

UPDATING INTERESTS WITH PROCEDURES AND CURSORS

LOAN INTEREST UPDATE

The loan interest update procedure (refer setting up procedures for more info) make use of the view loan interest update (refer setting up views for more info) to fetch loan records and insert records into the loan interest records by calculating interests with help of the interest rates fetched from interest info table. The 'Loan Interest Update' page on the application contains a single button which updates the interest and this action is irreversible. This button call the procedure and interest is updated.

This is the initial loan table with all zero interest.

```
MySQL localhost:33060+ ssl thebank SQL> SELECT * FROM LOANS;
```

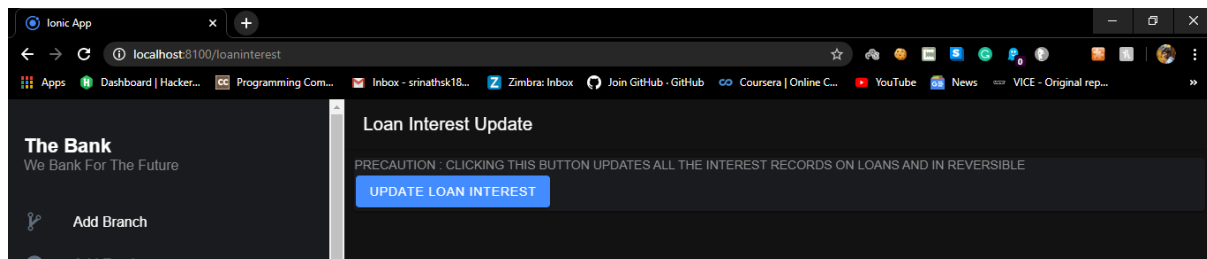
LOANACCOUNTNO	BRANCHIFSC	CUSTOMERID	PRINCIPLE	INTERESTAMT	OUTSTANDING	LOANSTATUS	LOANSECURITY	LOANTYPE	APPROVEDBY	SANCTIONDATE
10000	BANK0000001	10000	1000	0	900	A	LAND	HOM	10000	2020-04-21
10001	BANK0000001	10002	100000	0	90000	A	HOME DOCUMENT	EDU	10001	2020-04-22
10002	BANK0000001	10006	100000	0	100000	A	HOME DOCUMENT	AGR	10001	2020-04-22
10003	BANK0000001	10008	10000	0	10000	A	COLLEGE CERTIFICATE	PER	10003	2020-04-22
10004	BANK0000003	10007	1000	0	900	A	COLLEGE CERTIFICATE	PER	10008	2020-04-22
10005	BANK0000005	10010	8000	0	7000	A	GOLD	PER	10006	2020-04-22

6 rows in set (0.0008 sec)

The loan interest record is initially empty.

```
MySQL localhost:33060+ ssl thebank SQL> SELECT * FROM LOANINTERESTRECORD;
Empty set (1.2009 sec)
MySQL localhost:33060+ ssl thebank SQL>
```

Now we click the loan interest update button



Console entry is made

```
LoanPayment ID : 10003 LoanAccNo : 10004LoanIFSC : BANK0000003A
Updated calculated interests on Loans for this month...
```

Now we observe the loan interest record table which contains the calculated interest.

```
MySQL localhost:33060+ ssl thebank SQL> SELECT * FROM LOANINTERESTRECORD;
```

LOANACCOUNTNO	BRANCHIFSC	TRANDATE	INTEREST
10000	BANK0000001	2020-04-22	7.3125
10001	BANK0000001	2020-04-22	656.25
10002	BANK0000001	2020-04-22	708.333
10003	BANK0000001	2020-04-22	83.3333
10004	BANK0000003	2020-04-22	7.5
10005	BANK0000005	2020-04-22	58.3333

6 rows in set (0.0008 sec)

Now we observe the Loans table the interest values are updated and added to the outstanding amount in loans table. (Refer setting up triggers for more info).

```
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM LOANS;
```

LOANACCOUNTNO	BRANCHIFSC	CUSTOMERID	PRINCIPLE	INTERESTAMT	OUTSTANDING	LOANSTATUS	LOANSECURITY	LOANTYPE	APPROVEDBY	SANCTIONDATE
10000	BANK0000001	10000	1000	7.3125	907.312	A	LAND	HOM	10000	2020-04-21
10001	BANK0000001	10002	100000	656.25	90656.2	A	HOME DOCUMENT	EDU	10001	2020-04-22
10002	BANK0000001	10006	100000	708.333	100708	A	HOME DOCUMENT	AGR	10001	2020-04-22
10003	BANK0000001	10008	10000	83.3333	10083.3	A	COLLEGE CERTIFICATE	PER	10003	2020-04-22
10004	BANK0000003	10007	1000	7.5	907.5	A	COLLEGE CERTIFICATE	PER	10008	2020-04-22
10005	BANK0000005	10010	8000	58.3333	7058.33	A	GOLD	PER	10006	2020-04-22

```
6 rows in set (1.2079 sec)
MySQL localhost:33060+ ssl thebank SQL >
```

DEPOSIT INTEREST UPDATE

This procedure makes use of the view deposit interest info (refer setting up views for more info) to calculate interest with help of interest rate in interest info table.

This is the initial records of accounts that are either fixed deposit accounts or recurring deposit accounts.

```
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM ACCOUNTS where ACCOUNTTYPE='F' or ACCOUNTTYPE='R';
```

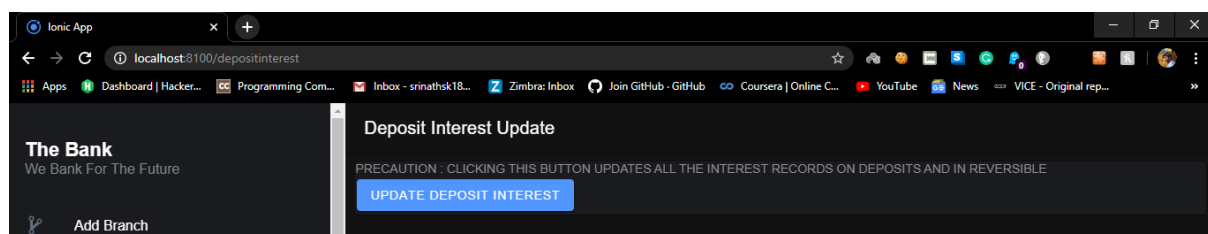
ACCOUNTNO	BRANCHIFSC	CUSTOMERID	ACCOUNTTYPE	ACCSTATUS	BALANCE
10002	BANK0000001	10001	R	A	7700
10005	BANK0000005	10005	F	A	540
10007	BANK0000003	10004	F	A	10000
10011	BANK0000002	10007	R	A	30000
10012	BANK0000001	10007	R	A	1800

```
5 rows in set (0.0007 sec)
```

The deposit interest info table is initially empty

```
Empty set (0.2557 sec)
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM DEPOSITINTERESTINFO;
Empty set (0.0006 sec)
MySQL localhost:33060+ ssl thebank SQL >
```

Now we click the deposit interest info button Deposit interest page. (This is an irreversible action).



We check for console entries

```
Updated calculated interests on Loans for this month...
Updated calculated interests on Fixed and Recurring Deposits for this month...
```

The deposit interest info table is updated

```
Empty set (0.0000 sec)
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM DEPOSITINTERESTINFO;
```

ACCOUNTNO	BRANCHIFSC	TRANDATE	INTEREST
10002	BANK0000001	2020-04-22	43.3125
10005	BANK0000005	2020-04-22	3.0375
10007	BANK0000003	2020-04-22	56.25
10011	BANK0000002	2020-04-22	168.75
10012	BANK0000001	2020-04-22	10.125

```
5 rows in set (0.0008 sec)
MySQL localhost:33060+ ssl thebank SQL >
```

Trigger updated the balance on these account by addition of interest. (Refer setting up triggers for more info).

```
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM ACCOUNTS where ACCOUNTTYPE='F' or ACCOUNTTYPE='R';
```

ACCOUNTNO	BRANCHIFSC	CUSTOMERID	ACCOUNTTYPE	ACCSTATUS	BALANCE
10002	BANK0000001	10001	R	A	7743.31
10005	BANK0000005	10005	F	A	543.037
10007	BANK0000003	10004	F	A	10056.2
10011	BANK0000002	10007	R	A	30168.8
10012	BANK0000001	10007	R	A	1810.12

```
5 rows in set (0.0011 sec)
```

```
MySQL localhost:33060+ ssl thebank SQL > _
```