Creating Loan Account Action

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# Create a window
window = Tk()
window.title("Loan Calculator") # Set title

# create the input boxes.
Label(window, text = "Annual Interest Rate").grid(row = 1,
                            column = 1, sticky = W)
Label(window, text = "Number of Years").grid(row = 2,
                          column = 1, sticky = W)
Label(window, text = "Loan Amount").grid(row = 3,
                         column = 1, sticky = W)
Label(window, text = "Monthly Payment").grid(row = 4,
                          column = 1, sticky = W)
Label(window, text = "Total Payment").grid(row = 5,
                         column = 1, sticky = W)

# for taking inputs
self.annualInterestRateVar = StringVar()
Entry(window, textvariable = self.annualInterestRateVar,
            justify = RIGHT).grid(row = 1, column = 2)

self.numberOfYearsVar = StringVar()
Entry(window, textvariable = self.numberOfYearsVar,
        justify = RIGHT).grid(row = 2, column = 2)

self.loanAmountVar = StringVar()
Entry(window, textvariable = self.loanAmountVar,
     justify = RIGHT).grid(row = 3, column = 2)

self.monthlyPaymentVar = StringVar()
lblMonthlyPayment = Label(window, textvariable =
            self.monthlyPaymentVar).grid(row = 4,
            column = 2, sticky = E)

self.totalPaymentVar = StringVar()
lblTotalPayment = Label(window, textvariable =
            self.totalPaymentVar).grid(row = 5,
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            column = 2, sticky = E)

    # create the button
    btComputePayment = Button(window, text = "Compute Payment",
                        command = self.computePayment).grid(
                            row = 6, column = 2, sticky = E)
    # Create an event loop
    window.mainloop()
def computePayment(self):
    # compute the total payment.
    monthlyPayment = self.getMonthlyPayment(float(self.loanAmountVar.get()),
                float(self.annualInterestRateVar.get()) / 1200,
                int(self.numberOfYearsVar.get()))

     self.totalPaymentVar.set(format(totalPayment, '10.2f'))

# compute the monthly payment.
def getMonthlyPayment(self, loanAmount, monthlyInterestRate,
numberOfYears):
    monthlyPayment = loanAmount * monthlyInterestRate /
                (1- 1 / (1 + monthlyInterestRate) **
                (numberOfYears * 12))

from tkinter import
 *
    return monthlyPayment;
# Import tkinter

class LoanCalculator:

    def __init__(self):
        window = Tk() # Create a window
        window.title("Loan Calculator") # Set title
        #
create the input boxes.
        Label(window, text = "Annual Interest Rate").grid(row = 1,
                                    column = 1, sticky = W)
        Label(window, text = "Number of Years").grid(row = 2,
                                column = 1, sticky = W)
        Label(window, text = "Loan Amount").grid(row = 3,
```

```
                        column = 1, sticky = W)
    Label(window, text = "Monthly Payment").grid(row = 4,
                            column = 1, sticky = W)
    Label(window, text = "Total Payment").grid(row = 5,
                           column = 1, sticky = W)

    # for taking inputs
    self.annualInterestRateVar = StringVar()
    Entry(window, textvariable = self.annualInterestRateVar,
                justify = RIGHT).grid(row = 1, column =)
    self.numberOfYearsVar = StringVar()

    Entry(window, textvariable = self.numberOfYearsVar,
            justify = RIGHT).grid(row = 2, column = 2)
    self.loanAmountVar = StringVar()

    Entry(window, textvariable = self.loanAmountVar,
          justify = RIGHT).grid(row = 3, column = 2)
    self.monthlyPaymentVar = StringVar()
    lblMonthlyPayment = Label(window, textvariable =
                    self.monthlyPaymentVar).grid(row = 4,
                    column = 2, sticky = E)

    self.totalPaymentVar = StringVar()
    lblTotalPayment = Label(window, textvariable =
                  self.totalPaymentVar).grid(row = 5,
                  column = 2, sticky = E)

    # create the button
    btComputePayment = Button(window, text = "Compute Payment",
                           command = self.computePayment).grid(
                           row = 6, column = 2, sticky = E)
    window.mainloop() # Create an event loop


# compute the total payment.
def computePayment(self):

    monthlyPayment = self.getMonthlyPayment(1200,
    int(self.numberOfYearsVar.get()))
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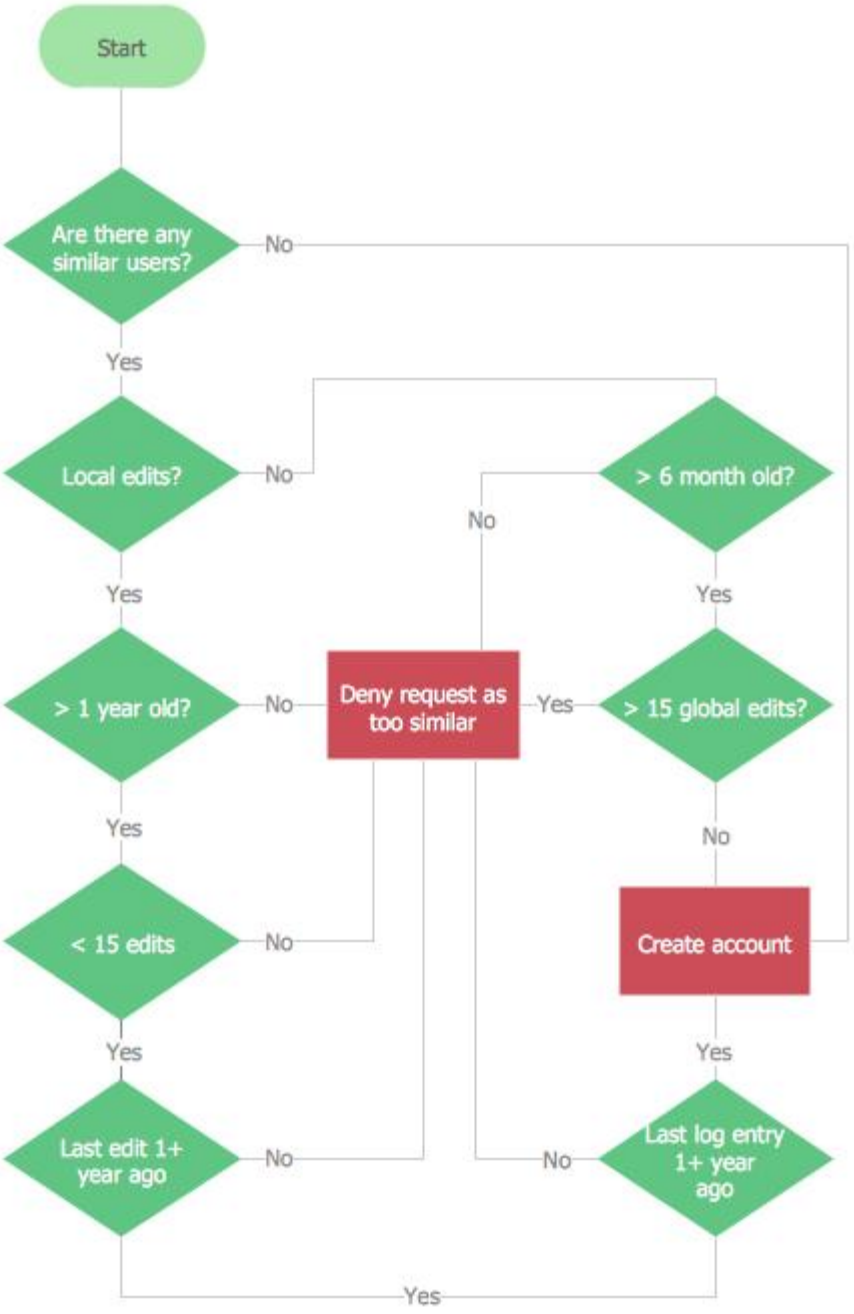
            float(self.loanAmountVar.get()),
        float(self.annualInterestRateVar.get()) /
        self.monthlyPaymentVar.set(format(monthlyPayment, '10.2f'))
        totalPayment = float(self.monthlyPaymentVar.get()) * 12 \
                            * int(self.numberOfYearsVar.get())

        self.totalPaymentVar.set(format(totalPayment, '10.2f'))

    def getMonthlyPayment(self, loanAmount, monthlyInterestRate,
numberOfYears):
        # compute the monthly payment.
        monthlyPayment = loanAmount * monthlyInterestRate / (1
        - 1 / (1 + monthlyInterestRate) ** (numberOfYears * 12))
        return monthlyPayment;
        root = Tk() # create the widget

 # call the class to run the program.
LoanCalculator()
```

Flowchart:


Start
Are there any similar users?
No
Yes
Local edits?
No
Yes
> 1 year old?
No
Yes
< 15 edits
No
Yes
Last edit 1+ year ago
No
Yes
> 6 month old?
No
Yes
Deny request as too similar
Yes
> 15 global edits?
No
Create account
Yes
Last log entry 1+ year ago
No
Yes