CODING CHALLENGE



MORTGAGE LOAN CALCULATOR

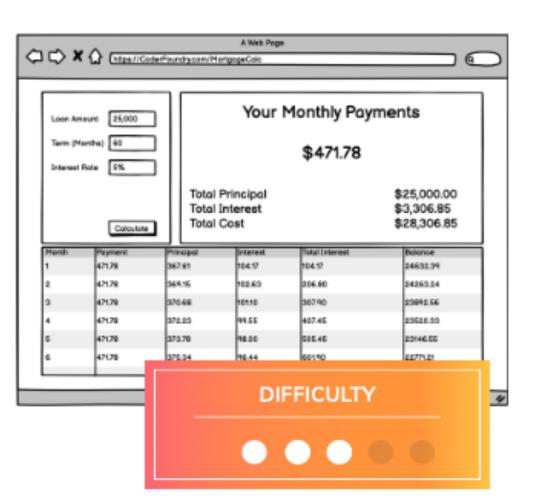
DESCRIPTION

Write a mortgage loan calculator application that takes in three parameters:

- 1. The amount of money loaned in dollars (balance)
- 2. The time over which the loan will be repaid, in months (term)
- 3. The percentage rate at which interest will accrue on the loan (rate)

The output should include the following:

- The month (1 corresponding to the 1st month of payment, through the total number of months)
- 2. The payment amount
- 3. The principal paid this month
- 4. The interest paid this month
- 5. The total interest paid to date
- The remaining loan balance at the end of the month



FORMULAS USED

Total Monthly Payment = (amount loaned) * (rate/1200) / (1 - (1 + rate/1200) (-Number of Months))

Remaining Balance before the very first month equals the amount of the loan.

Interest Payment = Previous Remaining Balance * rate/1200

Principal Payment = Total Monthly Payment - Interest Payment

At end each month, Remaining Balance = Previous Remaining Balance - principal payments