

Project 3 Screenshots of GUI - A Two-Tier Client-Server Application

1. GUI Areas

SQL Client Application

Connection Details

Username:

Password:


Properties File:

User:

Enter SQL Command

NO CONNECTION ESTABLISHED

2. Initial Connection

 SQL Client Application

Connection Details

Username:

Password:

Properties File: ▼

User: ▼

Enter SQL Command

CONNECTED TO: jdbc:mysql://localhost:3306/project3

3. Database Dropdown Menu

SQL Client Application

Connection Details

Username:

Password:

Properties File: ▼

User:

project3.properties

bikedb.properties

Enter SQL Command

CONNECTED TO: jdbc:mysql://localhost:3306/project3

4. User Properties Dropdown Menu

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Connect

Enter SQL Command

CONNECTED TO: jdbc:mysql://localhost:3306/project3

Clear Command

Clear Results

Execute

Close

5. Root project3 Select Command & Results

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Connect **Disconnect**

Enter SQL Command

select * from riders


CONNECTED TO: jdbc:mysql://localhost:3306/project3

Clear Command **Clear Results** **Execute**

Close

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Andy Schleck	Leopard-Trek	Luxembourg	35	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Ceylin del Carmen Alvarado	Alpecin-Fenix	Netherlands	88	F
Chris Froome	Sky	Great Britain	23	M
Davide van der Poel	Jumbo-Visma	Alpecin	0	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Balsamo	Trek-Segafredo	Italy	20	F
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Filippo Ganna	Ineos	Italy	25	M

6. Root project3 Complicated Query

 SQL Client Application

Connection Details

Username:

Password:

Properties File: ▼

User: ▼

Connect

Disconnect

Enter SQL Command


```
select distinct racename from racewinners where ridername in (select ridername  
from riders where num_pro_wins > 50)
```

CONNECTED TO: jdbc:mysql://localhost:3306/project3

Clear Command

Clear Results

Execute

Close

racename
Amstel Gold
Fleche Wallone - Feminine
GP-E3
Liege-Bastogne-Liege
Paris-Roubaix
Rund de Flandren
Super Prestige - Dienem
Telnet Super Prestige
Tour de France
World Championship - Elite Men
World Championship - Elite Women
World Cup CycloCross - Elite Women
World Cyclocross Championships - Elite Women

7. SQL Command Entry Error

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:


Enter SQL Command

```
select distinct racename from racewinners where ridername in (select ridername  
from riders where num_pro_winds > 50)
```

CONNECTED TO: jdbc:mysql://localhost:3306/project3

racename

Execution Error

 Error executing SQL: Unknown column 'num_pro_winds' in 'where clause'

8. Non-query Command Handling

a. Before

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Enter SQL Command

select * from riders
where nationality = 'Netherlands'

CONNECTED TO: jdbc:mysql://localhost:3306/project3

ridername	teamname	nationality	num_pro_wins	gender
Ceylin del Carmen Alvarado	Alpecin-Fenix	Netherlands	88	F
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Marianne Vos	WM3	Netherlands	230	F
Mathieu van der Poel	Alpecin	Netherlands	34	M
Peter Post	Ti-Raleigh	Netherlands	150	M

b. Insert Issued

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Enter SQL Command

insert into riders values
('Annekemik van Vleuten', 'Movistar', 'Netherlands', 92, 'F')

CONNECTED TO: jdbc:mysql://localhost:3306/project3

ridername	teamname	nationality	num_pro_wins	gender
Ceylin del Carmen Alvarado	Alpecin-Fenix	Netherlands	88	F
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Marianne Vos	WM3	Netherlands	230	F
Mathieu van der Poel	Alpecin	Netherlands	34	M
Peter Post	Ti-Raleigh	Netherlands	150	M

Execution Success
Executed successfully, affected rows: 1

c. After

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Enter SQL Command

select * from riders
where nationality = 'Netherlands'

CONNECTED TO: jdbc:mysql://localhost:3306/project3

ridername	teamname	nationality	num_pro_wins	gender
Annekemik van Vleuten	Movistar	Netherlands	92	F
Ceylin del Carmen Alvarado	Alpecin-Fenix	Netherlands	88	F
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Marianne Vos	WM3	Netherlands	230	F
Mathieu van der Poel	Alpecin	Netherlands	34	M
Peter Post	Ti-Raleigh	Netherlands	150	M

9. Client1 project3 Select Command

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:

Connect **Disconnect**

Enter SQL Command

```
select * from riders
```

CONNECTED TO: jdbc:mysql://localhost:3306/project3

Clear Command **Clear Results** **Execute**

Close

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Andy Schleck	Leopard-Trek	Luxembourg	35	M
Annemeik van Vleuten	Movistar	Netherlands	92	F
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Ceylin del Carmen Alvarado	Alpecin-Fenix	Netherlands	88	F
Chris Froome	Sky	Great Britain	23	M
Davide van der Poel	Jumbo-Visma	Alpecin	0	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Balsamo	Trek-Segafredo	Italy	20	F
Elisa Borghini	Schenger	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M

10. Client1 Not Allowed Command

SQL Client Application

Connection Details

Username:

Password:

Properties File:

User:


Enter SQL Command

```
update riders  
set num_pro_wins = 98  
where ridername = 'Annemeik van Vleuten'
```

CONNECTED TO: jdbc:mysql://localhost:3306/project3

ridername	teamname	nationality	num_pro_wins	gender
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Execution Error

 Error executing SQL: UPDATE command denied to user 'client1'@'localhost' for table 'riders'

11. Mismatched/Incorrect Credentials for Connection

SQL Client Application

Connection Details

Username:

Password:


Properties File:

User:

Enter SQL Command

NO CONNECTION ESTABLISHED


Authentication Error

 Error: Incorrect username or password. Credentials Do Not Match Properties File!

Accountant Specific Screenshots

12. Accountant GUI (shown with 13 below)

13. Accountant operationscount

 SQL Accountant Application

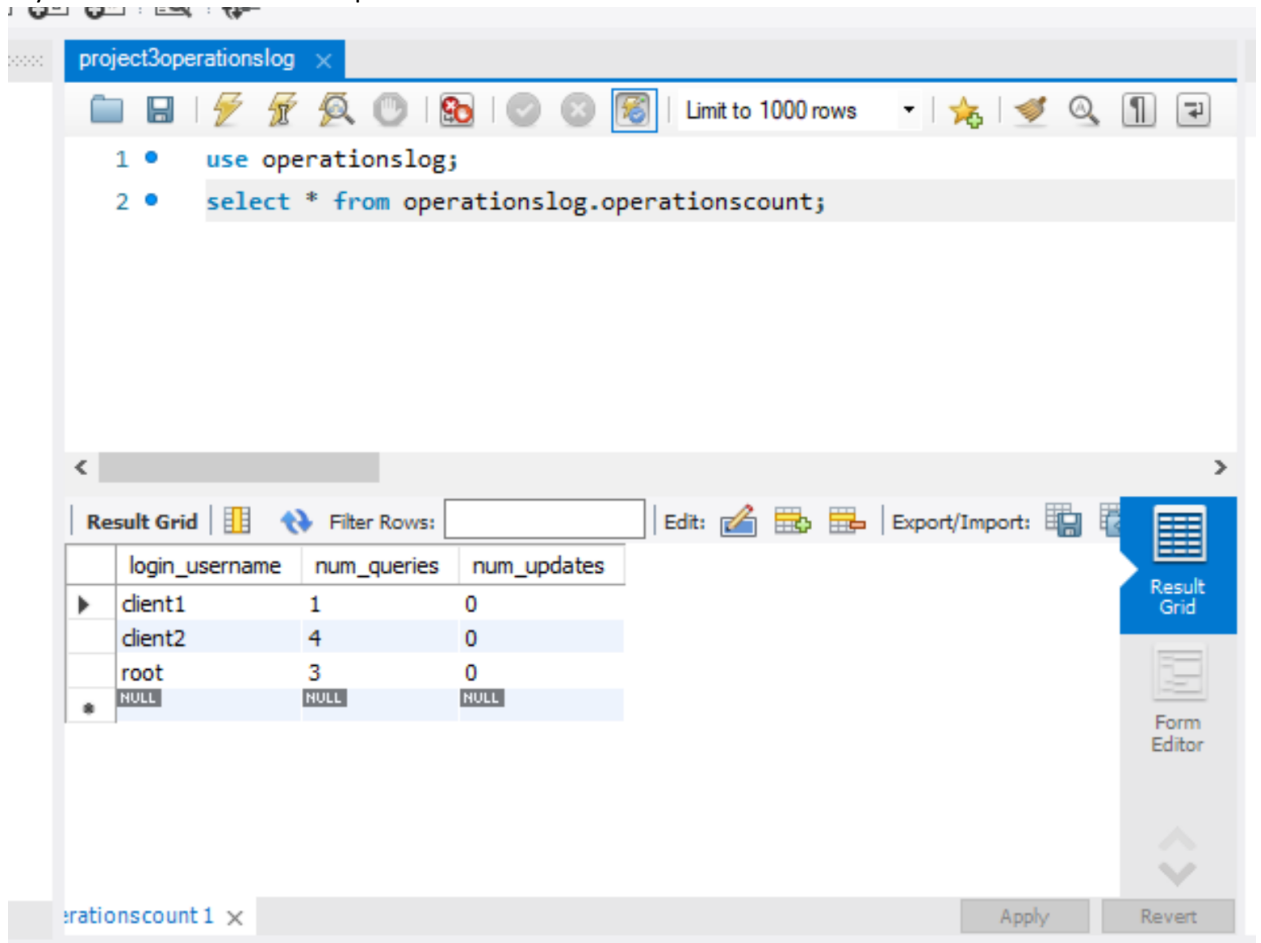
Connection Details
Username:
Password:
DB URL Properties
User Properties

Enter SQL Command

CONNECTED TO: jdbc:mysql://localhost:3306/operationslog

	login_username	num_queries	num_updates
client1	1	0	
client2	4	0	
root	3	0	

14. MySQL Workbench View of operationscount



The screenshot shows the MySQL Workbench interface. The top toolbar includes icons for file operations, execution, and viewing. The SQL editor contains the following queries:


```
1 • use operationslog;  
2 • select * from operationslog.operationscount;
```

The bottom toolbar shows the 'Result Grid' tab selected, with a 'Filter Rows' field and 'Edit' and 'Export/Import' options. The 'Result Grid' displays the following data:

	login_username	num_queries	num_updates
▶	client1	1	0
	client2	4	0
	root	3	0
*	NULL	NULL	NULL

The bottom status bar shows 'operationscount 1' and buttons for 'Apply' and 'Revert'.

15. Different theaccountant Query

 SQL Accountant Application

Connection Details

Username:

Password:

DB URL Properties

User Properties

Enter SQL Command

```
select num_queries
from operationscount
where login_username = "client2"
```

CONNECTED TO: jdbc:mysql://localhost:3306/operationslog

	num_queries
4	