Creating Loan Account Action

Date	17 November 2022
Team ID	PNT2022TMID49300
Project Name	AI Based Discourse for Banking Industry

```
# 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 =

          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,
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'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,
```
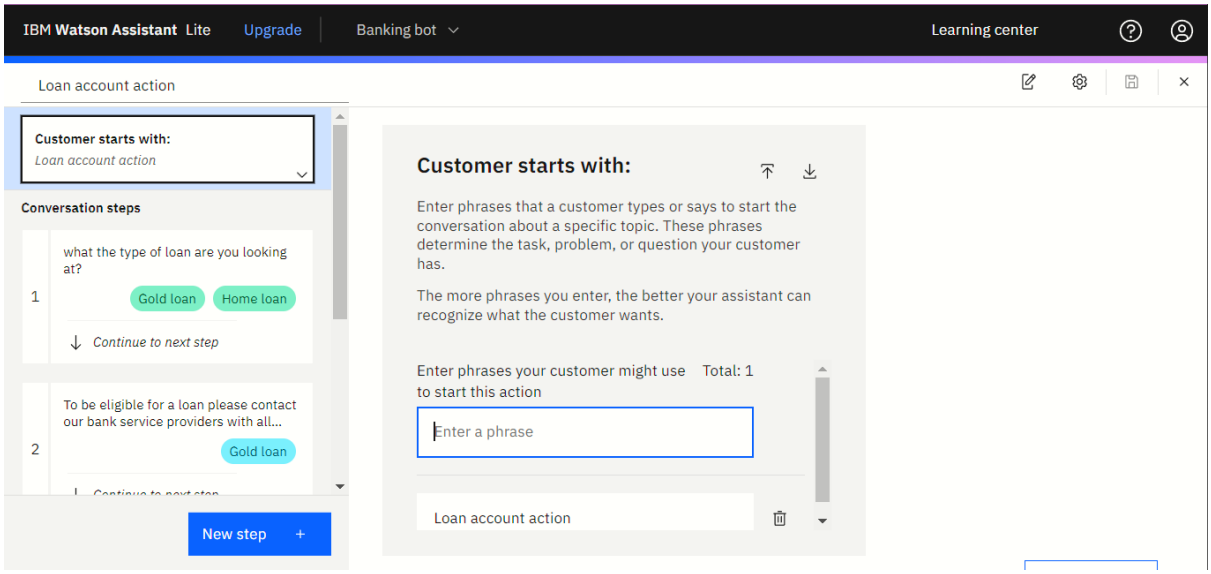

```
                                column = 1, sticky = W)
    Label(window, text = "Total
    Payment").grid(row = 5,
                           column = 1, sticky = W)
# for taking inputs
self.annualInterestRateVar =
StringVar()
Entry(window, textvariable =
        self.annualInterestRateVar, justify =
        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()))

        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()
```


IBM Watson Assistant Lite
Upgrade
Banking bot
Learning center
Loan account action
Customer starts with:
Loan account action
Conversation steps
1
what the type of loan are you looking at?
Gold loan
Home loan
Continue to next step
2
To be eligible for a loan please contact our bank service providers with all...
Gold loan
New step
+
Customer starts with:
Enter phrases that a customer types or says to start the conversation about a specific topic. These phrases determine the task, problem, or question your customer has.
The more phrases you enter, the better your assistant can recognize what the customer wants.
Enter phrases your customer might use to start this action
Total: 1
Enter a phrase
Loan account action