Assignment 2: Design Document for ATM

| Wenqiang Chen  Hamilton, Canada  chenw25@mcmaster.ca | Carolyn Chong  Hamilton, Canada  chongce@mcmaster.ca | Kevin Ly  Hamilton, Canada  lyk2@mcmaster.ca | Meraj Patel  Hamilton, Canada  patelmu2@mcmaster.ca |
| --- | --- | --- | --- |

# instructions to run software

To run the software locally, in the atm folder, open up index.html in your browser. Alternatively, you can go to http://tools.quarters.space/as2/atm.

Please run on Chrome 46.

Please view the application full-screen (1920x1080).

Please do not use browser functions (e.g. navigation or manually changing url.)

We have made the assumption that actions made directly with the machine (e.g. swiping cards, inputting and withdrawing cash/cheques from ATM) are handled by the machine.

Please note entering your account number simulates swiping your card.

Account Number: 12341234

Initial Pin: 1234

# design decisions

## Assignment Requirements

We implemented the following requirements from the assignment guidelines:

Ability to enter an account number, simulating swiping/inserting a card 🡪 We chose to force users to swipe their card to prevent them forgetting to retrieve it at the end of their session.

Ability to withdraw and deposit cash, updating a bank account balance accordingly 🡪 Separate functions that are accessible from the main menu. Updated balance is shown after the transaction.

Ability to simply check/display account balances 🡪 Accessible via main menu under "Account History".

Transfers between accounts 🡪 Accessible via main menu under "Transfers".

## Additional Features

* A digital clock in the header to record transaction times
* A "Request Help" button in the header for easy access and to reassure the user that they can get help
* "Main Menu" and "Exit" Buttons in the same spot on every page for easy and convenient access, with appropriate background colours
* We added pictures to simplify the user's experience by providing guidance to those who are visual learners
* A loading page that appears during transactions to give the user feedback that their transaction is in progress
* Ability to print receipts
* Display and print transactions in "Account History"
* Password is starred upon input for privacy
* Automatic redirect back to login page upon exit
* A credit card account
* Validation: length and type of input, withdrawal/transfer amounts, alert dialogs
* Preference of bill denominations during withdrawal
* Currency Exchange
* Pin changer