**CSC 834**

**Software Engineering**

**Spring 2021**

**Individual Project**

Date: 03/15/2021

*A new local bank ZZZ asks for your help to develop a software system for their multiple ATM machines. The machines will provide basic operations to their customers, including depositing money, withdrawing money, checking balances, and transferring money from one account to another. Each machine will be refilled to hold $100,000 cash daily for possible withdrawals. For security reason, each account can have at most $3000 in total for all the transactions (except for checking balance) through ATM machines each day. Effectiveness and efficiency are their primary requirements.*

**From the instructor:**

We will use this simple project to practice the waterfall process model. We will learn and use different methods and tools to produce the output of different phases in the model. The output will be graded in five assignments:

Assignment 1: a complete set of functional requirements and non-functional requirements

Assignment 2: a use case diagram and a domain diagram

Assignment 3: sequence diagrams, activity diagrams, a state diagram, and a class diagram

Assignment 4: database design (an ER diagram and a table schema)

Assignment 5: a final report that integrates the contents of the previous four assignments, including the code

You will use the same methods and tools to complete a team project with your teammates. If you have any questions regarding the assignments and the projects, please contact the instructor immediately.