Assignment 2

Computer Science 4HC3

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**General Design Documentation**

1. Buttons are formatted consistently through colour, capitalization, and border color to allow for easy recognition for what the available functions are
2. Labels (text being displayed to user and not cannot be edited by user) are located in background without any borders
3. The state of which the UI exists in can be easily found by looking at window heading
4. Each page contains a common design and formatting principles to have a sense of unity within the interface
5. Most pages are minimalized to only allow features that are necessities to be visible and discoverable, otherwise they are not as prominent to divert to much attention away from the users main course of action
6. Error messages will appear to users when incorrectly entering a value within constraints (i.e. account number, pin, amounts)
7. Feedback is simultaneous with transitions to new states (i.e. entering a new page, selecting tasks, entering numbers on the keypad, etc.) All buttons will lead to an immediate response of some sort with no phantom responses.
8. If the user ever incorrectly decides a transaction path, they can always go back with the press of a button.

**Feature #1**

**(Account Details)**

Design Documentation:

The user is given the following options to view their account details:

1. Select a simulated approach through(simulated through a button press):
   1. Swiping your card
   2. Inserting your card
   3. Tapping your card
2. Select a manual approach through:
   1. Entering in the users’ account number(16 digits)
3. Have the user enter in their PIN number(4-8 digits)
4. The user will then be taken to their account balance page

Design Rational:

The four options were set up in the beginning as four buttons in a square shape, because the user is most likely to equally choose one of the options as a way of inputting their account number and we want it to be clearly displayed to the user.

The screens for asking for the account number manually and PIN were kept very minimalistic, because we don’t want the user to be able to do or focus on anything else before they log into the system. This focuses their attention on giving the ATM their information, before requesting anything else of it.

**Feature #2**

**(Updating Bank Account)**

Design Documentation:

The user has the ability to update their bank account balance through:

1. Withdrawing money
   1. Selecting account(Savings or Chequing)
   2. Choosing a pre-set value to withdraw or entering in the amount the user wishes to withdraw
2. Depositing money
   1. Selecting account(Savings or Chequing)
   2. Enter in the value the user wishes to deposit
3. Transferring money between the users’ accounts(Chequing/Saving)
   1. Selecting transfer choice between:
      1. Savings to Chequings
      2. Chequings to Savings
   2. Entering in value the user wishes to transfer
4. E-transferring money to another users’ account
   1. Choose account the user would like to transfer money from
   2. Enter email of the user receiving the transfer
   3. Enter in the amount the user will receive

Design Rational:

**Feature #3**

**(Account Balances)**

Design Documentation:

The user has the following options to view their account balance:

1. After entering their PIN, they will be directed to a page which displays their account balance
2. After any transaction, the user is given the option to go back to their account balance
3. Will be displayed on the receipt that is shown to the user after every transaction committed

Design Rational:

Like the rest of our design, we tried to keep the account balance page very simple and with only the necessities showing and giving users only the basic functions including withdrawing, depositing, and transferring money. This will make sure the user isn’t overwhelmed with too much information but still having the core concepts available.

The application will display a welcome message with the user’s name and account number at the top of the page to assure users that they have logged in successfully. The font of the welcome message will be larger than the rest of the page to draw the user’s attention right away, allowing them to confirm for any mistakes. The user will then be shown their balances in both their accounts (chequing and savings).

Once the user has confirmed that their information is correct, they will be presented with buttons allowing them to select what operations they wish to perform. These tasks include withdrawals and depositing of money and transfers between their accounts or to other contacts. The buttons have text to highlight the purposes of the commands rather than just information being displayed to the user which informs users that pressing them will result in an action being carried out.

**Feature #4**

**(Transfers)**

Design Documentation:

The user will be able to transfer money between their accounts

1. From the account balance page, select Transfers
2. Selecting transfer choice between:
   1. Chequing to Saving
   2. Saving to Chequing
3. Enter the value the user wishes to transfer over

Design Rational:

Similar to the other designs, the concept for the transfer page is minimalistic. The user is presented with two directives in determining where their money will be taken out of and where it will end up. The user can then select the amount they wish to transfer through the keypad while keeping in mind their current balances in each account.

**Extra Feature #1**

**(Interac E-Transfer)**

Design Documentation:

The user will be able to do an E-transfer to another users’ account by the following method:

1. From the account balance page, select E-Transfers
2. Selecting which account you are transferring money from
   1. Chequings or Savings
3. Select the user from the contact list
4. Enter the amount you will be transferring
5. Enter in a PIN, the receiving user will need to confirm and receive the transaction

Design Rational:

The Interac page has a bit more information being displayed to users than our other transaction pages, but this was kept as simple as it could be. The information being displayed to the user is necessary in completing the e-transfer with minimal effort required.

**Extra Feature #2**

**(Account History)**

Design Documentation:

1. The user will be able to view all transactions that have occurred recently with the card they signed in with
2. This service can be accessed as a button located on the lower left corner of the account balance page
3. It displays transactions and can take up to 24 hours to process and display

Design Rational:

We felt this feature would be a nice addition to add to an ATM to allow users to quickly track their recent usage. This allows for planning of future transactions in case users are meticulous when banking. This button is smaller in size ratio-wise compared to the other buttons on the account balance page in order to not draw away attention to the more major features. It is not a focal point of the application so it doesn’t need the attention as much as the others do. Inside the account history page, the user will be presented with the date of transaction, type of transaction, change in amount, account type and total balance after transaction. Only these categories were included as we felt the user would only want to know what was affected and how much it was affected by.

**Extra Feature #3**

**(Language)**

Design Documentation:

1. The user will be able to change the language of the system at the very first screen
2. This service can be accessed as a button located on the lower right corner of the first screen page
3. It displays the different languages that the system can use

Design Rational:

This feature shows immediate feedback when a specific language is clicked by changing the language the system is displaying. This feature does not change the language of the rest of the system, as we felt showing the feedback and usability on that page an adequate amount of a system that doesn’t need to be entirely functional.