# Manage Home Loan EMI

## Andriod App. Introduction

This App is not the simple EMI calculator, but allows the users to make informed decisions so that they can save a lot of interest in the long run. The following screens and description will define in detail what needs to be done.

#### Screen1 (home screen)

This is how the home screen looks like and what all these buttons mean.





The header, logo, background and the icons on the top remain as-is. Even the colorcombination has to remain the same. I can share original word document so that you can get these elements



User has the option to input amount (automatically formats into lakh), interest rate with 2 decimals (% is there by default) and duration as round number. When "Go" is pressed, the text underneath gets populated with the total interest amount. On clicking "Reset", all the values change to default of 0, 0.00%, 0. I have noth thought yet on the default text when "Go" is not pressed.



Clicking this button takes to the next screen. Or to say the user can only visit the "i" screen for help and info page, but not any other page unless they click this. If there has been no calculation done, remind user to first do the calculation.

#### Screen2 (Calculation by adjusting EMI or duration)

This screen has a slider. The header will have the interest rate calculated earlier and the adjusted interest amount on the right side. If there is no amount on right side for "Adjusted interest", just have the text "You save: Rs. 0". EMI should slide in increase of Rs 500 (round number) and month with



increasing number. In the home screen you will come up with an EMI amount. Use that as the starting point (or nearest 1000; e.g EMI = 5520, then use 5000) for EMI slider. EMI and duration are dependent on each other so if EMI goes up, month slider automatically adjusts and comes down. The user cannot adjust both at same time. The white text shows what is the current value selected. It will be really great to get the "Interest" value automatically calculated based on the choice and reflect "You save: Rs 40,000" in the header based on the slider value.

There is an amortization chart which comes up while calculating the EMI. I will share the formula. There should be a provision to email that chart to the user (in PDF if possible).

### Screen3 (Calculation after part payment)

This is the tricky part of the application. From the amortization chart or the chart which present the Principal and interest part of the payment, we get a table showing the principal amount, interest amount and the EMI. That changes every month. Hence we need a slider, which goes from top to bottom and scrollable in both directions. While sliding, one of the months when its in the active window, becomes a bigger size (e.g. month 14 below). There is no need to label other months. This is shown in image 1. So far so easy.



Now the tricky part comes here. When you have a home loan, you can also do a part payment. Whenever you do a part payment, you have the option of keeping same duration (remaining duration; e.g. If my home loan runs for 20 months and I do part payment in month 4, I can either keep duration as 20 months, meaning my EMI goes down, or keep EMI the same, meaning duration goes down) or keep EMI constant. This option is presented once the user presses the month button as shown in screen 2. A pop-up as in screen 3 is what is presented, with the option. Part payment amount, and 2 radio buttons. Once the user does Add, the chart going downwards, automatically adjusts itself. Wherever there is a part payment added, that month bubble is in green, others are in purple shade. This will help user remember where the part payments are added. Now if I come across month 15 again, I click it, I should have option to remove the part payment, in which case the amounts going downwards adjust automatically again. For recalculation, always take the previous month's opening principal into account so that if there is a part payment in say month 18, there is no impact when the one on month 15 is removed.

# Screen4 (Info/help screen)

This is the final screen where a summary of all help options will be presented as shown in the screen below. Clicking on one of them takes you into more detailed information page.



You will always have the header at the top so that you can go back to the home screen for example.