

## Department of Computer Science and Engineering

### Quiz 2, Fall 2023

#### CSE471: System Analysis and Design

Total Marks: 10

Time Allowed: 30 minutes

Name:

ID:

#### Question

Almost every ATM machine has a core Transaction Processor module which handles all the transactions successfully. For a successful transaction, at first the Transaction Processor module sends the card no. to a library module named Get Account Details which returns back the account no., A/C name, branch and address. Before further processing, the Transaction Processor module receives an authenticated flag from the Authentication System module. For authentication, first the A/C no. is sent to the Authentication System module which is then sent to the Block Status module. Block Status returns a void flag if everything is alright. Then the Authentication System sends the A/C no. to Loan Status module in order to receive ledger balance which is then sent to Calculate Available Balance module along with the A/C no. Finally, the Authentication System receives available balance and returns it back to the Transaction Processor module. The Transaction Processor module then sends the A/C no and transaction details to the Communication Interface module which is then sent to the Bank Server module. The Bank Server module extracts the raw amount from the transaction details using the Extract Amount module and sends it with the A/C no. to the Update Balance module. The raw amount is also sent back to the Transaction Processor module through the Communication Interface module. After that, the Transaction Processor sends the raw amount to the Cash Dispenser module. A true flag is returned to the Transaction Processor to indicate a successful operation. Finally, Transaction Processor sends A/C no., A/C name, branch and address to either the Print Receipt module which is continued on the same page of the structure chart or to the Print Mini Statement module which is continued to another page.

Now **design** a structure chart diagram based on the given information. You might find it useful drawing it in landscape. [CO2]

Solution:

