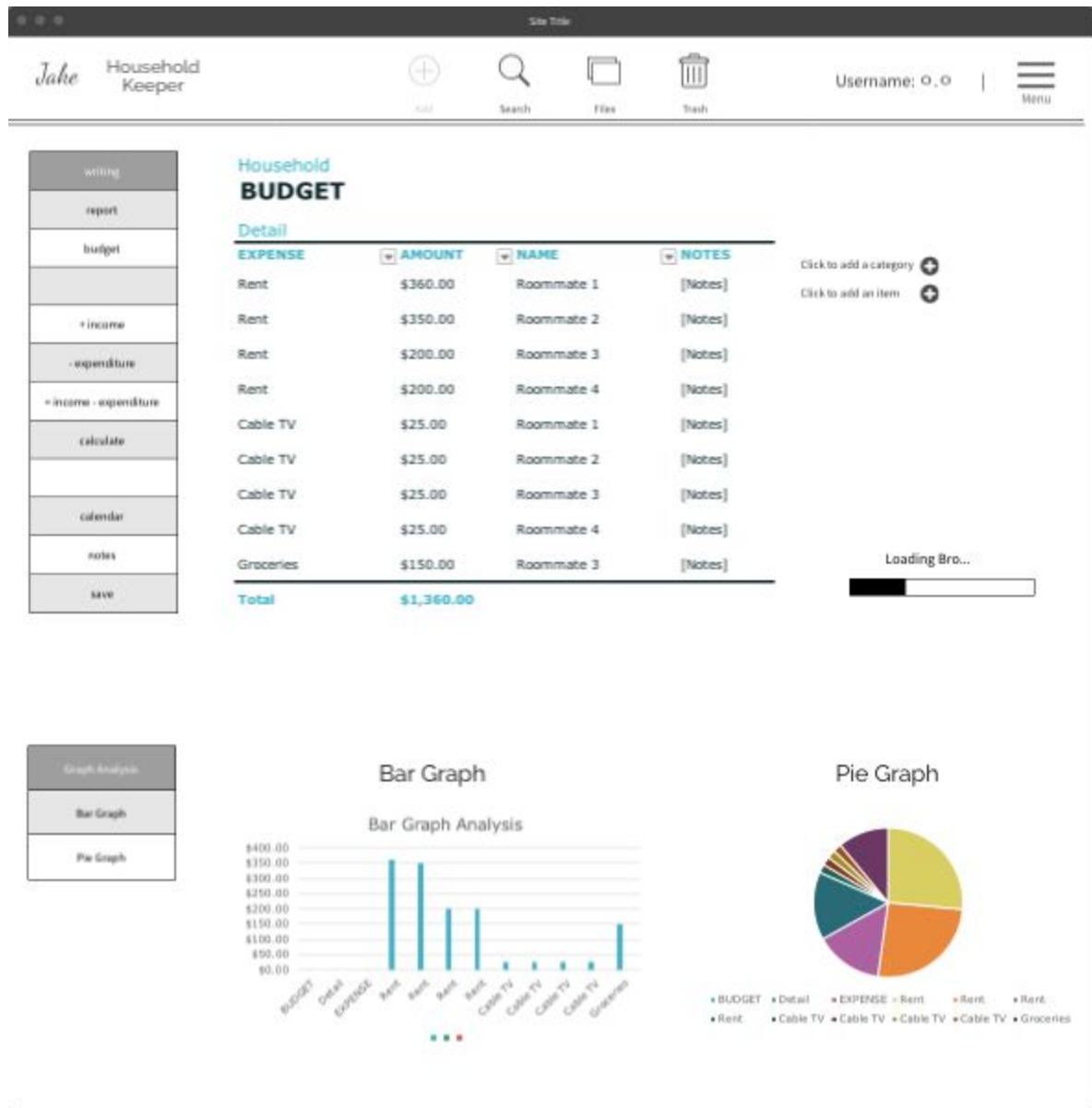


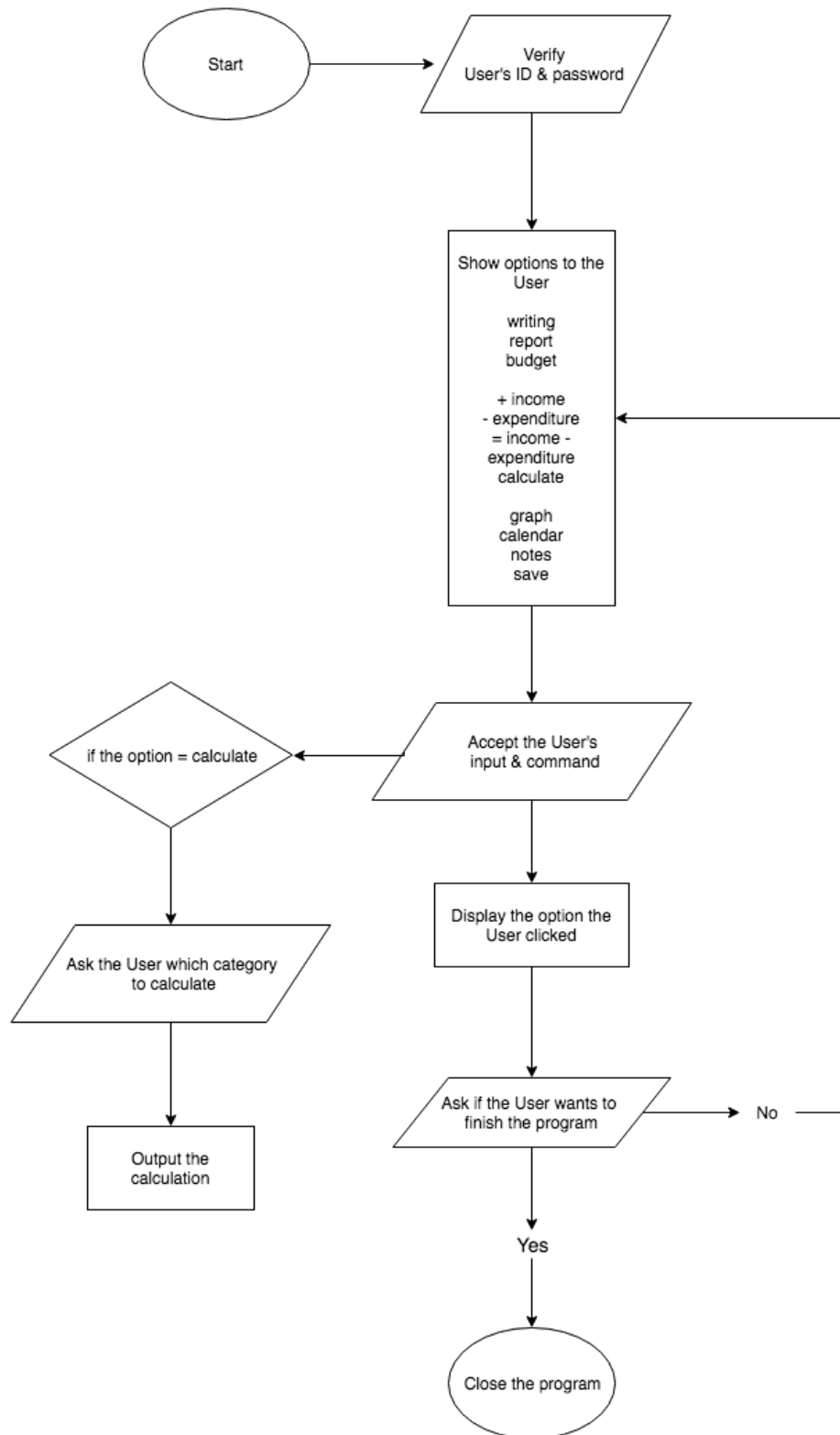
## ❑ Overview of initial design (initial draft)



Elements in the menu bar are the options that the client can choose: writing, report, budget, income, expenditure, calculate, calendar, notes and graphs.

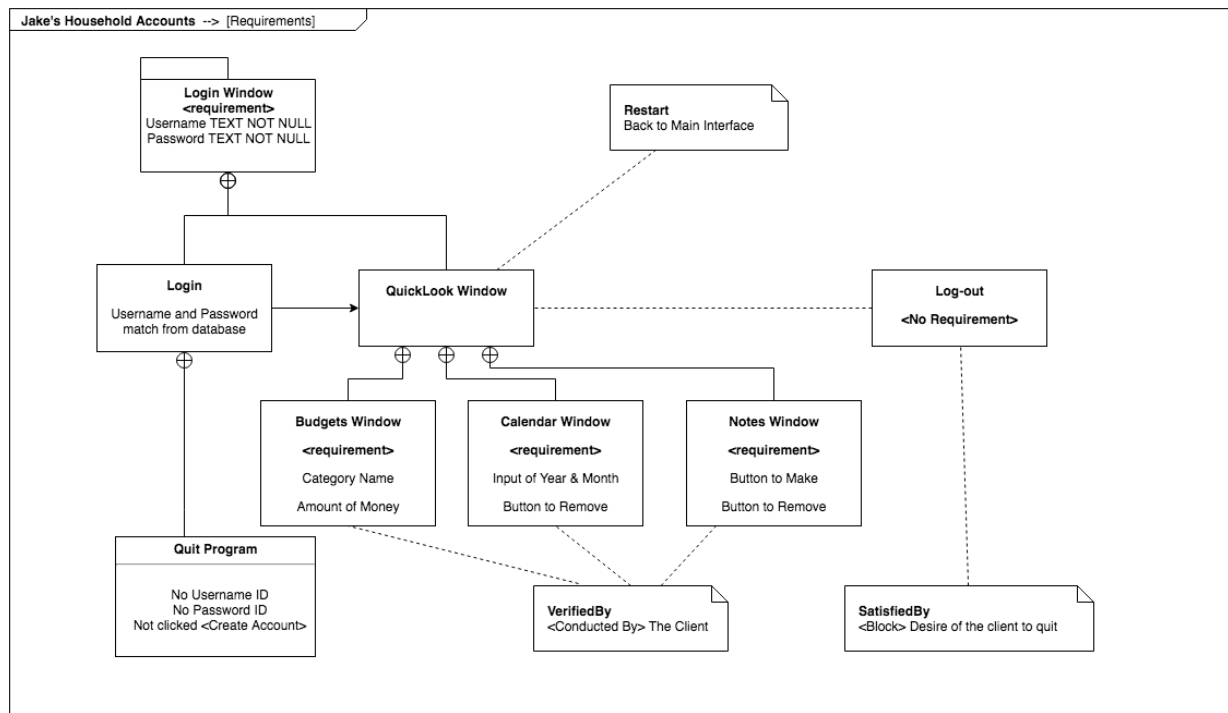
## Flowchart

❑ Basic overall flowchart of the program:



## UML diagram

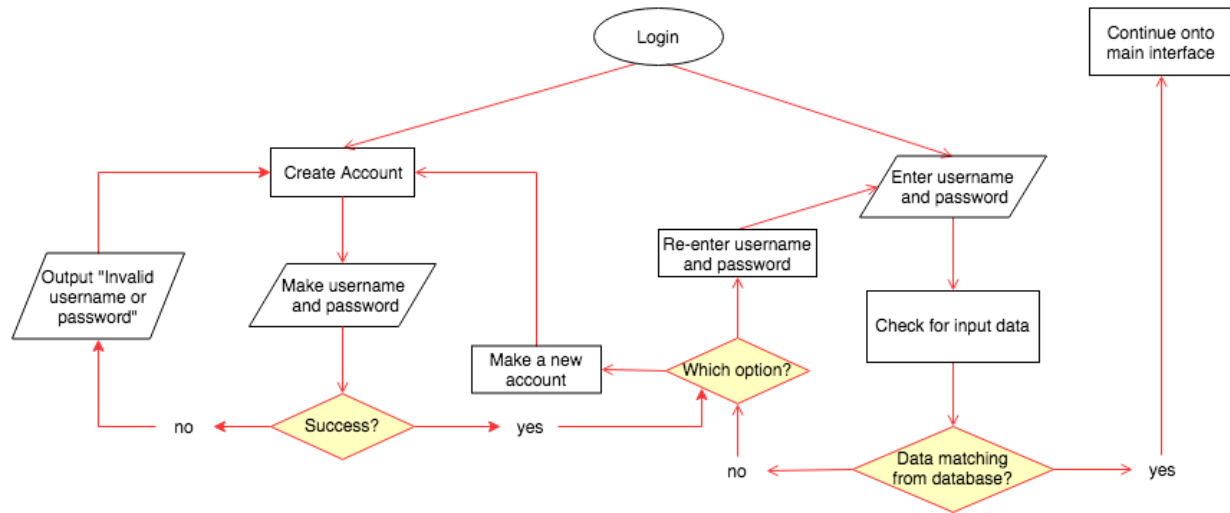
### UML diagram (Requirements of the program)



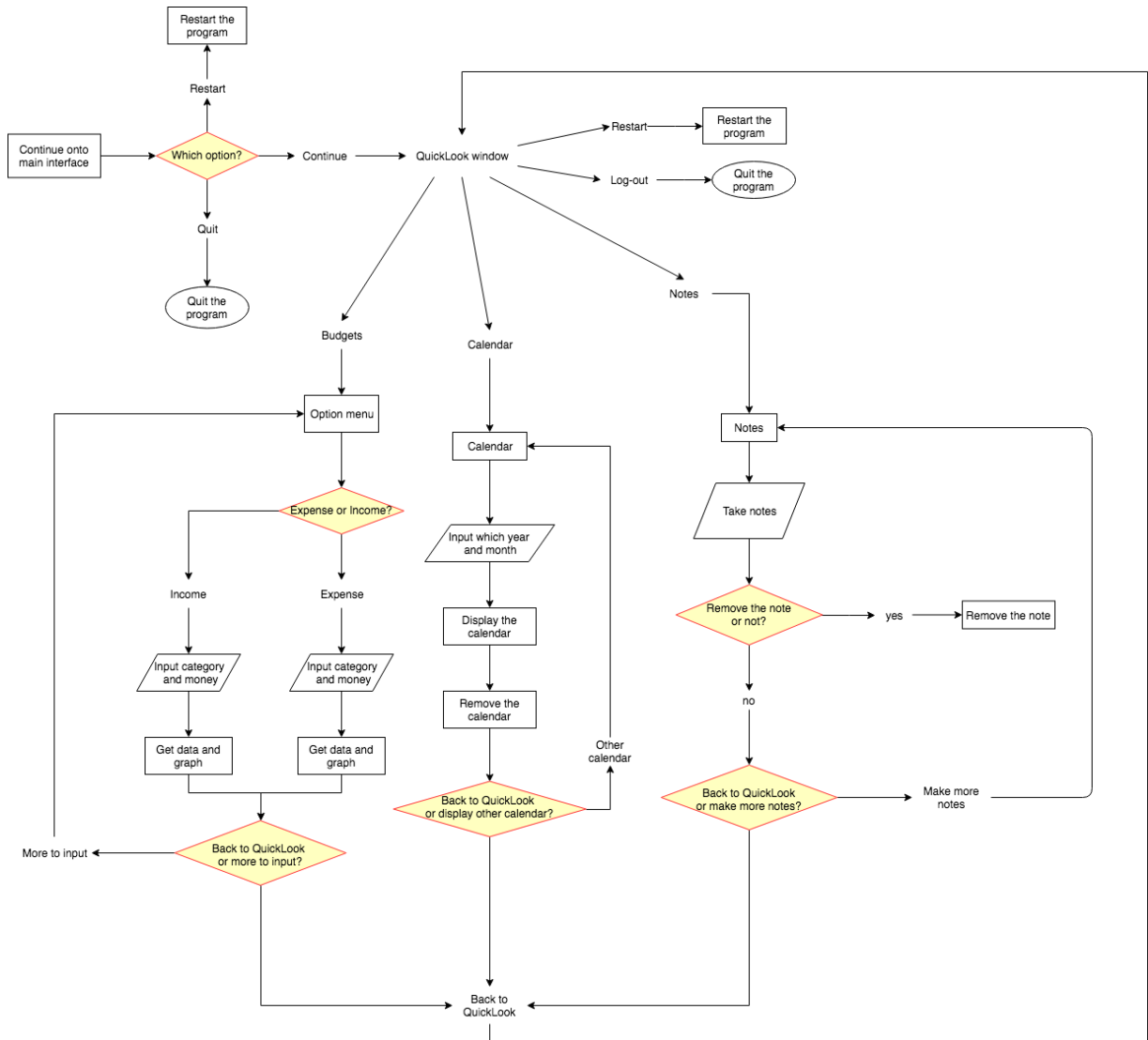
This diagram shows requirements of the program such as necessary inputs or elements that have to be inserted by the user. It also demonstrates its interdependencies of the program that every single item or element has to be carried out and relied on other variables in order to execute main and sub functions.

## Flowcharts

### ❑ Flowchart of Login window (starting the program)

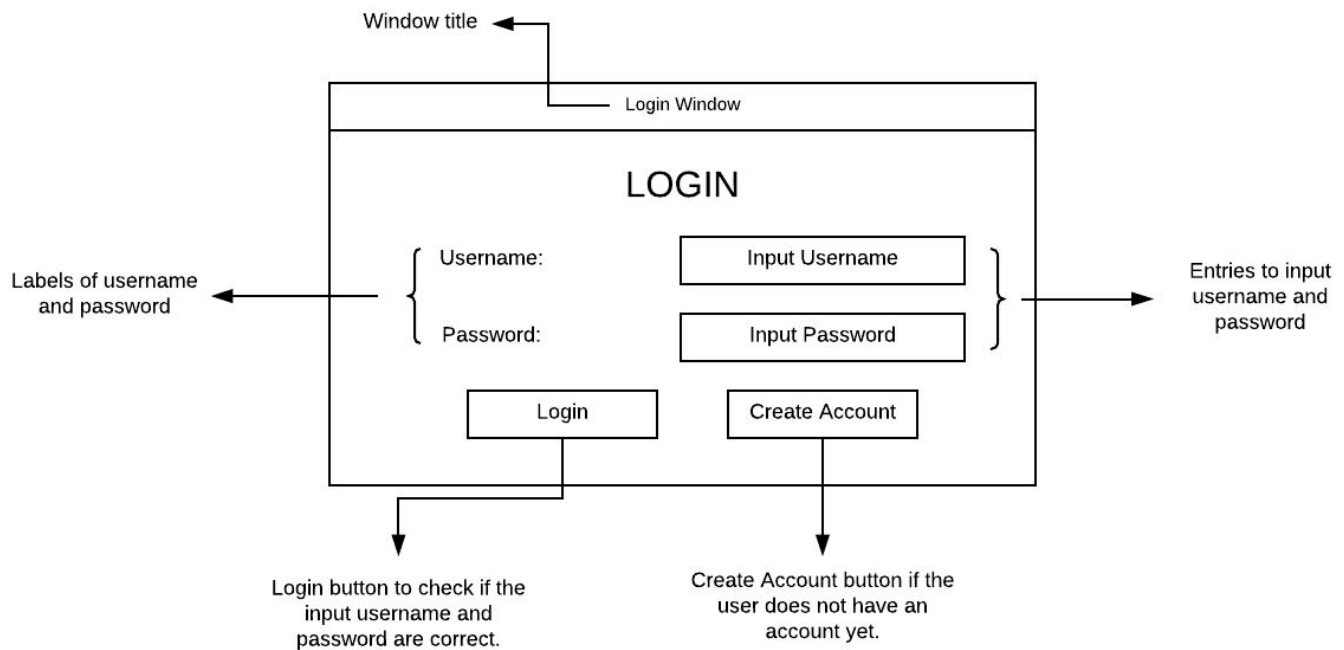


❑ Flowchart of the main interface and sub-interfaces. (Continued flowchart after the Login window)

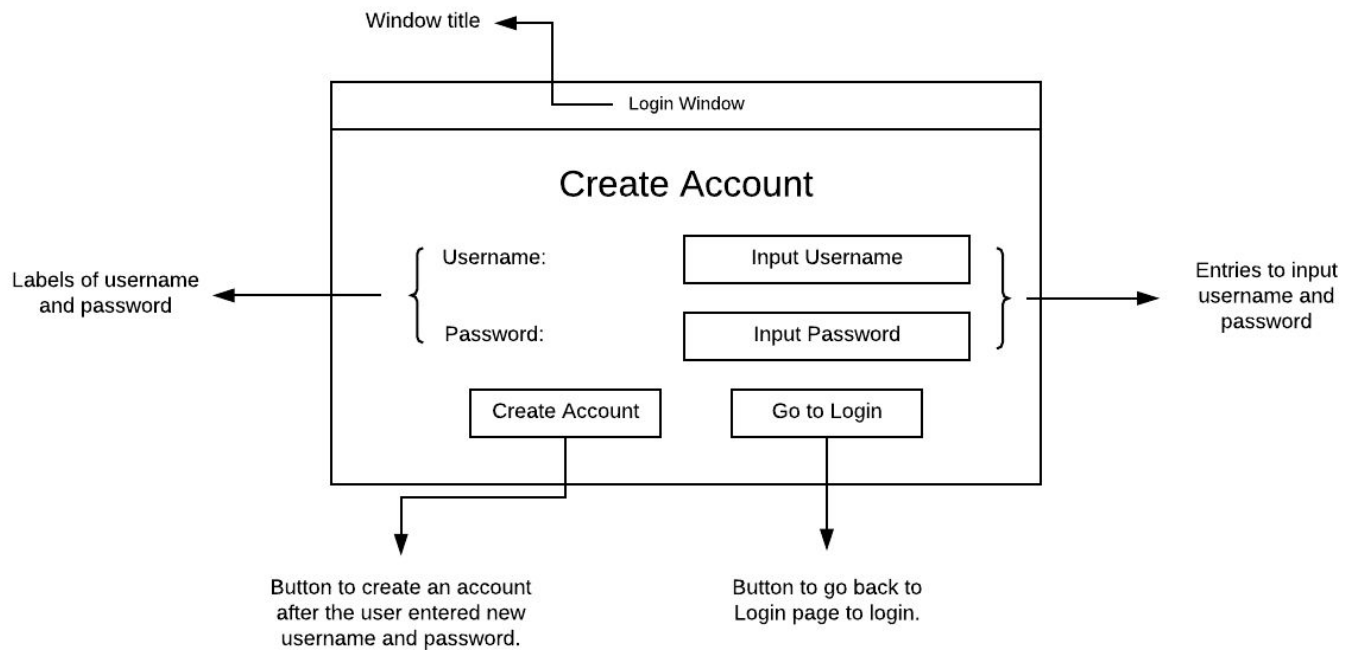


## Interfaces

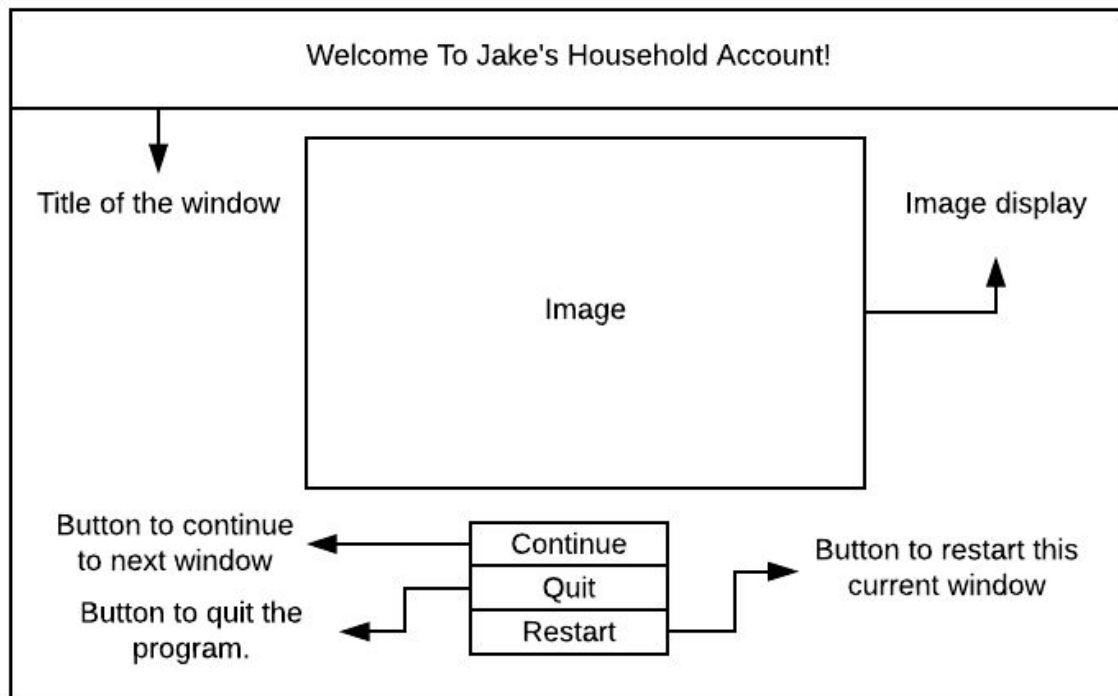
### ❑ Login Window Interface (starting the program)



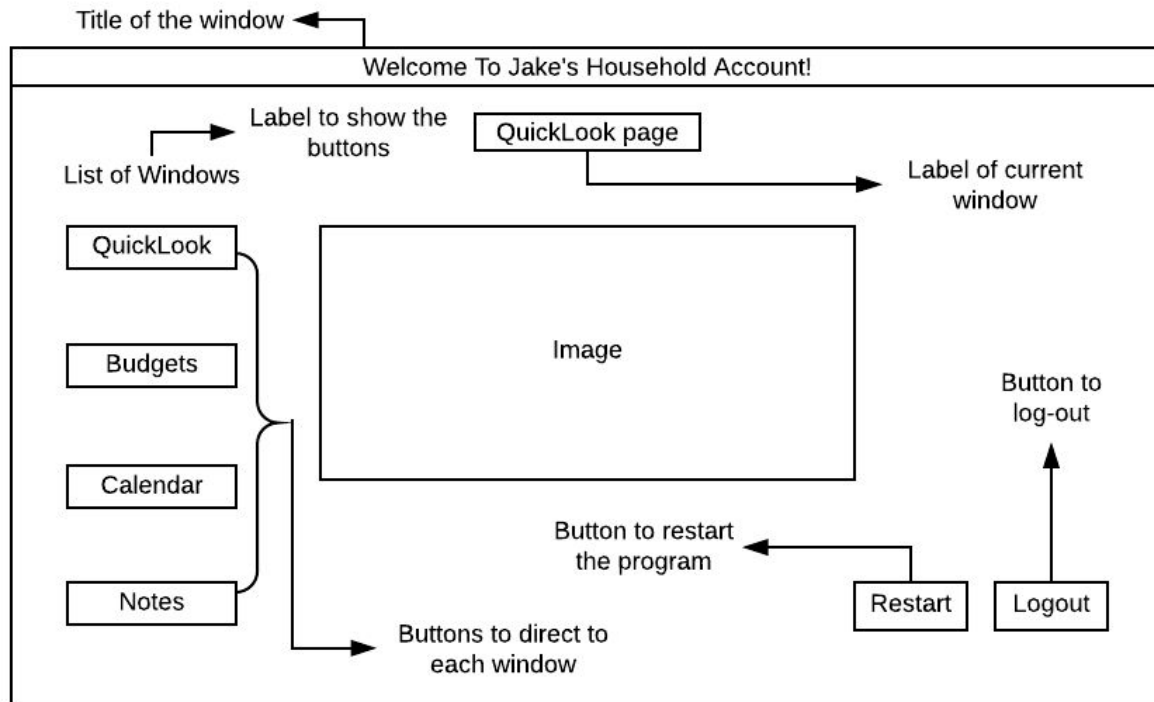
### ❑ Create Account window When clicked 'Create Account' from Login window



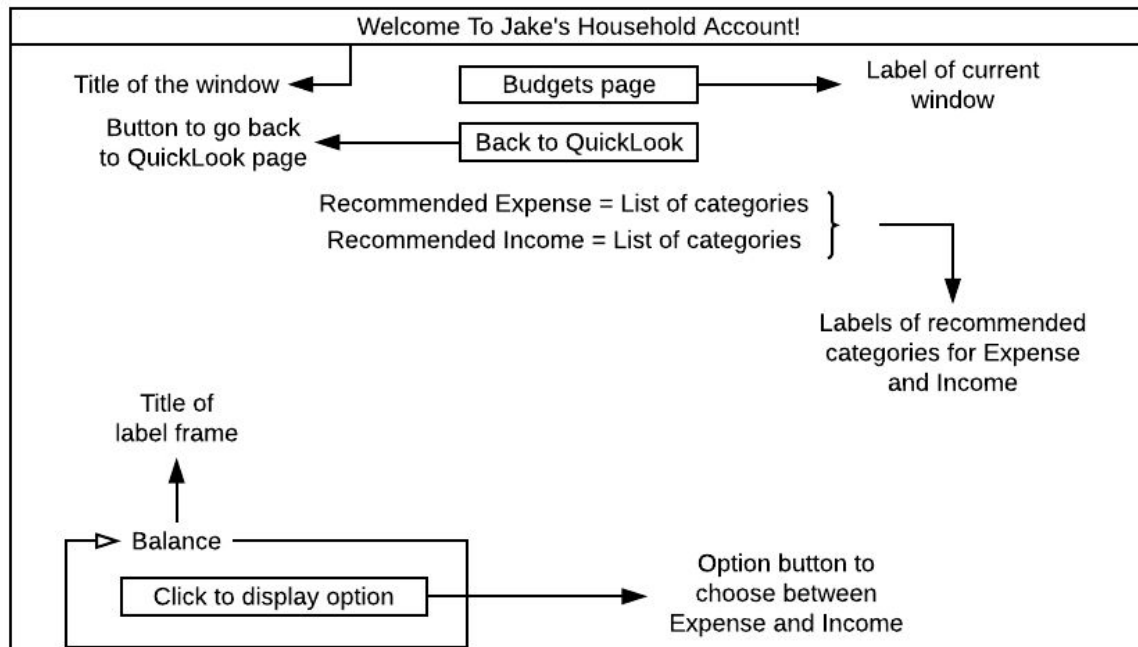
❑ Main interface (after successful login)



❑ QuickLook window when clicked 'Continue' from the main interface.

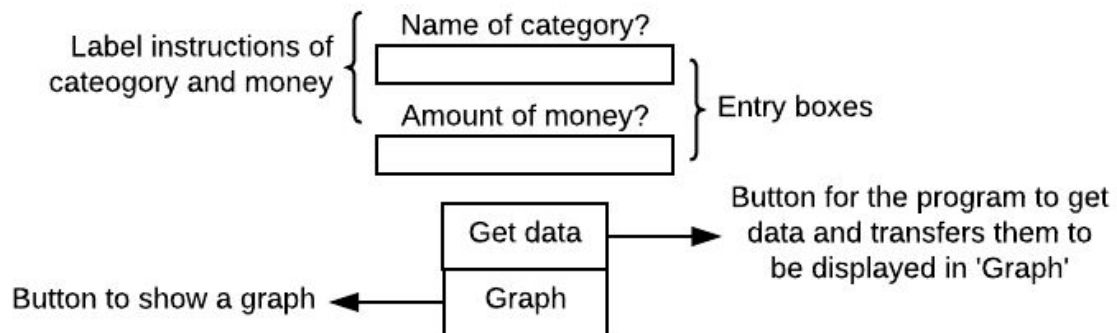


❑ Budgets window when clicked 'Budgets' from the QuickLook window.

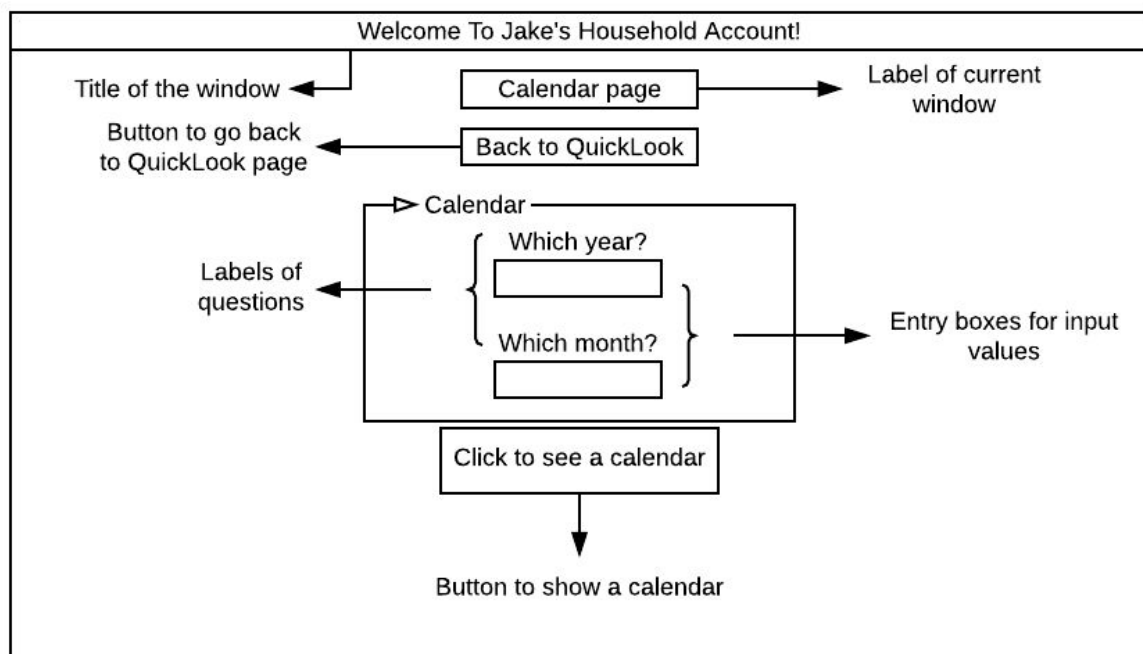




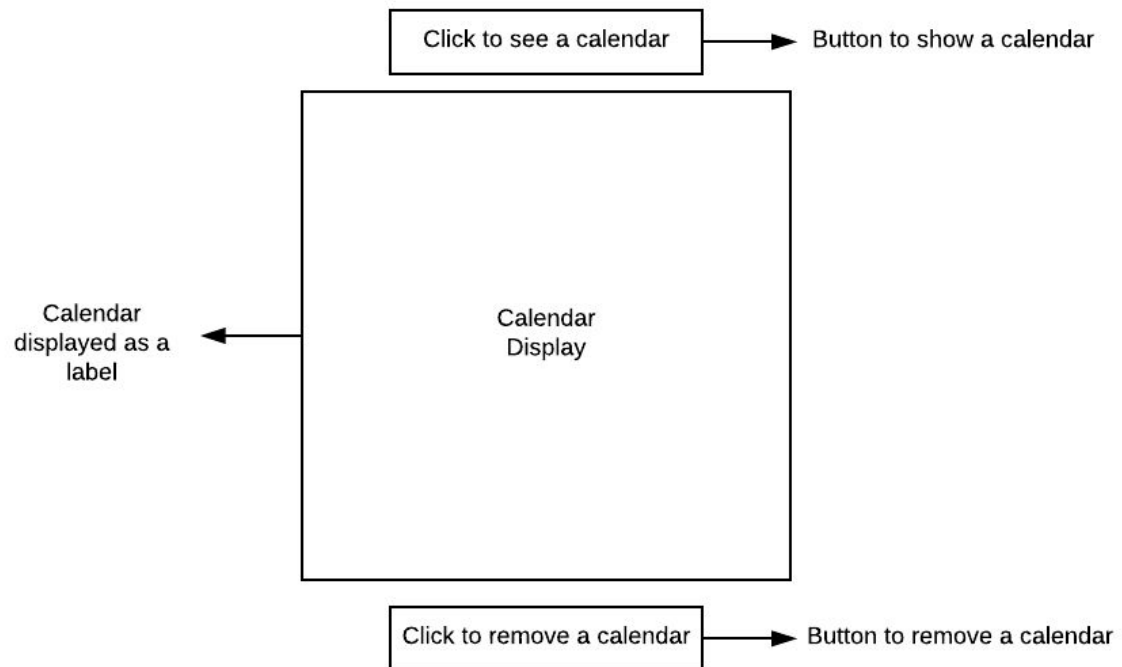
- ❑ Functions displayed when clicked 'Click to display option' from the 'Budgets' window.



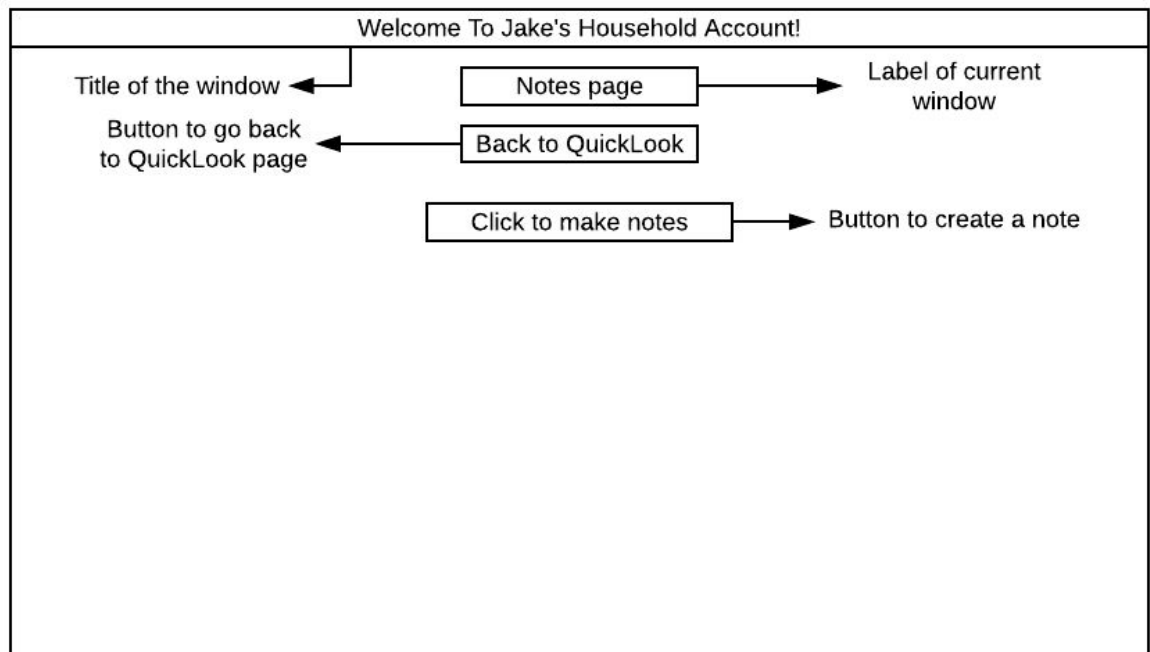
- ❑ Calendar window when clicked 'Calendar' from the 'QuickLook' window.



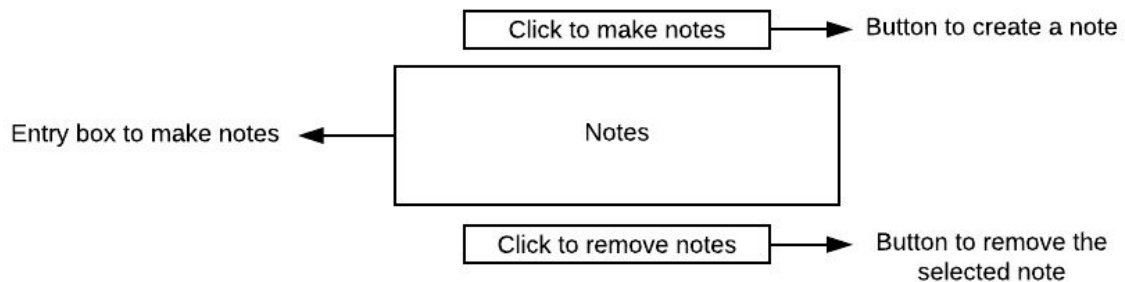
- ❑ Display of calendar when clicked 'Click to see a calendar' from the 'Calendar' window as well as 'Click to remove the calendar'.



❑ Notes window when clicked 'Notes' from the 'QuickLook' window.



❑ Display buttons to create and remove notes when clicked 'Click to make notes' from the 'Notes' window.



## Test Plans

Commands	Execution process	Pass/Fail (P/F)	Failures and fixed	Pass/Fail afterwards
Save and read the user's username and password to and from a database.	If the user clicks 'Create Account' or 'Login', it should save and get data from the database.	F	Figured out connection was established, but ID was not functioning. Tried to fix primary key of the table.	P
When clicked "Continue", it continues onto where there are multiple buttons for other windows.	The program shows main window that 4 other windows are implemented in the main window.	F	The windows were not in a loop to be displayed. Attempted to have the windows to put in a one-time (single) loop.	P
When clicked "Click to make notes", it allows the user to take notes.	When the button is clicked, the program makes a note as well as a button for removing the note.	P		
When clicked "Calendar", it should show today's date and input boxes of year and month to put in.	The program shows entry boxes that the user can input year and month to be displayed on the window.	P		

When clicked "Display option" in "Budgets" window, it shows 2 options in a menu: Expense and Income.	When the menu label is clicked, the program shows 2 options of Expense and Income.	P		
When clicked "Expense" or "Income" as an option in "Budgets" window, it should show input boxes of category's name and amount of expense or income the user can name and classify.  It also shows buttons called "Graph".	The program shows entry boxes of name of category and amount of expense or income. Afterwards, button for graph should be displayed below the entry boxes.	F	Showed the entry boxes the user can input, however the button for graph was displayed at a random position on the interface. Tried to have the button using other command.	P
When clicked "Graph for Income or Expense" as an option clicked, the program displays a graph that has the input data.	Graph for the input data should be displayed.	F	It was only able to have 1 value. Tried to fix with a single loop and 2 lists to store the data.	P

When clicked "Remove" in "Notes" and "Calendar" windows, the program should remove existing note or calendar.	The note that is above the "Remove" button should be removed when clicked the button.	P		
If the username or password is not valid and does not exist, the program shows an error message.	An error message box pops up when an invalid username or password is entered to login.	F	Could fix after fixing the problem of saving and reading data from database.	P
If account is created successfully, the program shows a success message.	A success message pops up when an account is created successfully.	F	Could fix after fixing the problem of saving and reading data from database.	P
When typing for password to login, the password should be unseen and covered by black dots.	The password the user inputs is covered by the dots.	P		