User Manual

## Intro

This mortgage calculator is a GUI application to help the user estimate their monthly mortgage payments based on loan details such as loan amount, interest rate, loan term, property tax, home insurance, HOA fees, and PMI. It also includes an entry field for the home price and down payment which the automatically updates the loan amount. Users who may want to use this tool include homebuyers who want to get an estimate in their future loan or someone who may want to refinance as well.

## How to Use the Mortgage Calculator

1. Enter the loan details

* Input the Home Price ($)
* Input the Down payment ($)
* The total loan amount should be displayed
* Input interest rate (% per year)
* Input the loan terms (years)
* Input yearly property tax ($)
* Input yearly home insurance ($)
* Input HOA fees ($)
* Input PMI (%)

1. Calculate the monthly payment

* Click the calculate icon to allow the application to compute the monthly mortgage payment based on the user input int entry fields.

1. View Amortization Schedule

* User can click “View amortization Schedule” button to open a different window where it displays a month-by-month breakdown of their estimated mortgage payments.
* The schedule shows principal payments, interest payments, and remaining balance for each of the months.
* User can click the close button to exit the amortization window.

1. Clear the fields

* User can click the “Clear” button to clear and reset all the entry fields.

1. Exit the application

* User can click the “Exit” button to shut down the program.

## Output

* After the user inputs all loan details and clicks calculate the application will display the monthly mortgage payment including loan payment, property tax, home insurance, HOA fees, and PMI.
* If invalid values are inputted by the user, then an error message will display promoting the user to correct the input.

## Planned Future Add-On’s

In the future I plan on adding features to allow saving the amortization schedule to a separate file, have the ability to compare multiple loan types such as FHA or conventional, and enhance the UI design even more.

## Troubleshooting

Q1: The application does not start.

A1: Ensure python is installed and you are running the right script.

Q2: The calculations seem incorrect.

A1: Check the values again ensuring that the interest rate ad loan terms are in the correct format and the screen is not displaying an error screen.

Q3: The images are not displaying.

A1: Ensure that the images are in the correct folder and in the same folder wth mortgagecalculator.py. If the issue persists then try running the program from the correct directory using the terminal.