

# CNT 4714: Enterprise Computing Fall 2015

## Client User Creation In The MySQL Workbench

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# Client User Creation In The MySQL Workbench

- For Project Three you need to create a new client for the `project3` database and assign them specific privileges on the database.
- This set of slides steps you through that process using the MySQL Workbench.
- This can also be done via the MySQL command line client, however, it requires issuing specific GRANT commands and while providing finer grained privilege detail, goes a bit beyond what we need for this project.



MySQL Workbench

Local instance MySQL56 x

File Edit View Query Database **Server** Tools Scripting Help

Navigator

SCHEMAS

Filter objects

bikedb

Tables

bikes

bluebikes

Views

Stored Procedures

Functions

coloursurvey

guestbook

mailinglist

project2

project4

project5

test

vendor2

Management Schemas

Information

No object selected

File 12\* SQL File 13\* SQL File 14\* SQL File 14 bikedbscript x SQL File 17\* mailing list script Administration - Users and Privil... pro

Limit to 1000 rows

```

1  /* script file to create the bike database for the lecture notes */
2  drop database if exists bikedb;
3
4  create database bikedb;
5
6  use bikedb;
7
8  create table bikes (
9      bikename varchar(30) not null,
10     size int(2),
11     color varchar(15),
12     cost int(6),
13     purchased date,
14     mileage int(6),
15     primary key (bikename)
16 );
17
18 insert into bikes values ('Colnago Dream Rabobank',60,'blue/orange',5500,'2002-07-07',4300);
19 insert into bikes values ('Bianchi Evolution 3',58,'celeste',4800,'2003-11-12',2000);
20 insert into bikes values ('Eddy Merckx Molteni',58,'orange',5100,'2004-08-12',0);
21 insert into bikes values ('Eddy Merckx Domo',58,'blue/black',5300,'2004-02-02',0);
22 insert into bikes values ('Battaglin Carrera',60,'red/white',4000,'2001-03-10',11200);
23 insert into bikes values ('Gianni Motta Personal',59,'red/green',4400,'2000-05-01',8700);
24 insert into bikes values ('Gios Torino Super',60,'blue',2000,'1998-11-08',9000);
25 insert into bikes values ('Schwinn Paramount P14',60,'blue',1800,'1992-03-01',200);
26 insert into bikes values ('Bianchi Corse Evo 4',58,'celeste',5700,'2004-12-02',300);
27 insert into bikes values ('Colnago Superissimo',59,'red',3800,'1996-03-01',13000);

```

Output

Action Output

	Time	Action	Message	Duration / Fetch
88	15:22:48	select * from bikes LIMIT 0, 1000	9 row(s) returned	0.000 sec / 0.000 sec

Object Info Session

SQL Editor closed

Start the Workbench and select Server tab at the top of the window. Select Users and Privileges from the drop-down list.



Local instance MySQL56 x client - CNT4714 - Project 3 - Fall ...x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- bikedb
- mailinglist
- project3**
- test
- vendor2

Management Schemas

Information

Schema: **project3**

Object Info Session

1\* chapter5smalldbscript SQL File 4\* SQL File 5\* Administration - Users and Privil... x

### Local instance MySQL56

## Users and Privileges

User Accounts

User	From Host
(!) <anonymous>	%
client	%
root	localhost
root	127.0.0.1
root	::1

Select an account to edit or click [Add Account] to create a new one

Login Account Limits Administrative Roles Schema Privileges

Login Name:  You may create multiple accounts with different hostnames.

Authentication Type:  For the standard password and/or host select 'Standard'.

Limit to Hosts:  Only accounts that are used for this host can be used.

Confirm Password:  Confirm the password.

Authentication Plugin:  Authentication plugin specific parameters.

Click the Add Account button here.

Add Account Delete Refresh

Revoke All Privileges Expire Password Revert Apply

Closing Administrator.



Local instance MySQL56 x client - CNT4714 - Project 3 - Fall ...x

File Edit View Query Database Server Tools Scripting Help

Navigator: 1\* chapter5smalldbscript SQL File 4\* SQL File 5\* Administration - Users and Privil... x

**SCHEMAS**

Filter objects

- bikedb
- mailinglist
- project3**
- test
- vendor2

Management Schemas

Information

Schema: **project3**

Object Info Session

**Users and Privileges**

Local instance MySQL56

**User Accounts**

User	From Host
(!) <anonymous>	%
client	%
root	localhost
root	127.0.0.1
root	::1
newuser	%

**Details for account newuser@%**

Login Account Limits Administrative Roles Schema Privileges

Login Name: client You may create multiple accounts with this name to connect from different hosts.

Authentication Type: Standard For the standard password and/or host select 'Standard'.

Limit to Hosts Matching: % % and \_ wildcards may be used

Password: \*\*\*\*\* Type a password to reset it.

Weak password.

Confirm Password: \*\*\*\*\* Enter password again to confirm.

Enter the information for the new user named "client" as shown.

Click the Apply button when finished

Add Account Delete Refresh Revoke All Privileges Expire Password Revert Apply

Closing Administrator.



Local instance MySQL56 (project3) x Local instance MySQL56 (proj... x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- bikedb
- mailinglist
- project3**
  - Tables
  - Views
  - Stored Procedures
  - Functions
- test
- vendor2

Management Schemas

Information

No object selected

Object Info Session

Query 1 Administration - Users and Privil...

Local instance MySQL56

## Users and Privileges

User Accounts

User	From Host
(!) <anonymous>	%
client	%
root	localhost
root	127.0.0.1
root	::1

Select an account to edit or click [Add Account] to create a new one

Login Account Limits Administrative Roles Schema Privileges

Login Name:  You may create multiple accounts with different hostnames to connect from different hosts.

Authentication Type:  For the standard password and/or host select 'Standard'.

Limit to Hosts Matching:  % and \_ wildcards may be used

Password:  Type a password to reset it.

Consider using a password with 8 or more characters with mixed case letters, numbers and punctuation marks.

Confirm Password:  Enter password again to confirm.

Add Account Delete Refresh Revoke All Privileges Expire Password Revert Apply

You have now created your new client accounts. Next you need to set the permissions (as outlined in the assignment) for the client user.



Local instance MySQL56 (project3) x Local instance MySQL56 (proj... x

File Edit View Query Database Server Tools Scripting Help

Navigator: Query 1 Administration - Users and Privil... x

**SCHEMAS**

Filter objects

- bikedb
- mailinglist
- project3**
- test
- vendor2

Management Schemas

Information

Schema: **project3**

**Users and Privileges**

Local instance MySQL56

User Accounts

User	From Host
(!) <anonymous>	%
<b>client</b>	%
root	localhost
root	127.0.0.1
root	::1

**Details for account client@%**

Login Account Limits Administrative Roles **Schema Privileges**

Schema	Privileges
Schema and Host fields may use % and _ wildcards. The server will match specific entries before wildcarded ones.	

Object Rights

- ☐ SELECT
- ☐ INSERT
- ☐ UPDATE
- ☐ DELETE
- ☐ EXECUTE

DDL Rights

- ☐ CREATE
- ☐ ALTER
- ☐ REFERENCES
- ☐ INDEX
- ☐ CREATE VIEW
- ☐ CREATE ROUTINE
- ☐ ALTER ROUTINE
- ☐ EVENT
- ☐ DROP
- ☐ TRIGGER

Other R

- ☐ LO

Select a user (client in this case) and then click the Schema Privileges tab on the right side of the window.

Add Account Delete Refresh Revoke All Privileges Expire Password Revert Apply

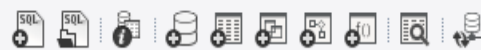
Object Info Session



Local instance MySQL56 (project3) ×

Local instance MySQL56 (proj... ×

File Edit View Query Database Server Tools Scripting Help



Navigator

SCHEMAS

Filter objects

- bikedb
- mailinglist
- project3**
- test
- vendor2

Management Schemas

Information

Schema: project3

Object Info Session

Query 1

Administration - Users and Privil... ×



Local instance MySQL56

## Users and Privileges

User Accounts

User	From Host
(!) <anonymous>	%
client	%
root	localhost
root	127.0.0.1
root	::1

Details for account client@%

Login Account Limits Administrative Roles Schema Privileges

Schema	Privileges
<div></div>	

Schema and Host fields may use % and \_ wildcards.  
The server will match specific entries before wildcarded ones.

Delete Entry

Add Entry...

Object Rights

- ☐ SELECT
- ☐ INSERT

DDL Rights

- ☐ CREATE
- ☐ ALTER

Other Rights

- ☐ GRANT OPTION
- ☐ CREATE TEMPORARY TABLES
- ☐ LOCK TABLES

From the Schema Privileges window  
click the Add Entry button

Add Account

Delete

Refresh

Revoke All Privileges

Expire Password

Revert

Apply





Local instance MySQL56 (project3) x

Local instance MySQL56 (proj... x

File Edit View Query Database Server Tools Scripting Help



Navigator

SCHEMAS

Filter obj

biked

mailing

project3

test

vendor2

Management

Information

Schema: p

## New Schema Privilege Definition

Select the Schema for which the user 'client' will have the privileges you want to define.

Schema

☒ Any Schema (%)

This rule will apply to any schema name.

☐ Schemas matching pattern or name:

This rule will apply to schemas that match the given name or pattern.  
You may use \_ and % as wildcards in a pattern.  
Escape these characters with \ in case you want their literal value.

bikedb  
colorsurvey  
guestbook  
information\\_schema  
mailinglist  
mysql  
performance\\_schema  
project2  
project3  
project4  
project5  
test  
vendor2

☐ Selected schema:

Select a specific schema name for the rule to apply to.

Select the "Selected Schema" button  
and then select the project3 database  
from the selection box. Then click OK.

Cancel

OK

Add Account

Delete

Refresh

Revoke All Privileges

Expire Password

Revert

Apply

Object Info Session



client - Project Three x Local instance MySQL56 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

bikedb

Tables

bikes

bluebikes

Views

Stored Procedures

Functions

colorsurvey

guestbook

mailinglist

project2

project4

project5

test

vendor2

Management Schemas

Information

No object selected

Object Info Session

Local instance MySQL56

### Users and Privileges

User	From Host
(!) <anonymous>	%
client	%
client1	%
client1	localhost
client2	%
root	localhost
root	127.0.0.1
root	::1

Add Account Delete Refresh

#### Details for account client@%

Login Account Limits Administrative Roles Schema Privileges

Schema	Privileges
project3	none

Schema and Host fields may use % and \_ wildcards.  
The server will match specific entries before wildcarded ones.

The user 'client'@'%' will have the following access rights to the schema 'project3':

Object Rights

- ☐ SELECT
- ☐ INSERT
- ☐ UPDATE
- ☐ DELETE
- ☐ EXECUTE
- ☐ SHOW VIEW

DDL Rights

- ☐ CREATE
- ☐ ALTER
- ☐ REFERENCES
- ☐ INDEX
- ☐ CREATE VIEW
- ☐ CREATE ROUTINE
- ☐ ALTER ROUTINE
- ☐ EVENT
- ☐ DROP
- ☐ TRIGGER

Other Rights

- ☐ GRANT OPTION
- ☐ CREATE TEMPORARY TABLES
- ☐ LOCK TABLES

Unselect All Select "ALL"

Revoke All Privileges Expire Password Revert Apply

Delete Entry Add Entry...

You've now returned to the Schema Privileges window, but the options below are now accessible.



client - Project Three x Local instance MySQL56 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

bikedb

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bikes

bluebikes

Views

Stored Procedures

Functions

coloursurvey

guestbook

mailinglist

project2

project4

project5

test

vendor2

Management Schemas

Information

No object selected

Object Info Session

Local instance MySQL56

### Users and Privileges

User Accounts

User	From Host
(!) <anonymous>	%
client	%
client1	%
client1	localhost
client2	%
root	localhost
root	127.0.0.1
root	::1

Add Account Delete Refresh

#### Details for account client@%

Login Account Limits Administrative Roles Schema Privileges

Schema	Privileges
project3	SELECT

Schema and Host fields may use % and \_ wildcards.  
The server will match specific entries before wildcarded ones.

The user 'client'@'%' will have the following access rights to the schema 'project3':

Object Rights

- ☒ SELECT
- ☐ INSERT
- ☐ UPDATE
- ☐ DELETE
- ☐ EXECUTE
- ☐ SHOW VIEW

DDL Rights

- ☐ CREATE
- ☐ ALTER
- ☐ REFERENCES
- ☐ INDEX
- ☐ CREATE VIEW
- ☐ CREATE ROUTINE
- ☐ ALTER ROUTINE
- ☐ EVENT
- ☐ DROP
- ☐ TRIGGER

Other Rights

- ☐ GRANT OPTION
- ☐ CREATE TEMPORARY TABLES
- ☐ LOCK TABLES

Unselect All Select "ALL"

Revoke All Privileges Expire Password Revert Apply

Delete Entry Add Entry...

The new client should have only selection privileges on the project3 database. Click that option only and click Apply.



Local instance MySQL56 (bikedb) x Local instance MySQL56 (project6) x

File Edit View Database Tools Scripting Help

### Manage Server Connections

MySQL Connections

- Local instance MySQL56
- client2
- client - Project Three
- client1

Connection Name: client - Project Three

Connection Remote Management System Profile

Connection Method: Standard (TCP/IP) Method to use to connect to the RDBMS

Parameters SSL Advanced

Hostname: 127.0.0.1 Port: 3310 Name or IP address of the server host. - TCP/IP port.

Username: client Name of the user to connect with.

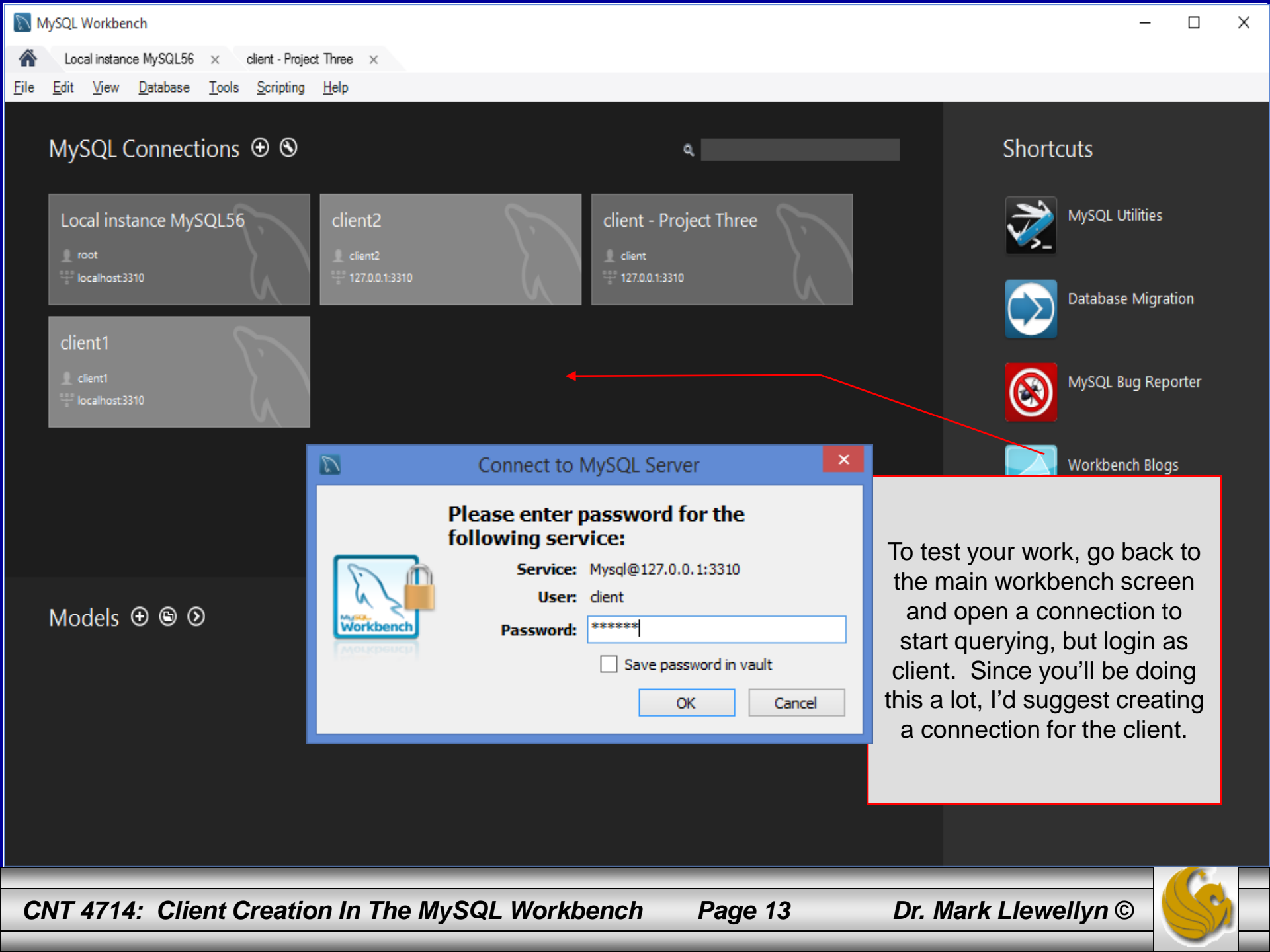
Password: Store in Vault ... Clear The user's password. Will be requested later if it's not set.

Default Schema: The schema to use as default schema. Leave blank to select

New Delete Duplicate Move Up Move Down Test Connection Close

To test your work, go back to the main workbench screen and open a connection to start querying, but login as client. Since you'll be doing this a lot, I'd suggest creating a connection for the client.





## MySQL Connections

Local instance MySQL56

root  
localhost:3310

client2

client2  
127.0.0.1:3310

client - Project Three

client  
127.0.0.1:3310

client1

client1  
localhost:3310

## Shortcuts



MySQL Utilities



Database Migration



MySQL Bug Reporter



Workbench Blogs

## Models

### Connect to MySQL Server

Please enter password for the following service:



Service: Mysql@127.0.0.1:3310

User: client

Password: \*\*\*\*\*

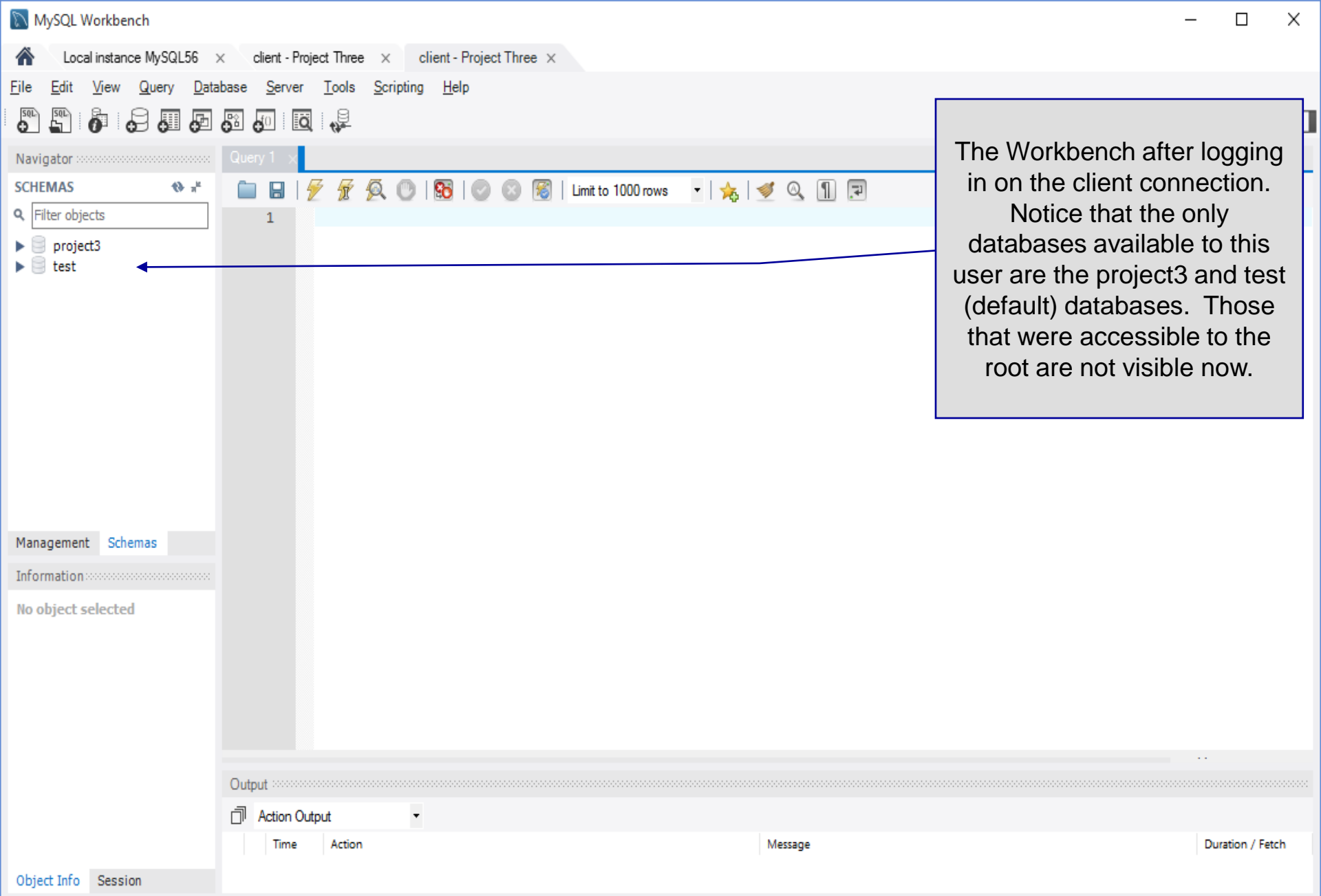
☐ Save password in vault

OK

Cancel

To test your work, go back to the main workbench screen and open a connection to start querying, but login as client. Since you'll be doing this a lot, I'd suggest creating a connection for the client.





The Workbench after logging in on the client connection. Notice that the only databases available to this user are the project3 and test (default) databases. Those that were accessible to the root are not visible now.



MySQL Workbench

Local instance MySQL56 x client - Project Three x client - Project Three (project3) x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

project3

- Tables
- Views
- Stored Procedures
- Functions
- test

Management Schemas

Information

Schema: project3

Query 1 x

Limit to 1000 rows

1 • select \* from riders

Result Grid

	ridername	teamname	nationality	num_pro_wins
▶	Alberto Contador	Astana	Spain	21
	Alessandro Ballan	Lampre	Italy	21
	Andy Schleck	Leopard-Trek	Luxembourg	35
	Bradley Wiggins	Ti-Raleigh	Great Britain	13
	Dietrich Thurau	Ti-Raleigh	Germany	78
	Fabian Cancellara	SaxoBank	Switzerland	58
	Fedor den Hertog	Acqua & Sapone	Netherlands	20
	Frank Schleck	Leopard-Trek	Luxembourg	28
	George Hincapie	BMC	USA	22
	Jens Voigt	SaxoBank	Germany	38
	Johan Museeuw	Quick-Step	Belgium	120
	Mario Cipolini	Acqua & Sapone	Italy	130
	Mark Cavendish	HTC-Columbia	Isle of Man	34
	Matti Breschel	Cofidis	Denmark	12
	Miguel Indurain	BMC	Spain	76
	Nicolas Roche	Cofidis	Ireland	8
	Niki Sorensen	SaxoBank	Norway	32

riders 1 x

Output

Action Output

Object Info Session

Time Action Message Duration / Fetch

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan

Appl Revert

The client user has select privileges on the project3 database, so this query executes properly.



MySQL Workbench

Local instance MySQL56 x client - Project Three x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

project3

- Tables
- Views
- Stored Procedures
- Functions

test

Management Schemas

Information

No object selected

Object Info Session

Query 1 x

Limit to 1000 rows

```

1 delete from riders
2 where ridername = "Alberto Contador"

```

Output

Action Output

	Time	Action	Message	Duration / Fetch
✓	1 15:33:26	select * from riders LIMIT 0, 1000	26 row(s) returned	0.000 sec / 0.000 sec
✗	2 15:33:50	delete from riders where ridername = "Alberto Contador"	Error Code: 1142. DELETE command denied to user 'client'@'localhost' for table 'riders'	0.000 sec

The client user attempts to execute a delete command, but does not have this privilege on the project3 database, so the DBMS denies the operation and no delete operation occurs.

