

Gina Cody School of Engineering and Computer Science

COEN 6311 – Software Engineering

Object Oriented programming (OOP) mini-programming project

Tuesday Section NN: (Family Bank Wallet)

You will design a bank wallet for a family where all the family members (10 members). The wallet can be linked by one bank or two bank accounts under the following conditions:

- 1) Dad and Mam have full access to pay using this wallet and withdraw money.
- 2) Children can pay using a wallet for a max of \$50 per day.
- 3) Dad and Mam can deposit money by transferring money from their bank account.
- 4) Dad and Mam can view all transactions for all family members, listing items of shop names and amount of money in the time stamp.
- 5) Dad can block any family member from using the wallet.
- 6) No one can pay if the wallet is zero balance, kids can request a money deposit (message Dad and Mam) if the balance is not sufficient.
- 7) Notification for Dad and Mam if the balance is less than \$100.
- 8) Children must ask permission to use the wallet two times a day regardless of the amount of money.
- 9) Kid can request overpay from Mam only if he needs to pay more than 50\$, Mam can accept or reject or transfer the request to Dad.

You should:

- 1. Rewrite the requirements and system description into user stories.
- 2. Show business model actions flow, as a diagram.
- 3. Create the needed <u>UML</u> diagrams for this application showing all attributes and methods needed to complete all requirements.
- 4. Do a plan of your work with activities and time you estimate (guess) it will take you to complete.
- 5. Implement the application in the language of your preference. The application must run on a windows pc. The user interface can be via the console menu.
- 6. As you work on your project, record the time each activity takes you (if you must add activities to the plan, estimate a time also).
- 7. Present a report showing your diagram and its relation to your code structure and code.
- 8. Present a report of the plan, estimated time, and actual time to complete each activity.