**P0 part 2 Bank Console application**

**Due:** 6 pm EST on 11/17/2020

**Presentation:** 10:30 am EST on 11/18/2020

**Required Technologies:**

Maven

PostgreSQL

AWS RDS

JUnit

Log4J

Git and GitHub

Markdown file

**Business Requirements:**

* A registered user can login with their username and password
* An unregistered user can register by creating a username and password
* An Admin can view, create, update, and delete all users.
* A user can view their own existing accounts and balances.
* A user can create an account.
* A user can delete an account if it is empty.
* A user can add to or withdraw from an account.
* A user can execute multiple deposits or withdrawals in a session.
* A user can logout.

**Required components:**

* Use Serial data types to generate USER\_ID and BANK\_ACCOUNT\_ID.
* Throw custom exceptions in the event of user error (overdraft, incorrect password, etc).
* Provide validation messages through the console for all user actions.
* Use the DAO design pattern.
* Store Admin username/password and database connection information in a properties file.
* PL/SQL with at least one user defined function
* JDBC with statements and prepared statements
* Scanner for user input
* JUnit tests on all user defined Java methods
* Transactions will be logged to a file with Log4J.

**Bonus:**

* A user may view transaction history.
* Logging into a DB table.

Create a Maven project with your solution as [lastName]JDBCBank. include it in your DB creation script (JDBCBank.sql), along with a Markdown (.md) file with information necessary to run your application, i.e. instructions, usernames and passwords, etc.