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05/09/2023

Finance Tracker User Story

Card. As a user, I want to create an account where I can store and categorize finance information and be able to view it in comprehensive tables and graphs showing expenditures over time so that I can more easily and efficiently keep track of my income and expenses.

Conversation. The finance tracker enables the user to complete the following actions:
-create an account with new login credentials (new user)
-create categories (e.g., Automobile) and optional subcategories (e.g., gas) for storing and organizing data
-input income and expenses (stored as positive values for income, negative for expenses)
-delete existing entries
-display all entries (show date, category, optional subcategory, amount, balance)
-display all entries in a particular category (show date, subcategory, amount)
-generate and display a graph of all income and expenses over time
-generate and display a graph of income and expenses in a particular category over time
-logout at any point and have data saved automatically
-return to saved data through login credentials (returning user)
-quit after logging out

A back-end database is used to keep track of users' login credentials and user ID numbers. Passwords are encrypted for safer storage.

UML of all classes in software is included for documentation.

The Qt graphics library is used for graphical user interface elements.
Documentation for this resource can be found at: **https://doc.qt.io/**

QCustomPlot is used for graphing capabilities.
Documentation for this resource can be found at: **https://www.qcustomplot.com/**

User Interface Path Mockup
Key:
Blue = Window (can ex out window)
Green = Input Form (can ex out dialog)
Gold = Button
Purple = Action
Italics = Optional

Login		
Enter: -Username -Password		
Login	Register	Quit
Allow user to retry until username and password match an existing account— if matching, go to Menu	Allow user to retry until username is unique— if unique, go to Menu	Exit application

Menu					
Create New Category	Create New Entry	Delete Entry	Display Entries	Generate Graph	Logout
Enter: -Title -*Subcategory*	Enter: -Income or Expense -Category -*Subcategory* -Amount -Date	Enter: -Income or Expense -Category -*Subcategory* -Amount -Date	Enter: -*Category*	Enter: -*Category*	Save all data, then return to Login
Create	Create	Delete	Display	Display	
(Sub)category is created if it doesn't already exist	Entry is added to database. If (sub)category doesn't exist, creates it	Entry is added to database. If (sub)category doesn't exist, creates it	Entries in given category are displayed (if none then all)	Graph of entries in given category is displayed (if none then all)	

Confirmation. Acceptance Criteria:

 -new user can create an account that does not conflict with pre-existing accounts

 -returning user can login using their username and password

 -once logged in, user can continue working on their saved data and:

  -create expense and income entries

  -create categories and optional subcategories that can be applied to entries

  -display all entries or a category of entries

  -generate and display a graph of all or a category of income and expenses over a period of time

  -be able to exit a page and then logout and quit at any point with data automatically saved