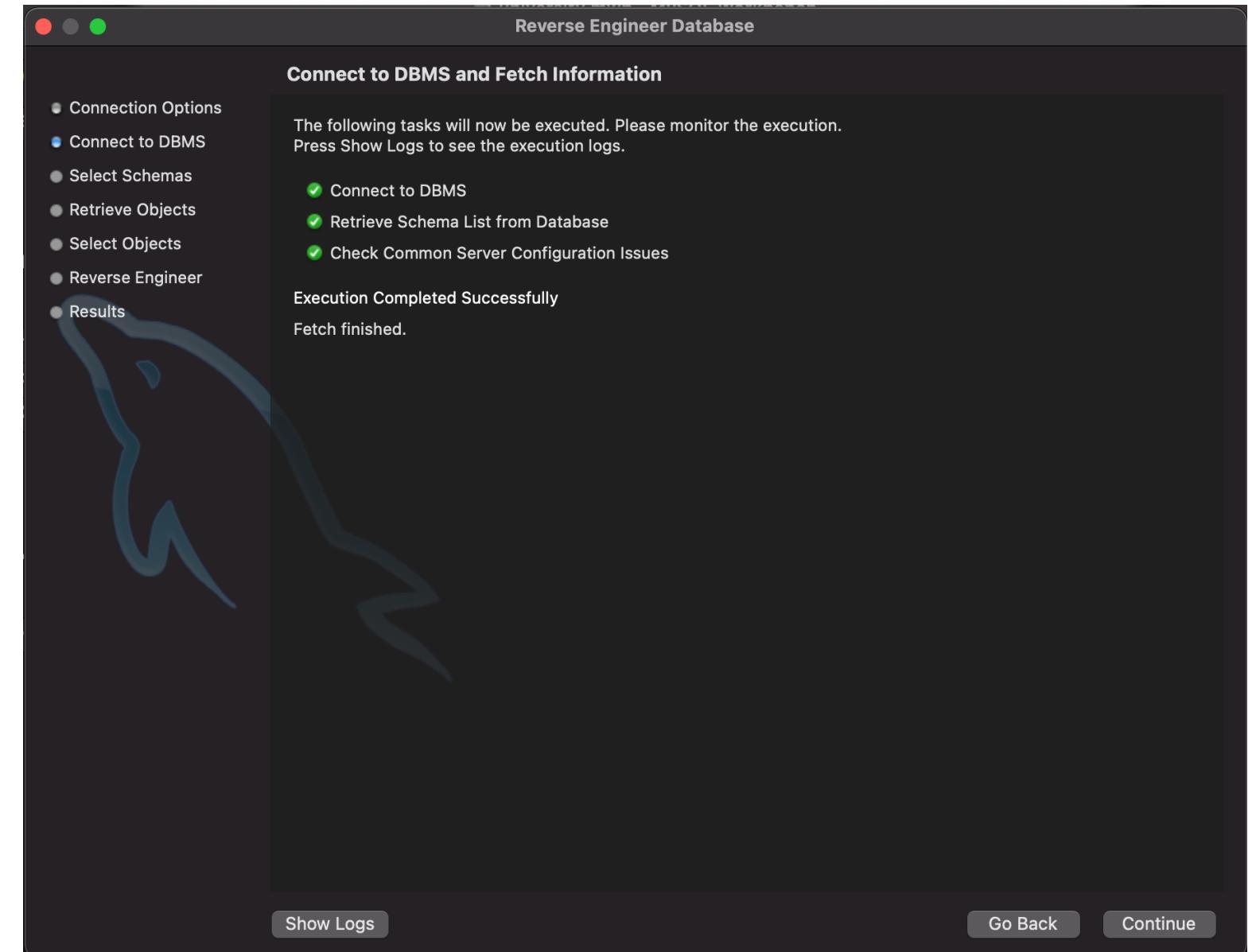
Log into the database management system



# Reverse Engineering a Database to a Model (4)

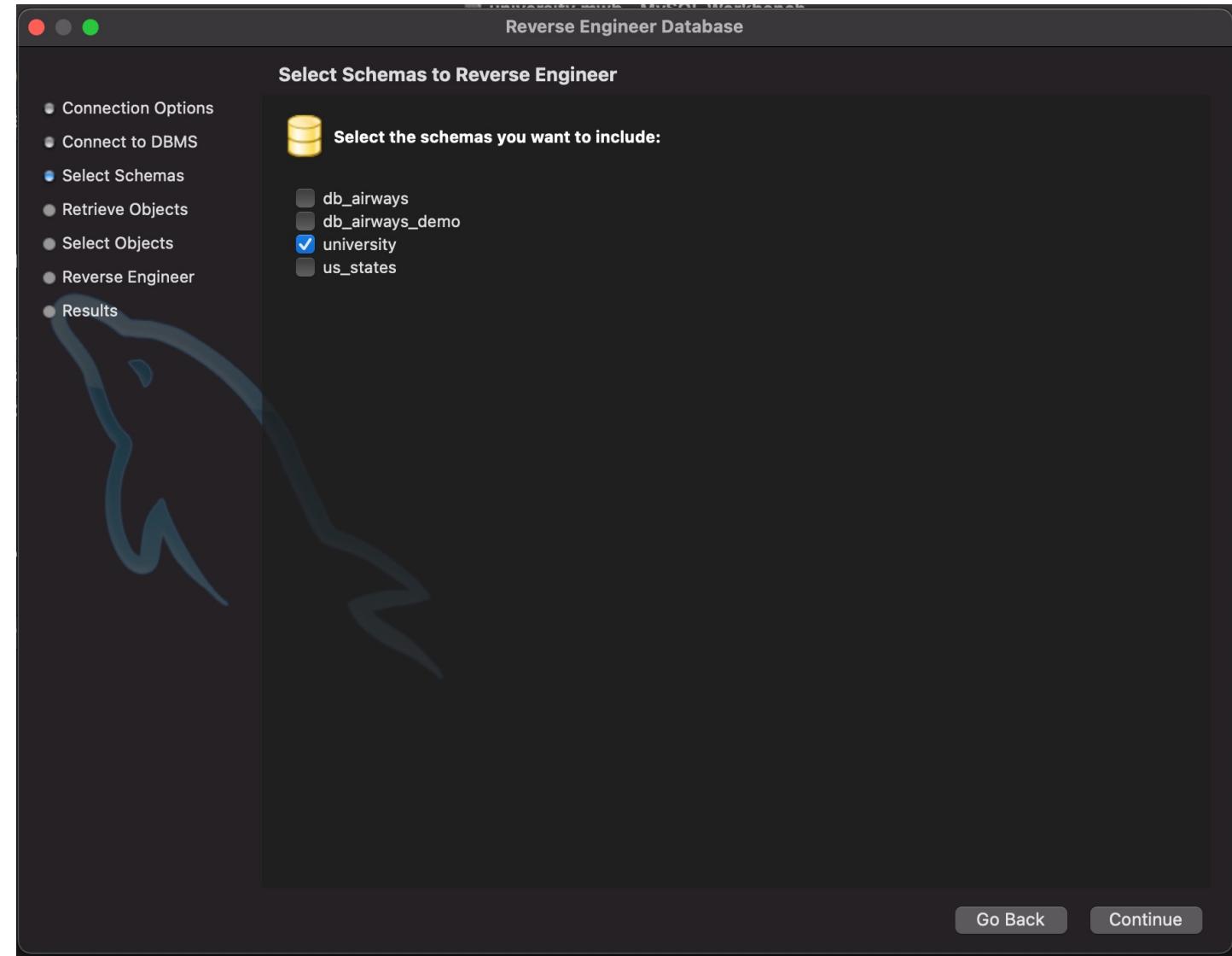
Wait while the process takes place.

Then click **Continue**.



# Reverse Engineering a Database to a Model (5)

Select the database schema to reverse engineer and click **Continue**.

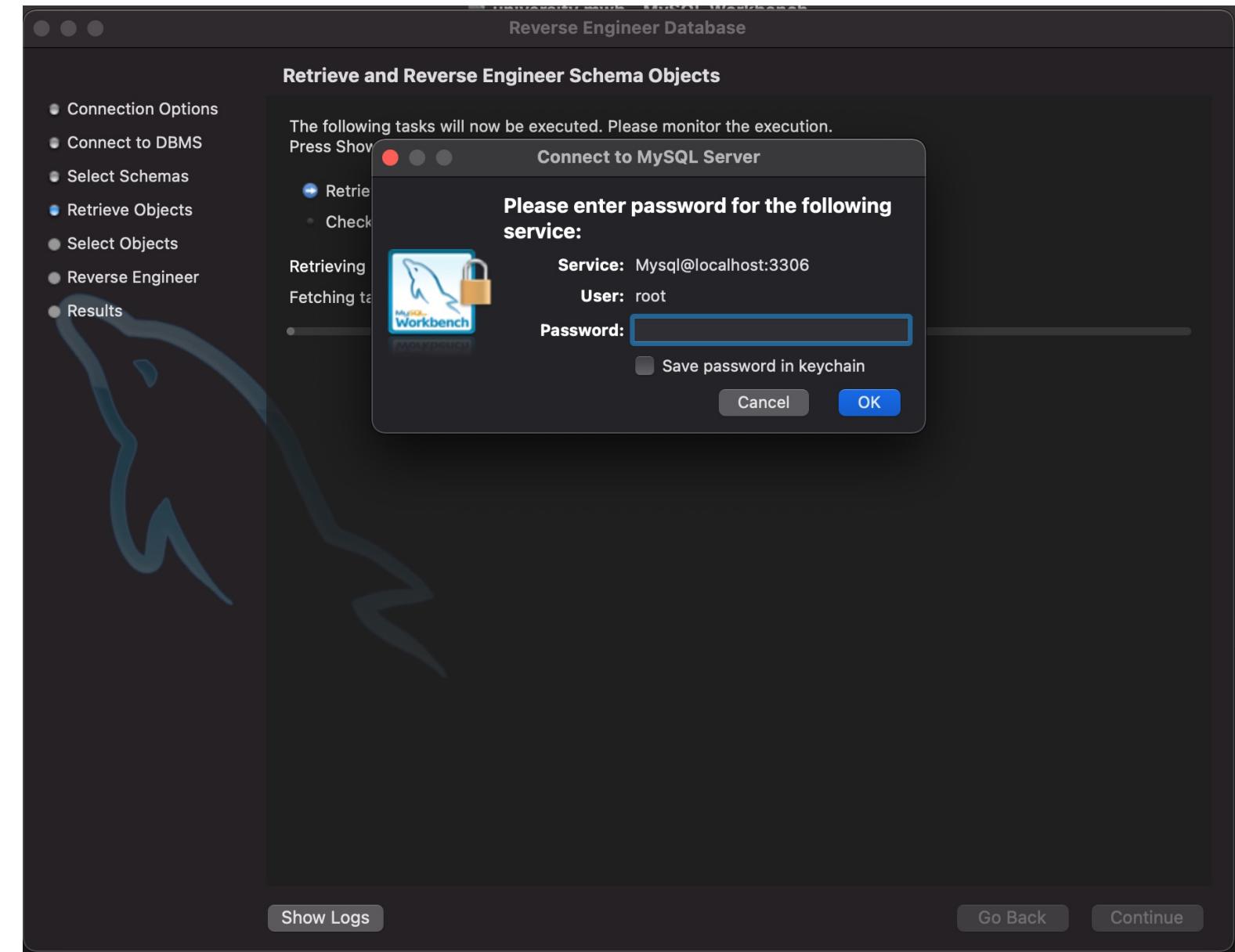


Go Back

Continue

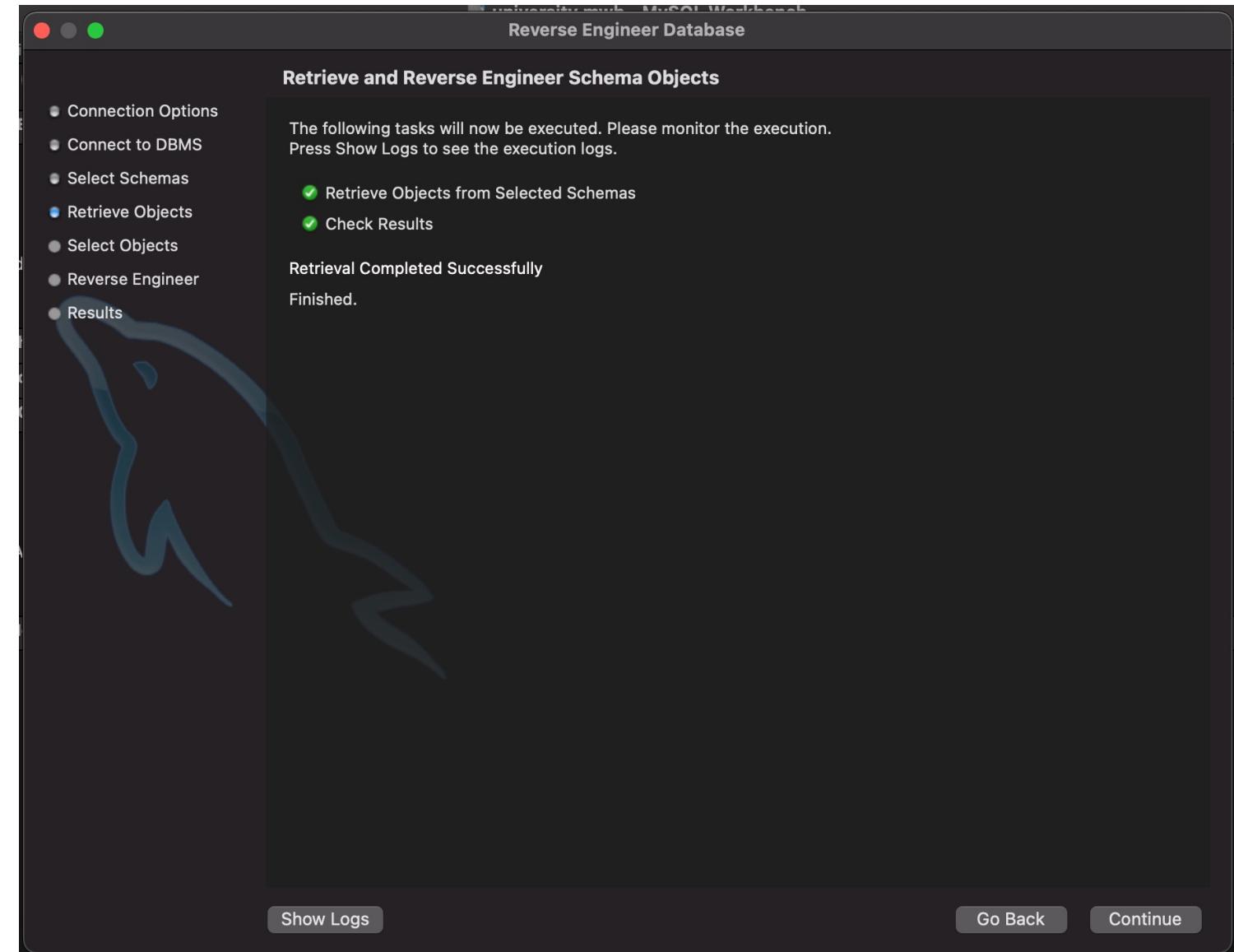
# Reverse Engineering a Database to a Model (6)

You may need to log into the database to retrieve the schema



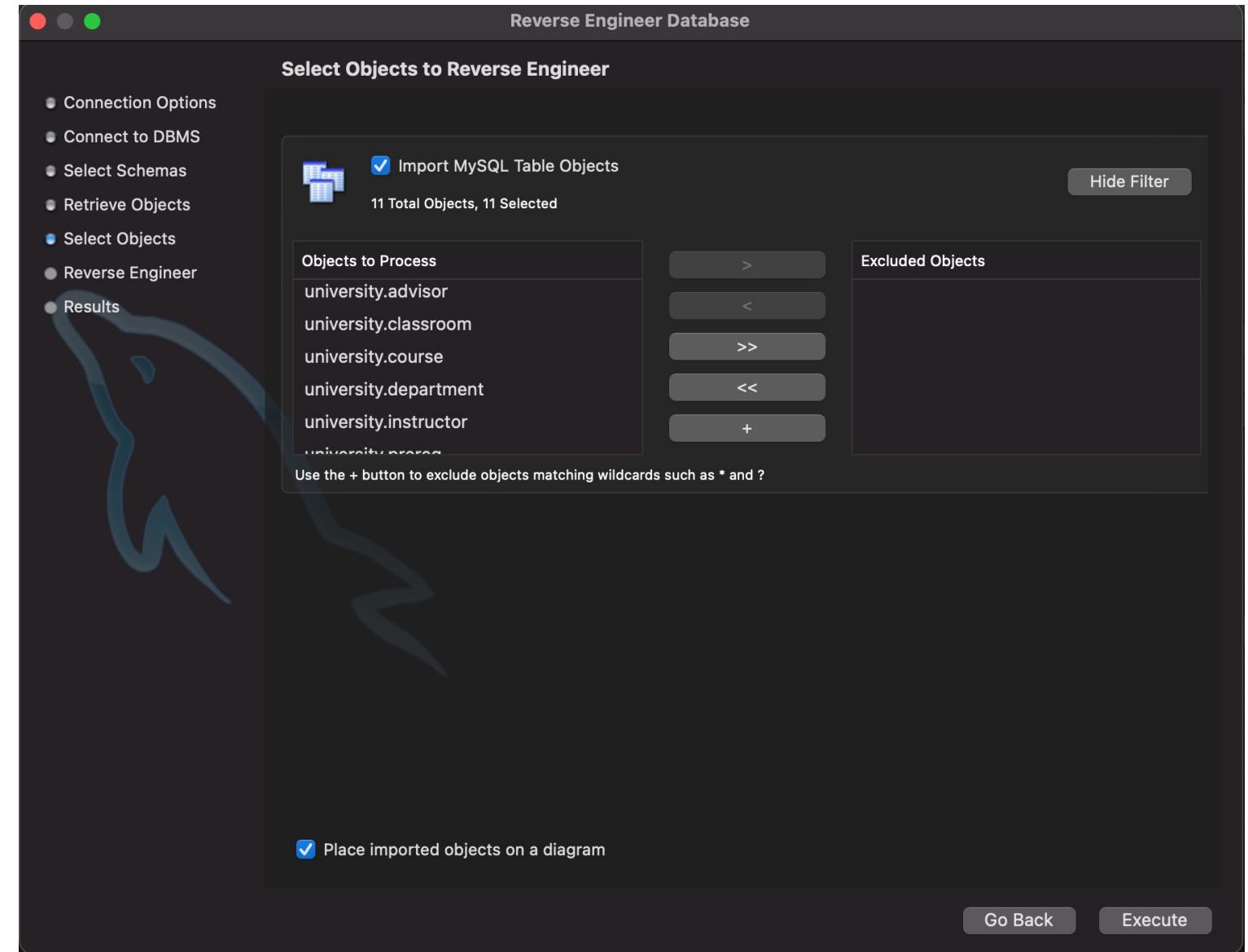
# Reverse Engineering a Database to a Model (7)

Wait while the objects are being retrieved. Then click [Continue](#).



# Reverse Engineering a Database to a Model (8)

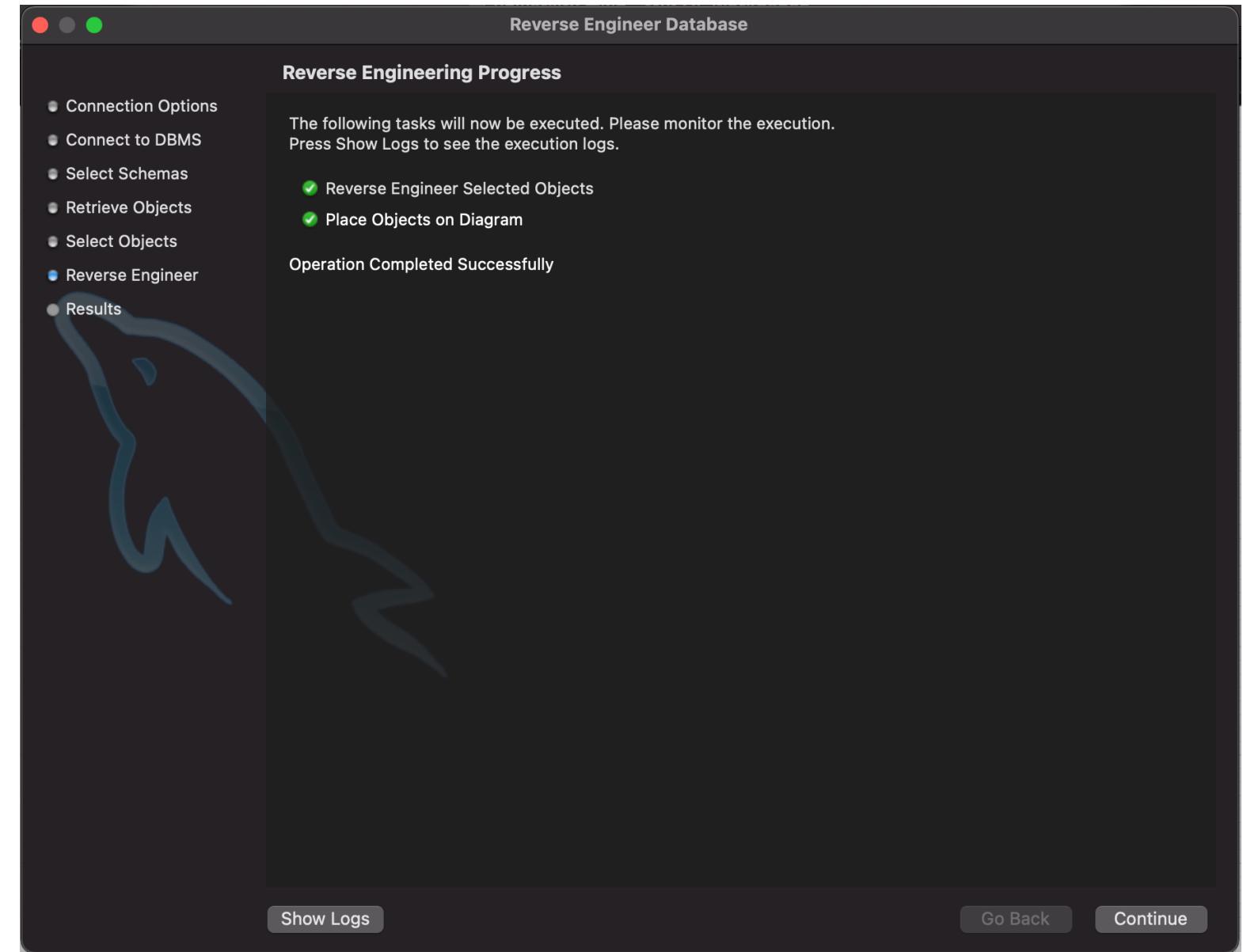
Select the objects from the schema to include in your model/ERD.



# Reverse Engineering a Database to a Model (9)

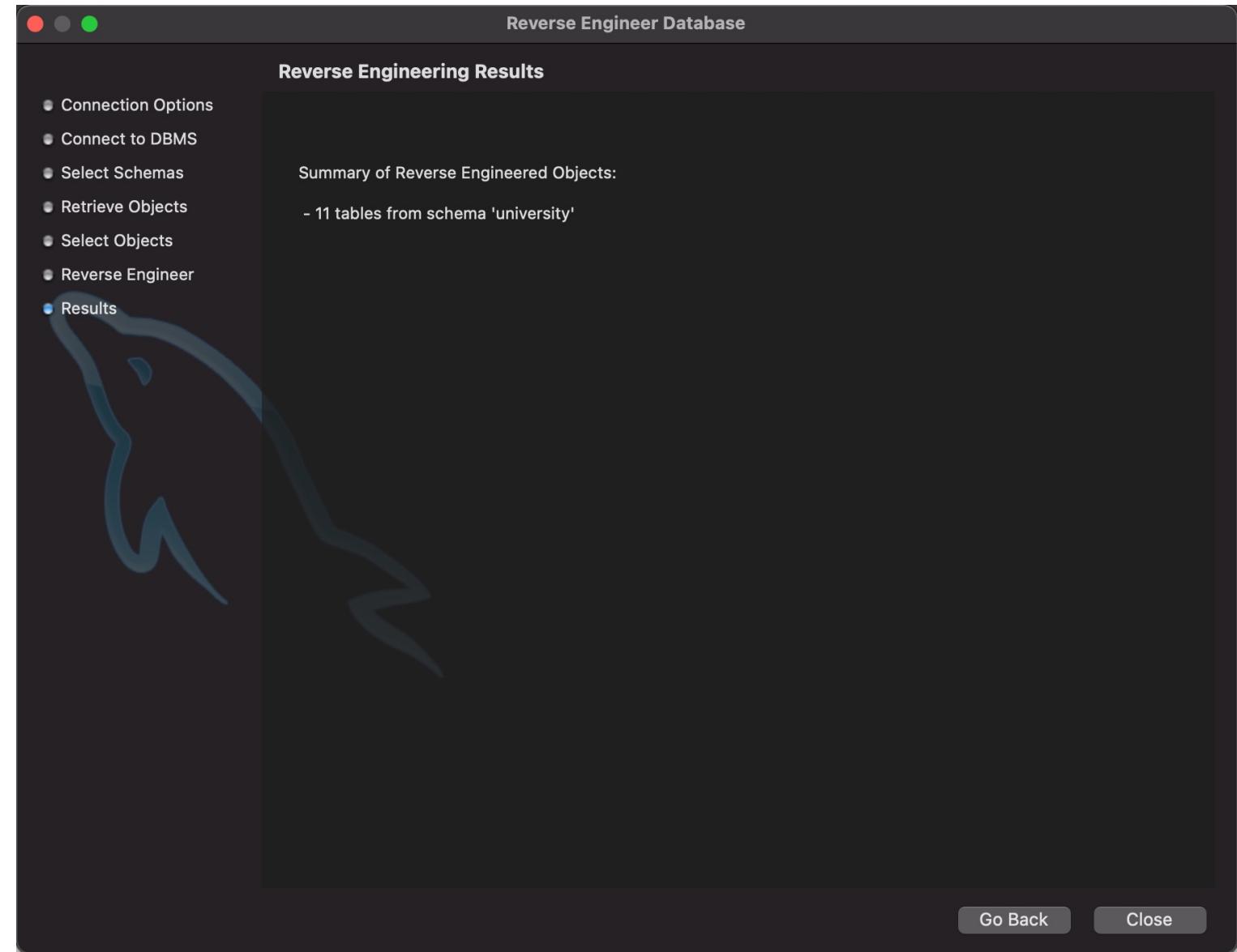
Wait while the model is being created.

Then click **Continue**.



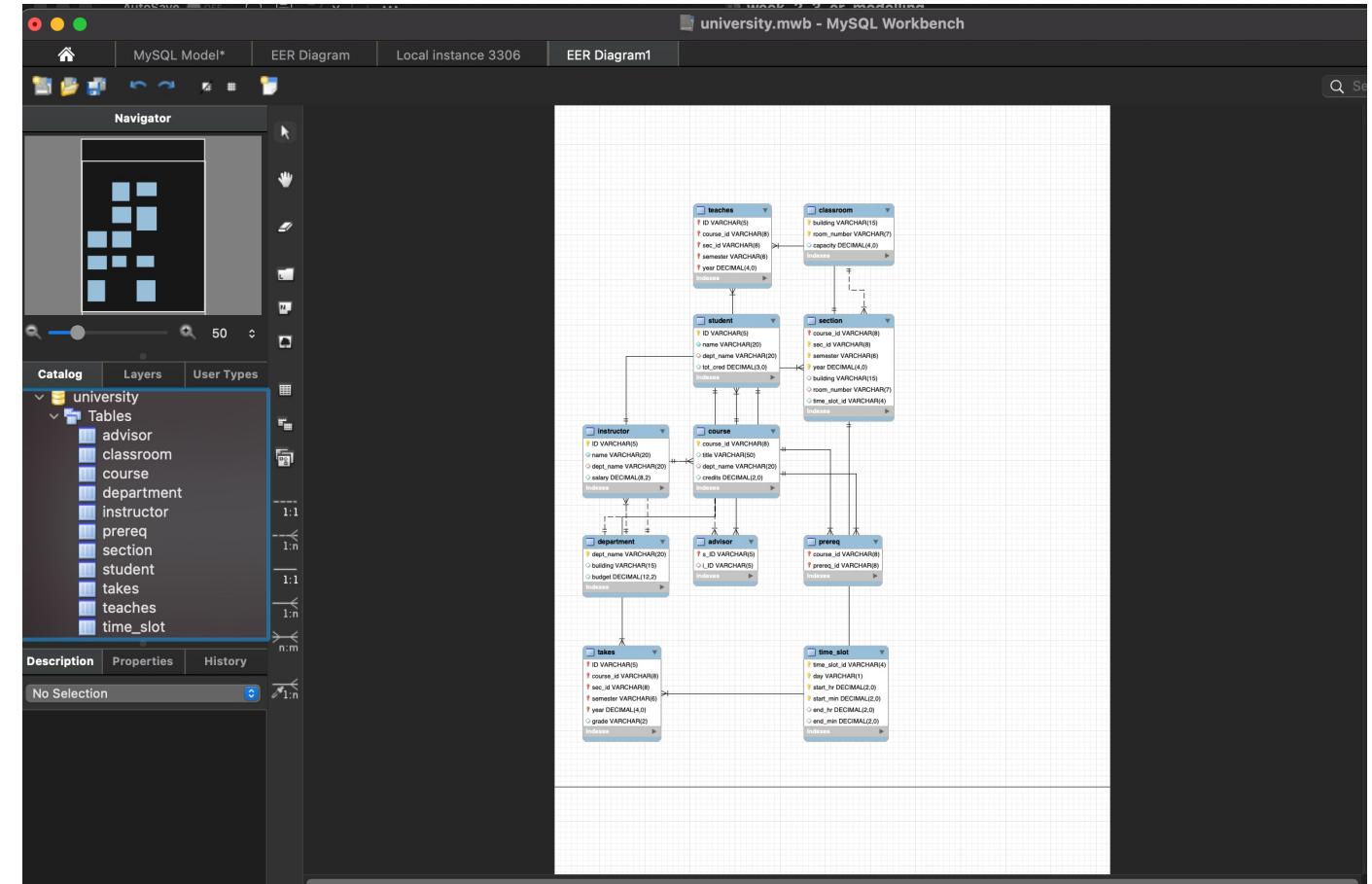
# Reverse Engineering a Database to a Model (10)

A message should display stating whether the process was successful or not.



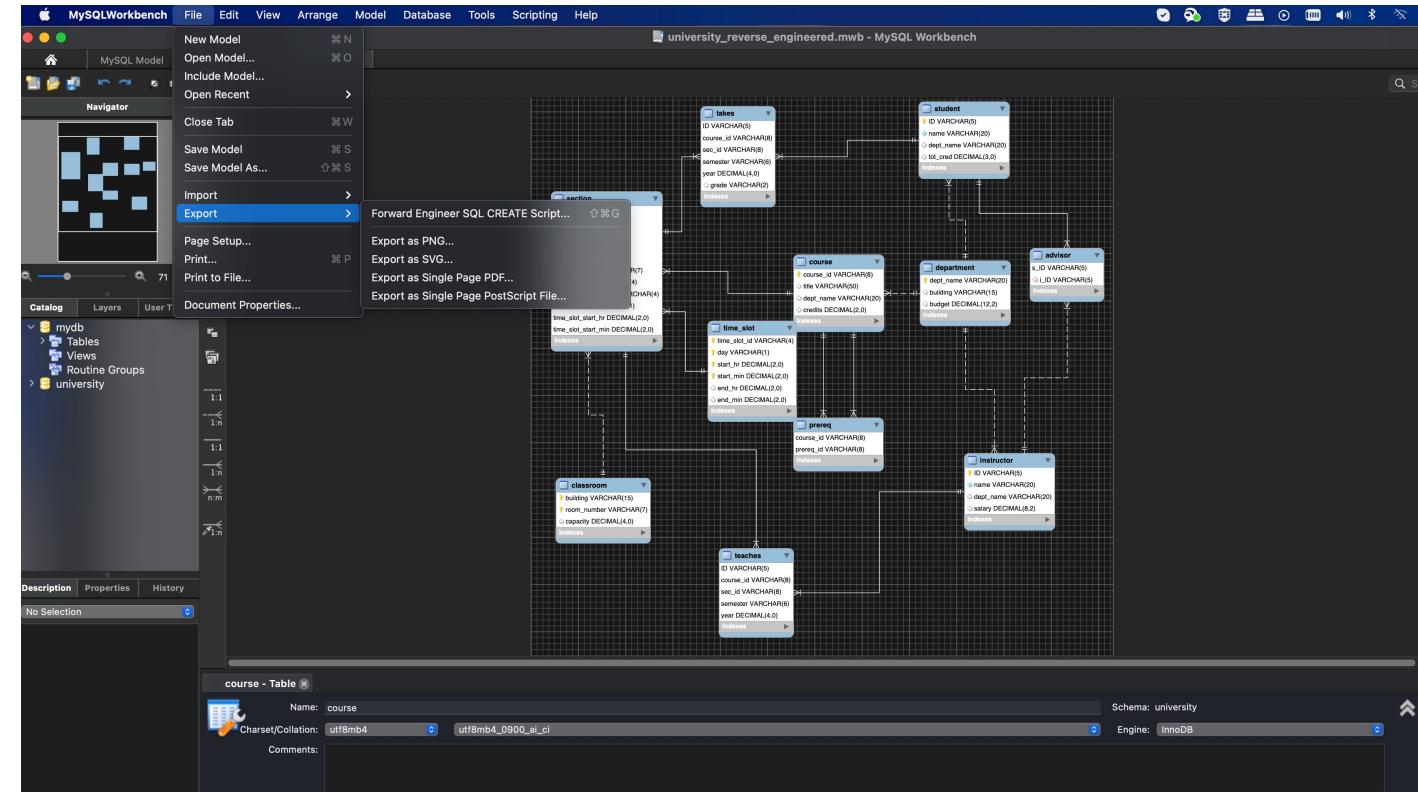
# Reverse Engineering a Database to a Model (11)

You should now be presented with the ER diagram. You may need to rearrange the objects as desired.



# Exporting a Model

Click **File→Export** to export your diagram. Export formats include PNG, SVG, PDF, or a DDL file.



# Model Types/Notation

Click **Model → Relationship Notation** to select a notation. Notations include Crow's foot, Classic, UML, and IDEF1X.

You may also change the notation of the objects by using **Model → Object Notation**.

