Deliverable 1

Valtis - Mortgage Calculator Pitch

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Problem

Vaultis users/customers who are interested/looking at buying a home are having a hard time determining homes that are in or out of their budget. This is especially the case for first time home buyers, they are unaware of how interest rates and the size of the down payment affect their mortgage. This makes their home buying process extremely complex and frustrating not knowing the affordability of the homes they are particularly interested in.

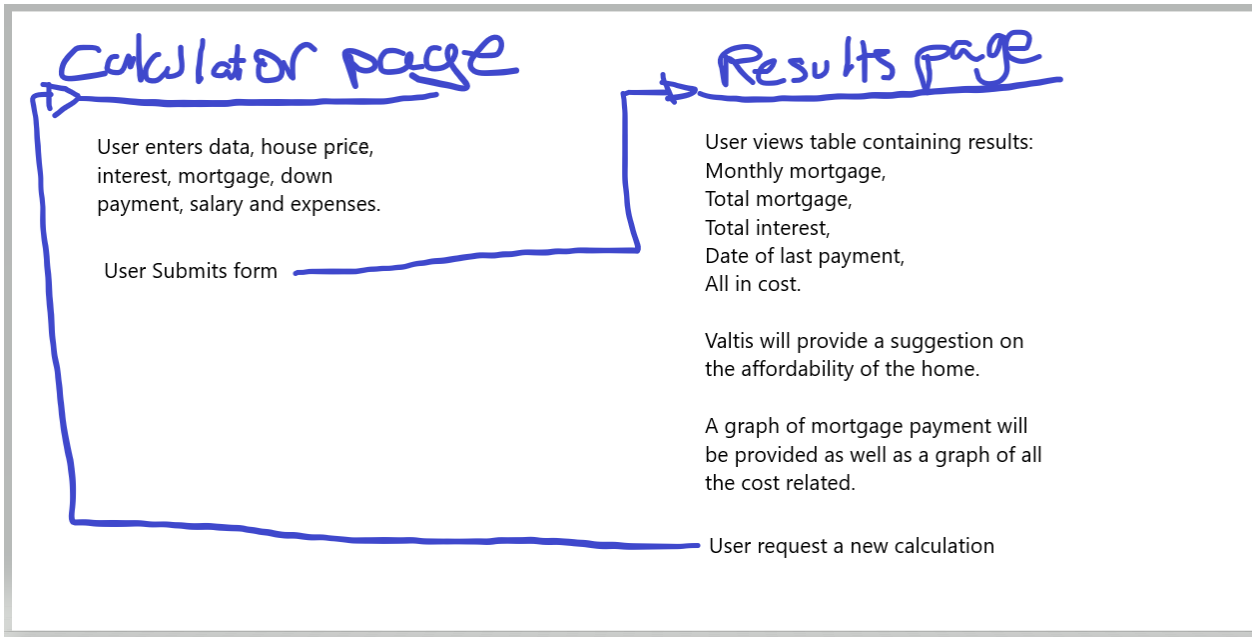
Appetite

The solution to this problem would be a big batch, this means that our two team members who both share the role of developer/designer are going to be spending 100% of their time during the upcoming 6 week cycle on the feature that solves the problem presented above.

Solution

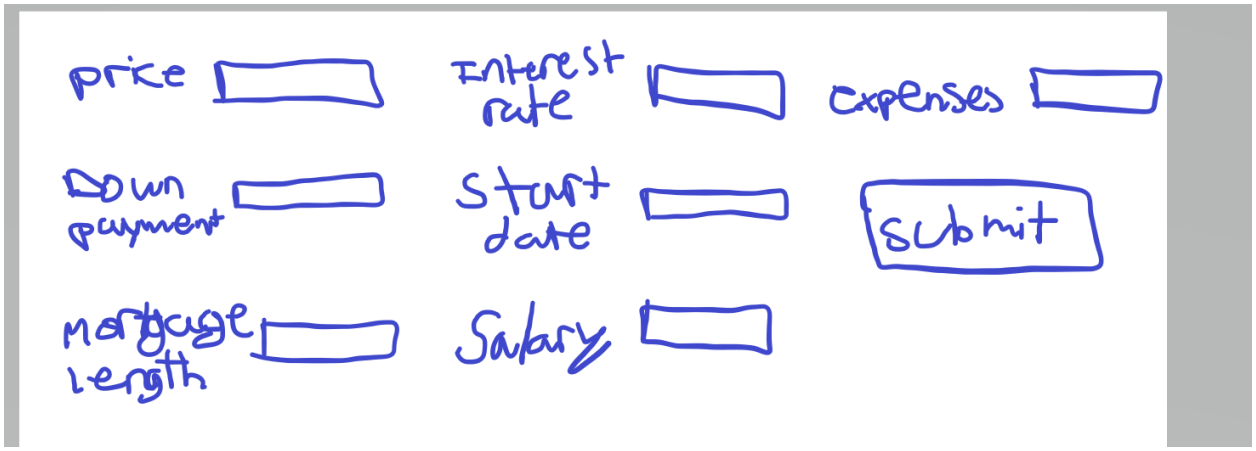
The proposed solution to the problem presented above would be a mortgage calculator that would allow users of Valtis the ability to enter the needed data such as the house price, interest rate, mortgage length, down payment, salary and expenses. The user would then be provided with the results of the data imputed with tables and graphs, this would allow for their own analysis of the affordability of the home. The feature will also provide its own recommendation of the affordability of the home based on the results. The feature should also contain a very user-friendly and intuitive interface.

Breadboarding



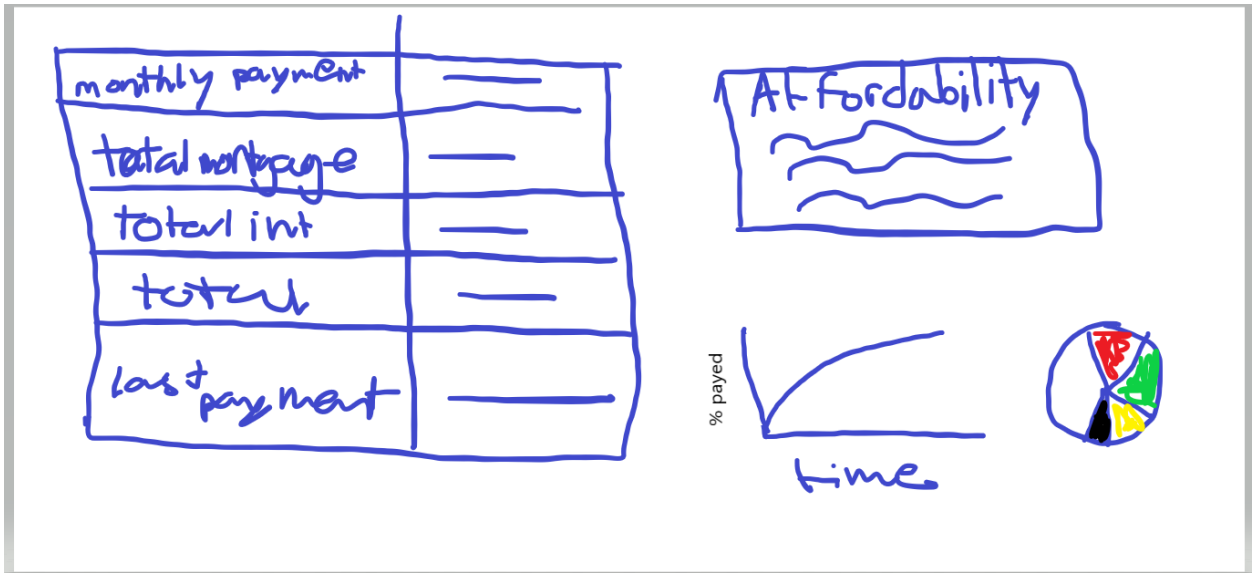
Fat Marker Sketches

Calculator Page



Above is a rough sketch that shows the first page of the feature. In this page the user is presented with all the fields where he is needed to input data and then submit such as previously discussed. This data includes the home price, down payment, mortgage length, interest rate, salary, expenses and start date of mortgage.

Results page



Above is a rough sketch of the results page shown to the user after the submission of the first page. In this page a table containing the monthly mortgage payment, total mortgage, total interest rate, total cost and the date of the last payment, as well as a graph displaying the % paid according to time and one showing the percentage of the cost related to the home

purchase will be displayed. Finally a message stating the affordability of the home is also displayed.

Rabbit Holes

- Complex User Interface: It is mentioned that the solution should contain an intuitive and user friendly design, this can sometimes be challenging to implement.
    - Overly complex graphs and animations could all add to the user's experience but doesn't add any value in the core purpose of the feature which is to determine the affordability of a home.
- Incorporating an API to obtain real time interest rate integration to our feature.
    - This would add some complexity to the code and would not be completely accurate as interest rate will depend from person to person and institutions they use for their mortgage.
- Currency changes, it might be tempting to allow for the calculator to work with several currencies but it will be important to determine the demographic that uses the calculator in order to determine if it would be useful enough for our users as well as multi language support.
- Optimizing the performance of the calculator. It might be tempting to optimize the speed at which all the calculations are made but it is important to not over do it since a second or so delay might not bother our users as much as the developers.

No Gos

Here are some of the No Gos I have been able to come up with.

- Including an option in the calculator for extra mortgage payments.
    - This would be a good addition for clients that are interested in paying mortgages quicker in order to save on interest. By adding this to the feature it would allow for them to realize how much money is saved by doing so. This option would definitely add more complexity to the code of the feature and possibly add confusion to the UI of the calculator and would only serve a small portion of our users.

- Refinancing options within the calculator would potentially add much complexity.
    - This feature could overwhelm users who are simply looking for the affordability of a home. Refinancing is also very uncommon for homeowners, evidently this would only serve a few of our users once again.

- Allowing for the option of calculation with adjustable-rate mortgages.

    - This would be useful but a few issues would be presented with this addition: it would be impossible to determine the interest rates of mortgages in the future.

- Allowing for implementation of every local regulation possible.
    - This would be a very time consuming process that would take a lot of research.

Some of these No Gos could be added at a later date in another cycle, especially the first two if we receive requests from users for these added features.