**ITEC-3150 Section 02: Fall 2015**

**Advanced Programming Final Project Proposal**

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Objective:

* To create bank database system with the help of JavaFX, JDBC using MySQL on localhost server and make a use of Collections and sets in order to demonstrate and satisfy learnt Advanced Java concepts in class.
* Database will store basic customer information, and their account details, using MySQL queries. And, Maybe Employee Details as well (in consideration for further expansion). Collections maybe used to display collective records such as all the user to administrator.
* Be able to document our work, using appropriate format of documentation to present our work in the best way possible during class presentation and future purpose.
* Be able to communicate effectively with our team partners and instructors during as well as post-development phase.

Description:

1. It may include a Registration Page by which a customer will be able to register himself into the bank database system as an online user.
2. Login window to login within one’s account details.
3. Each customer maybe assigned unique checking account number and saving account number and be able to withdraw and deposit from each of them depending on the amount of balance, they have into their account. MySql Database system will keep track of these withdrawal-deposit for respective customer, whosoever, is online into their respective account.
4. Another Activity page will be for Loan payment according to which, the database system will keep track of remaining amounts to be paid based on the number of installments and amounts the customer may have paid.
5. A Logout button which will end the session once a user clicks the logout button and takes the user out of the active session, destroying that active session. Thus, that login window will be available to other customers to login into their account.
6. List of potential tables and table-attributes:

* Registration table which stores the basic customer details and assigns the unique customerID associated with customer’s checking account number and saving account number. The basic attributes may include, but not limited to: CustomerID, First Name, Last Name, Phone number, Residential Address, Email Address, Username and Password.
* Checking Account Table: CustomerID , Unique Checking Account Number, Balance
* Saving Account Table: CustomerID, Unique Saving Account Number, Balance
* Loan Table: CustomerID, LoanID, Loan Amount, Months Needed, Credit Score, Annual Interest, Monthly Interest, Interest Incurred, Total Amount To be Paid, Remaining Amount to be Paid after each Payment
* Admin Table: CustomerID, Checking Account Number, Checking Balance, Saving Account Number, Saving Balance, Phone Number, Address, Email, Loan ID, Assigned Loan Amount, Total Amount to be Paid, and Remaining Amount to be Paid