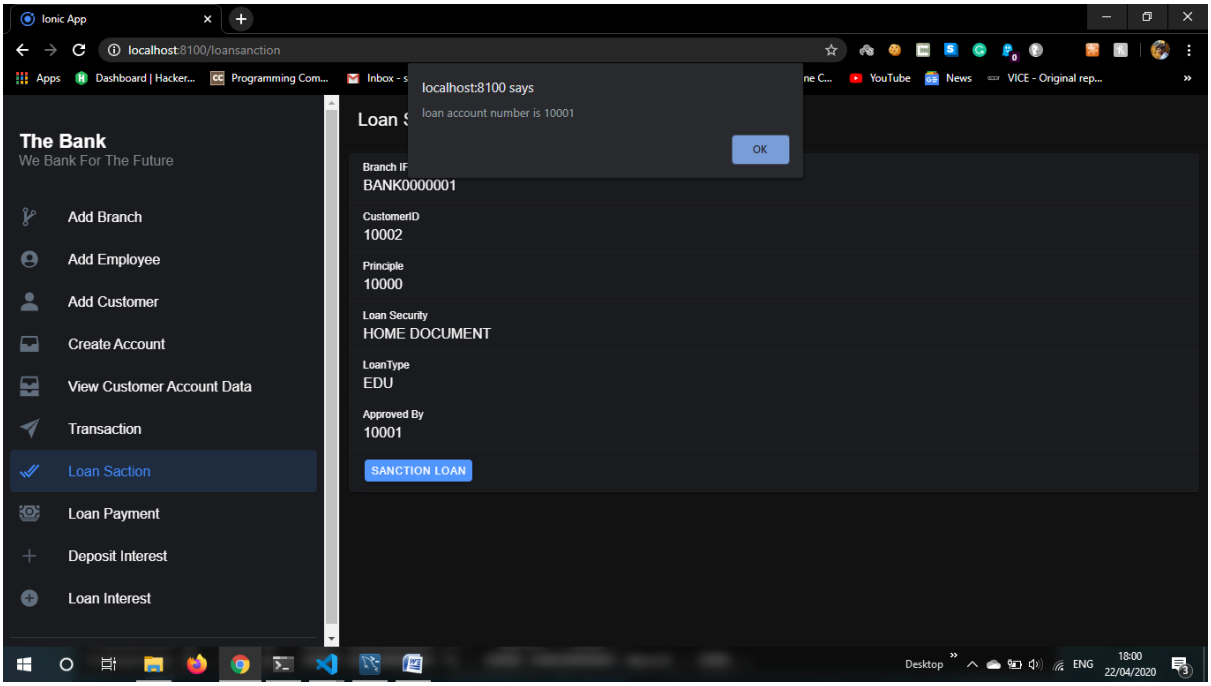
## LOANS AND LOAN PAYMENTS

To sanction a loan, an employee must go the loan sanction page, fill out the form and click sanction loan. The entry is recorded in the loans table and the loan account no is returned in an alert.




The console logs are entered

```
Customer 10002 got a EDU loan sanctioned from BANK0000001 with LoanAccountNo 10001...
Customer 10006 got a AGR loan sanctioned from BANK0000001 with LoanAccountNo 10002...
Customer 10008 got a PER loan sanctioned from BANK0000001 with LoanAccountNo 10003...
Customer 10007 got a PER loan sanctioned from BANK0000003 with LoanAccountNo 10004...
Customer 10010 got a PER loan sanctioned from BANK0000005 with LoanAccountNo 10005...
```

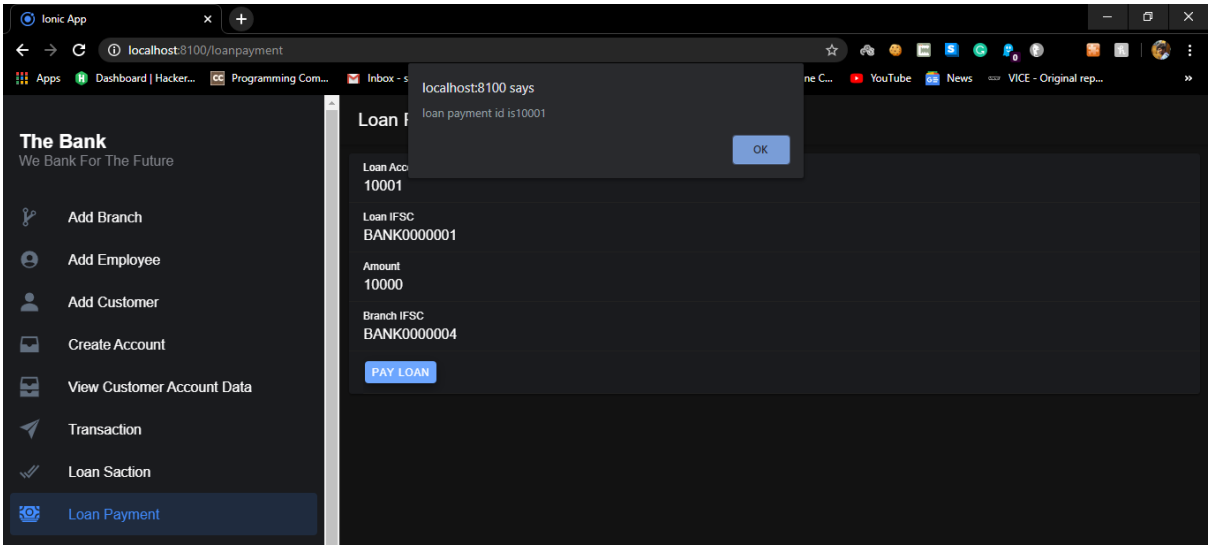
On looking into the loans table

```
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 |     10000 |            0 |       10000 | 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 |        1000 | A          | COLLEGE CERTIFICATE | PER      |      10008 | 2020-04-22   |
|         10005 | BANK0000005 |      10010 |      8000 |            0 |        8000 | A          | GOLD                | PER      |      10006 | 2020-04-22   |
+---------------+------------+------------+-----------+--------------+-------------+------------+---------------------+----------+------------+--------------+
6 rows in set (0.0010 sec)
MySQL  localhost:33060+ ssl  thebank  SQL >
```

## LOAN PAYMENTS

The loan payments section is where customer pay their instalments on loans with account number and loan IFSCCode. These records are maintained in loan payments table and the balance is updated in the outstanding of the loans table.

Branch IFSC denoted the branch where payments is made and loan IFSC is that of branch which sanctioned the loan. Loan payment ID is returned by an alert.




The console entries are made

```
LoanPayment ID : 10001 LoanAccNo : 10001LoanIFSC : BANK0000001Amount : 10000...
LoanPayment ID : 10002 LoanAccNo : 10005LoanIFSC : BANK0000005Amount : 1000...
LoanPayment ID : 10003 LoanAccNo : 10004LoanIFSC : BANK0000003Amount : 100...
```

```
6 rows in set (0.0011 sec)
MySQL localhost:33060+ ssl thebank SQL > SELECT * FROM LOANPAYMENTS;
+-----------+------------+--------+---------------+-------------+-------------+
| LOANPAYID | TRANDATE   | AMOUNT | LOANACCOUNTNO | LOANIFSC    | BRANCHIFSC  |
+-----------+------------+--------+---------------+-------------+-------------+
|     10000 | 2020-04-21 |    100 |         10000 | BANK0000001 | BANK0000001 |
|     10001 | 2020-04-22 |  10000 |         10001 | BANK0000001 | BANK0000004 |
|     10002 | 2020-04-22 |   1000 |         10005 | BANK0000005 | BANK0000001 |
|     10003 | 2020-04-22 |    100 |         10004 | BANK0000003 | BANK0000002 |
+-----------+------------+--------+---------------+-------------+-------------+
4 rows in set (0.0013 sec)
MySQL localhost:33060+ ssl thebank SQL >
```

Now we check with the loans table if the outstanding amount is updated. In the loans table we can observe that the difference between principle and outstanding is amount paid towards that loan in the loan payments table. In the next section we focus on the interest part.

```
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 (0.0011 sec)
MySQL localhost:33060+ ssl thebank SQL >
```

So the trigger (refer setting up triggers for info on the trigger) takes care of updating the outstanding values.