Christian D. Rosado Arroyo

CNT 4714 – Project Three – Fall 2021

Title: "Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC"

Screenshots:

Root User Commands:

#Command 1:

 #   Query: Which rider won Paris Roubaix Femmes in 2021?

#Command 2:

Query: List the teams that ride bikes manufactured in Italy.

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

```
select teamname
from teams
where bikename in (select bikename
        from bikes
        where country_of_origin = 'Italy');
```

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ....

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

teamname
Brooklyn
Lampre
Landbouwkredit
Molteni
Ti-Raleigh
UAE

CLEAR RESULT WINDOW

#Command 3:

 # Query: List the name of every race won by a rider who has more than

 #   50 professional wins.

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC   —   □   ✕

ENTER DATABASE INFORMATION:

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

JDBC DRIVER: com.mysql.cj.jdbc.Driver ▾

DATABASE URL: jdbc:mysql://localhost:3306/project3 ▾

USERNAME: root

PASSWORD: ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

racename
Amstel Gold
Fleche Wallone - Feminine
GP-E3
Liege-Bastogne-Liege
Paris-Roubaix
Rund de Flandren
World Championship - Elite Women

CLEAR RESULT WINDOW

#Command 4:

 #   Query: List the names of all the riders on the same team as the winner of the

 #   2010 Paris-Roubaix race.

#Commands 5A, 5B, and 5C:

Insert the rider Mark Renshaw into the riders table.

* * Do a "before" and "after" selection on the riders table

Command 5A:

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
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Frank Schleck	Leopard-Trek	Luxembourg	28	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M

Command 5B:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

insert into riders values ('Mark Renshaw','HTC-Columbia','Australia',26, 'M');

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ....

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

Command 5C:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

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
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Frank Schleck	Leopard-Trek	Luxembourg	28	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	26	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M

CLEAR RESULT WINDOW

#Command 6:

List the names of those riders who have won Paris-Roubaix at least two times.

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

```
select ridername
from racewinners
where racename = 'Paris-Roubaix'
group by ridername
having count(ridername) >= 2;
```

JDBC DRIVER:

com.mysql.cj.jdbc.Driver

DATABASE URL:

jdbc:mysql://localhost:3306/project3

USERNAME:

root

PASSWORD:

·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername
Eddy Merckx
Roger deVlaeminck
Fabian Cancellara

CLEAR RESULT WINDOW

#Commands 7A, 7B, and 7C:

 # Delete all the riders from Luxembourg from the riders table.

 # * * * Do a "before" and "after" select * from riders for this command.

Command 7A:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC — □ ×

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: com.mysql.cj.jdbc.Driver ▼

DATABASE URL: jdbc:mysql://localhost:3306/project3 ▼

USERNAME: root

PASSWORD: ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

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
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Frank Schleck	Leopard-Trek	Luxembourg	28	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	26	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M

CLEAR RESULT WINDOW

Command 7B:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

delete from riders where nationality = 'Luxembourg';

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ....

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

Command 7C:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	26	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

CLEAR RESULT WINDOW

#Commands 8A, 8B, and 8C:

Update rider Mark Renshaw to show number of wins = 30 in the riders table.

* * Do a "before" and "after" selection on the riders table

Command 8A:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	26	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

Command 8B:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

update riders set num_pro_wins = 30 where ridername = "Mark Renshaw";

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

Command 8C:

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: | com.mysql.cj.jdbc.Driver

DATABASE URL: | jdbc:mysql://localhost:3306/project3

USERNAME: | root

PASSWORD: | ·········

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	30	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

CLEAR RESULT WINDOW

Client User Commands:

#Command 1:

 #   Query: Which rider won the World Championship - Elite Women in 2021?

#Commands 2A, 2B, and 2C:

Delete all the riders from Norway from the riders table.

* * * Do a "before" and "after" select * from riders for this command.

Note: the before and after select statements will execute, but the delete will not

thus no changes will be reflected in the before and after snapshots.

Command 2A:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: client

PASSWORD: ......

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	30	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

CLEAR RESULT WINDOW

Command 2B:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

delete from riders where nationality = 'Norway';

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: client

PASSWORD: ......

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

Database error

DELETE command denied to user 'client'@'localhost' for table 'riders'

OK

CLEAR RESULT WINDOW

Command 2C:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER:	com.mysql.cj.jdbc.Driver
DATABASE URL:	jdbc:mysql://localhost:3306/project3
USERNAME:	client
PASSWORD:	......

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	30	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

CLEAR RESULT WINDOW

#Commands 3A, 3B, and 3C:

 #   Update rider Marianne Vos to show number of wins = 245 in the riders table.

 # * * Do a "before" and "after" selection on the riders table

 #   Note: the before and after select statements will execute, but the delete will not

 #   thus no changes will be reflected in the before and after snapshots.

Command 3A:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	30	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

Command 3B:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

update riders set num_pro_wins = 245 where ridername = "Marianne Vos";

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: client

PASSWORD: ......

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

Database error

❌ UPDATE command denied to user 'client'@'localhost' for table 'riders'

OK

CLEAR RESULT WINDOW

Command 3C:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

select * from riders;

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: client

PASSWORD: ••••••

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

ridername	teamname	nationality	num_pro_wins	gender
Alberto Contador	Astana	Spain	21	M
Alesandro Ballan	Lampre	Italy	21	M
Bradley Wiggins	Ti-Raleigh	Great Britain	13	M
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Mark Renshaw	HTC-Columbia	Australia	30	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M
Phillipe Gilbert	BMC	Belgium	85	M

CLEAR RESULT WINDOW

#Command 4:

Query: Which rider won the 2021 Tour de France?

Operations Log Total:

GUI Areas Defined:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME:

PASSWORD:

NO CONNECTION!

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

Initial Condition Established:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

JDBC DRIVER: com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ....

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

Drivers Available:

ENTER DATABASE INFORMATION:

JDBC DRIVER: com.mysql.cj.jdbc.Driver
com.mysql.cj.jdbc.Driver

DATABASE URL: jdbc:mysql://localhost:3306/project3

USERNAME: root

PASSWORD: ....

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

CLEAR RESULT WINDOW

URLs Available:

User Issued Select Command:

ENTER DATABASE INFORMATION:

select * from riders

JDBC DRIVER: com.mysql.cj.jdbc.Driver ▾

DATABASE URL: jdbc:mysql://localhost:3306/project3 ▾

USERNAME: root

PASSWORD: ••••••••

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

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
Chris Froome	Sky	Great Britain	23	M
Dietrich Thurau	Ti-Raleigh	Germany	78	M
Elisa Borghini	Schenker	Italy	34	F
Fabian Cancellara	SaxoBank	Switzerland	58	M
Fedor den Hertog	Acqua & Sapone	Netherlands	20	M
Frank Schleck	Leopard-Trek	Luxembourg	28	M
George Hincapie	BMC	USA	22	M
Jens Voigt	SaxoBank	Germany	38	M
Johan Museeuw	Quick-Step	Belgium	120	M
Lizzie Armistead	Boels-Dolmans	Great Britain	78	F
Marianne Vos	WM3	Holland	230	F
Mario Cipolini	Acqua & Sapone	Italy	130	M
Mark Cavendish	HTC-Columbia	Isle of Man	34	M
Matti Breschel	Cofidis	Denmark	12	M
Miguel Indurain	BMC	Spain	76	M
Nicolas Roche	Cofidis	Ireland	8	M
Niki Sorensen	SaxoBank	Norway	32	M
Pauline Ferrand	Gitane	France	45	F
Peter Post	Ti-Raleigh	Netherlands	150	M
Peter Sagan	Bora-Hansgrohe	Slovakia	101	M

CLEAR RESULT WINDOW

A More Complicated Query:

ENTER DATABASE INFORMATION:

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

JDBC DRIVER: `com.mysql.cj.jdbc.Driver`

DATABASE URL: `jdbc:mysql://localhost:3306/project3`

USERNAME: `root`

PASSWORD: `.........`

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

EXECUTE SQL COMMAND

SQL EXECUTION RESULT WINDOW:

racename
Amstel Gold
Fleche Wallone - Feminine
GP-E3
Liege-Bastogne-Liege
Paris-Roubaix
Rund de Flandren
World Championship - Elite Women

CLEAR RESULT WINDOW

User Mistake:

Project Three: Two-Tier Client-Server Application Development With MySQL and JDBC

ENTER DATABASE INFORMATION:

JDBC DRIVER: `com.mysql.cj.jdbc.Driver`

DATABASE URL: `jdbc:mysql://localhost:3306/project3`

USERNAME: `root`

PASSWORD: `.........`

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

CONNECTED TO JDBC:MYSQL://LOCALHOST:3306/PROJECT3

CONNECT TO DATABASE

CLEAR SQL COMMAND

SQL EXECUTION RESULT WINDOW:

Database error ✕

✕ Unknown column 'num_pro_winds' in 'where clause'

OK

CLEAR RESULT WINDOW