

## Databases Homework 1 report

M Hasibur Rahman, 295459, 12/05/2020

### Personal statement:

*'I certify that this assignment is entirely my own work, performed independently and without any help from the sources which are not allowed.'*

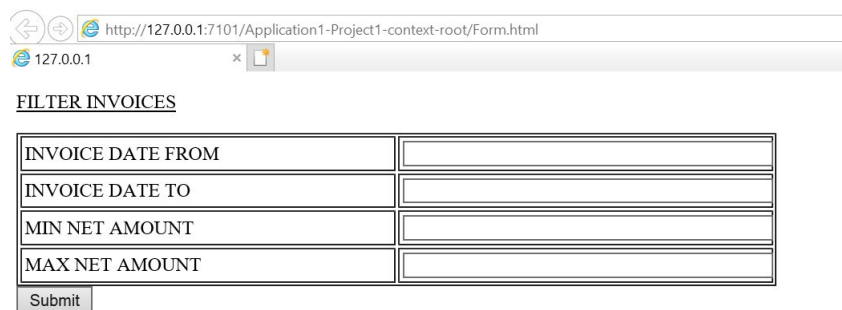
*Signed: M Hasibur Rahman*

### The purpose of each java servlets and html files:

- Servlet1.java prints out the table and is also used as a href after any update/insert/delete is performed i.e. after each process is finished we can redirect to the changed table
- Servlet2.java performs the filter and enables us to access update/insert/delete properties for the filtered rows
- Servlet3.java serves as the input form to get to the inputs to Insertdata.java
- Insertdata.java goes through logic to check in input data is permissible and outputs if insertion was successful or not
- Servlet5.java serves as the input form to get to the inputs to Update.java
- Update.java goes through logic to check if input data is permissible and outputs if update was successful or not
- Delete.java deletes a row
- Form.html is what we run and starts the filtering process.

### Example use:

When Form.html is run we see this:



http://127.0.0.1:7101/Application1-Project1-context-root/Form.html

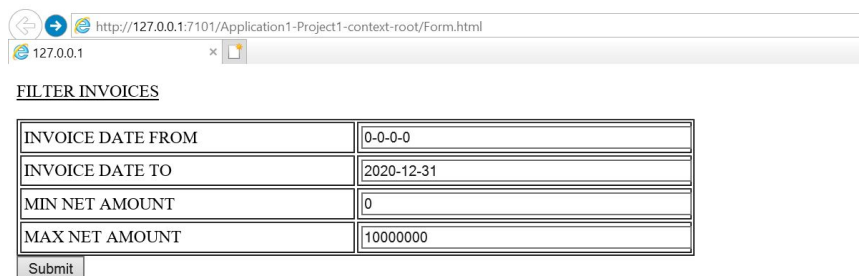
127.0.0.1

FILTER INVOICES

INVOICE DATE FROM	
INVOICE DATE TO	
MIN NET AMOUNT	
MAX NET AMOUNT	

Submit

After enter desired parameters:



http://127.0.0.1:7101/Application1-Project1-context-root/Form.html

127.0.0.1

FILTER INVOICES

INVOICE DATE FROM	0-0-0
INVOICE DATE TO	2020-12-31
MIN NET AMOUNT	0
MAX NET AMOUNT	10000000

Submit

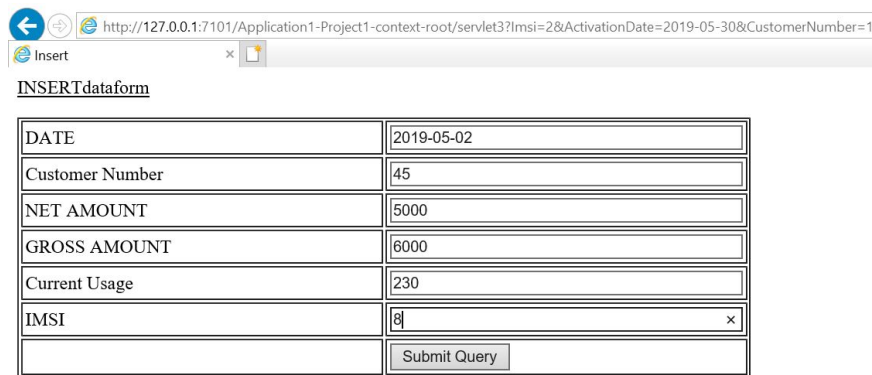
The result:

FILTER ROWS

IMSI	ACTIVATION_DATE	CUSTOMER_NUMBER	NET_AMOUNT	GROSS_AMOUNT	CURRENT_USAGE	
2	2019-05-30	13	3367.0000	8302.0000	2666	<a href="#">INSERT</a> <a href="#">UPDATE</a> <a href="#">DELETE</a>
4	2019-04-23	15	1238.0000	3457.0000	456	<a href="#">INSERT</a> <a href="#">UPDATE</a> <a href="#">DELETE</a>
5	2019-07-05	16	1374.0000	4312.0000	865	<a href="#">INSERT</a> <a href="#">UPDATE</a> <a href="#">DELETE</a>
24	2019-05-30	13	3367.0000	8302.0000	3	<a href="#">INSERT</a> <a href="#">UPDATE</a> <a href="#">DELETE</a>

Now lets Insert by pressing any of the insert on above pic also I have checked that when I put an IMSI number(which already exists in the current table) we get an error. The below shows when we put an unique IMSI number(i.e. Successful insertion)

:



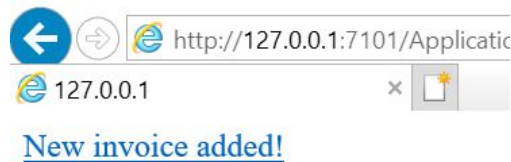
Insert

[Insert](#) [Update](#) [Delete](#)

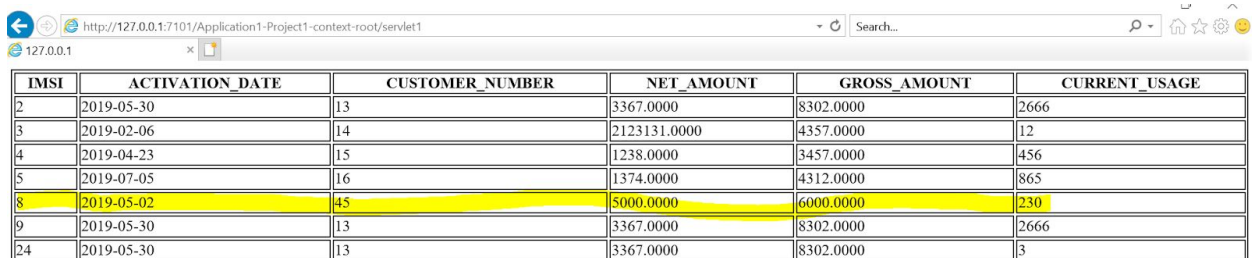
INSERTdataform

DATE	2019-05-02
Customer Number	45
NET AMOUNT	5000
GROSS AMOUNT	6000
Current Usage	230
IMSI	8
<input type="button" value="Submit Query"/>	

When the submit query is pressed, we get a confirmation of insertion:

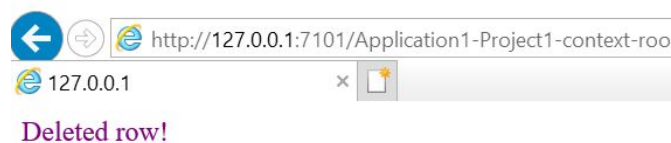


When we press on the hyperlink above we are directed to Servlet1.java i.e. to the new table(As highlighted below IMSI-8 has been added):

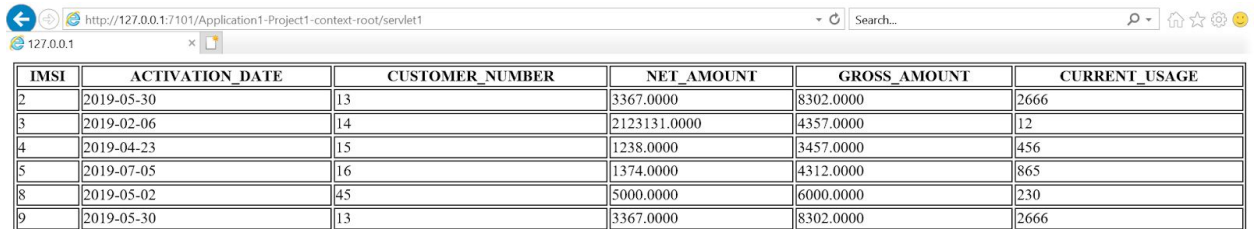


IMSI	ACTIVATION_DATE	CUSTOMER_NUMBER	NET_AMOUNT	GROSS_AMOUNT	CURRENT_USAGE
2	2019-05-30	13	3367.0000	8302.0000	2666
3	2019-02-06	14	2123131.0000	4357.0000	12
4	2019-04-23	15	1238.0000	3457.0000	456
5	2019-07-05	16	1374.0000	4312.0000	865
8	2019-05-02	45	5000.0000	6000.0000	230
9	2019-05-30	13	3367.0000	8302.0000	2666
24	2019-05-30	13	3367.0000	8302.0000	3

Now we will press delete IMSI-24 in the new table to show that delete.java works:

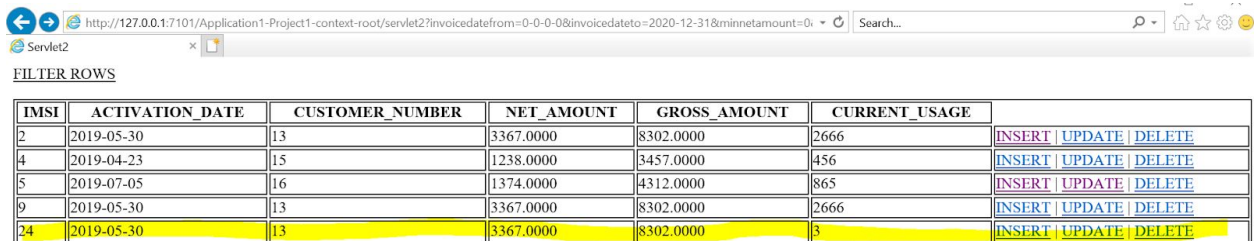


When the Delete row! Hyperlink is pressed we are redirected to Servlet1 and as seen below the row has been deleted:



IMSI	ACTIVATION_DATE	CUSTOMER_NUMBER	NET_AMOUNT	GROSS_AMOUNT	CURRENT_USAGE
2	2019-05-30	13	3367.0000	8302.0000	2666
3	2019-02-06	14	2123131.0000	4357.0000	12
4	2019-04-23	15	1238.0000	3457.0000	456
5	2019-07-05	16	1374.0000	4312.0000	865
8	2019-05-02	45	5000.0000	6000.0000	230
9	2019-05-30	13	3367.0000	8302.0000	2666

Now Lets check Update(the highlighted row is what we are updating:

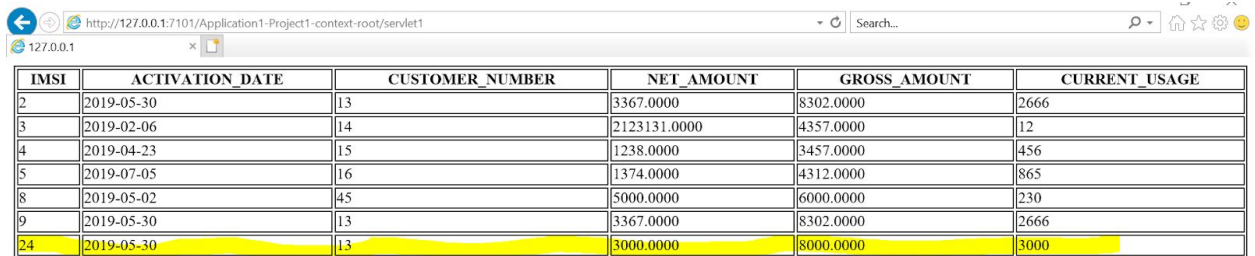


Servlet2

FILTER ROWS

IMSI	ACTIVATION_DATE	CUSTOMER_NUMBER	NET_AMOUNT	GROSS_AMOUNT	CURRENT_USAGE	
2	2019-05-30	13	3367.0000	8302.0000	2666	<a href="#">INSERT</a>   <a href="#">UPDATE</a>   <a href="#">DELETE</a>
4	2019-04-23	15	1238.0000	3457.0000	456	<a href="#">INSERT</a>   <a href="#">UPDATE</a>   <a href="#">DELETE</a>
5	2019-07-05	16	1374.0000	4312.0000	865	<a href="#">INSERT</a>   <a href="#">UPDATE</a>   <a href="#">DELETE</a>
9	2019-05-30	13	3367.0000	8302.0000	2666	<a href="#">INSERT</a>   <a href="#">UPDATE</a>   <a href="#">DELETE</a>
24	2019-05-30	13	3367.0000	8302.0000	3	<a href="#">INSERT</a>   <a href="#">UPDATE</a>   <a href="#">DELETE</a>

Once I press update and change the values I get the following:



IMSI	ACTIVATION_DATE	CUSTOMER_NUMBER	NET_AMOUNT	GROSS_AMOUNT	CURRENT_USAGE
2	2019-05-30	13	3367.0000	8302.0000	2666
3	2019-02-06	14	2123131.0000	4357.0000	12
4	2019-04-23	15	1238.0000	3457.0000	456
5	2019-07-05	16	1374.0000	4312.0000	865
8	2019-05-02	45	5000.0000	6000.0000	230
9	2019-05-30	13	3367.0000	8302.0000	2666
24	2019-05-30	13	3000.0000	8000.0000	3000

As seen above the row has been updated.