**UML Design of Dashboard and Login**

**Login:**

**QDialog**

**Logino**

-userLabel\* : QLabel

-passLabel\*: QLabel

-userLineEdit\*: QLineEdit

-passLineEdit\*: QLineEdit

-loginButton\*: QPushButton

-quitButton\*: QPushButton

+Logino(parent: QWidget\*) : void

+~Logino(): void

-reject() : void

-OnQuit(): void

-OnLogin(): void

**Dashboard**

**Dashboard**

**//Variables for username Display**

-userNameLabel\*: QLabel

-userNameBox\*: QGroupBox

-userNameLayout\*: QHBoxLayout

**//Variables for timeline Display**

-timelineLabel\*: QLabel

-timelineCombo\*: QComboBox

-timelineBox\*: QGroupBox

-timelineLayout\*: QHBoxLayout

**//Variables for Display Button**

-addIncomeButton\*: QPushButton

-addExpenseButton\*: QPushButton

-viewTransactionButton\*: QPushButton

-buttonBox\*: QGroupBox

-buttonLayout\*: QGridLayout

**// Variable to combine Timeline and Buttons**

-groupTimelineButtonsLayout\*: QVBoxLayout

// **Variables for Figures Display**

-monthLabel\*: QLabel

-monthValueLabel\*: QLabel

-previousBalanceLabel\*: QLabel

-previousBalanceValueLabel\*: QLabel

-currentIncomeLabel\*: QLabel

-currentIncomeValueLabel\*: QLabel

-currentExpenseLabel\*: QLabel

-currentExpenseValueLabel\*: QLabel

-currentMonthBalanceLabel\*: QLabel

-currentMonthBalanceValueLabel\*: QLabel

QLabel \*totalBalanceLabel;

QLabel \*totalBalanceValueLabel;

QGroupBox \*figureBox;

QGridLayout \*figureLayout;

**QWidget**

-totalBalanceLabel\*: QLabel

-totalBalanceValueLabel\*: QLabel

-figureBox\*: QGroupBox

-figureLayout\*: QGridLayout

**// Variable to combine Figures, Timeline and Buttons**

-groupFiguresTimelineButtonsLayout\*:QHBoxLayout

**// Variables for Graph Display**

-customPlot\*:QCustomPlot

-graphLabel\*: QLabel

-graph\*:QCPBarsGroup

-incomeGraph\*: QCPBars

-expenseGraph\*: QCPBars

-QVector<QString> labels

-QVector<double> ticks

**//Income and Expense Data to show in Graph**

-incomeData: QVector<double>

-expenseData: QVector<double>

-graphBox\*:QGroupBox

-graphLayout\*:QVBoxLayout

**// Variable to combine Graph, Figures, Timeline and Buttons**

-

-groupraphFiguresTimelineButtonsLayout\*: QVBoxLayout

**// Variable to display Main layout**

-mainLayout\*:QVBoxLayout

**// Expense Window**

AddExpense expenseWindow

**// Income Window**

AddIncome incomeWindow

-

=-

-monthStr\*:QString

-prevBalanceStr\*: QString

-currentIncomeStr\*:QString

-currentExpenseStr\*:QString

-currentMonthBalanceStr\*:QString

-totalBalanceStr\*:QString-

+getTimeline(int index): void

+showExpenseWindow(): void

+showIncomeWindow() : void

+Dashboard(parent: QWidget\*) : void

+~Dashboard(): void

+showUserName():void

+showTimeline():void

+showButtons():void

+combineTimelineButtons():void

+showFigures(): void

+combineFiguresTimelineButtons(): void

+showGraph(): void

+combineGraphFiguresTimelineButtons():void

+showMainLayout():void

+updateGraph(int timeline):void

+updateFigures(int timeline): void

-

=-