1.1 Empathize - Define

Empathy map with gains and pains
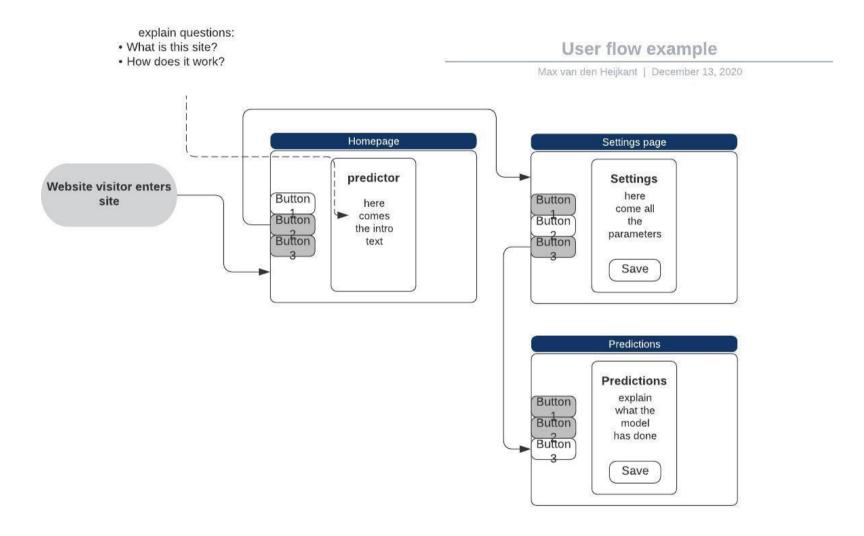
Max van den Heijkant | December 13, 2020

I have limited experience in stock trading

I want to start trading in stocks

are my predictions right?

Says
What the user says

Won't start experimenting

Makes totally wrong descisions

How do I know if in in the right ball park

Does
Actions user takes

Thinks
What the user thinks

Is the stock market really so difficult?

Feels
How the user feels

Insecure

Scared to start

• *is able to experiment with new tactics and check if they are right*

Gains
Wants/needs, measure of happiness

• *is scared to start because does not know if his intuition is right*

Pains
Fears, frustrations, obstacles

Process

1.2 Wireframes

explain questions:
• What is this site?
• How does it work?

User flow example

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Website visitor enters site

Homepage

Button 1
Button 2
Button 3

predictor

here comes the intro text

Settings page

Button 1
Button 2
Button 3

Settings

here come all the parameters

Save

Predictions

Button 1
Button 2
Button 3

Predictions

explain what the model has done

Save

1.3 Ideate

Please review the below:

a) Sketch and share 2 ways to meet your user's need hereunder:

1. If a user wants to get some intuition on a specific stock, they can use the app.

2. If they are starting with creating their own prediction models they can check if their model predictions are like the app's predictions

b) Wrong Prediction:

1. If your model is a classifier: Explain why your model is optimized either for recall or precision.

2. Please explain the impact of wrong prediction on user and context?

The impact depends on the usecase of the user. If the user uses the app to make predictions on the stock market they could lose (a part of) their stake. If the app is used to validate other models, the models will be wrong to.

1.4 Explainability and Accountability

Explain how your AI came to the prediction: Describe how you found the most impactful features? Explain which certain key features were responsible in driving certain decisions taken by your model during predictions.

The most impactful feature is holiday selection. With holiday selection the model will fit the dataset more precise on the on the holidays in the country where the stock is traded. This is important because holidays cause biases in the prediction.

1.5 Value Alignment

Please review the below:

a) **Behavior**: How might user's behaviour change because of your app? Their habits, time schedule, choice of activities, etc?

It gets easier to get in stock market trading.

b) **Values**: Does the AI do things which upsets the user? Think in terms of misaligned moral values between users' values and the AI's actions …

If the AI predicts that a stock would devaluate a lot, it could upset the user.

1.6 AI Fairness

Please review the below:

a) **Diversity**: How far is your data diverse and includes different groups?

The data that is used is the old data of the stock that will be predicted. It is very difficult to use other data.

b) **Amount**: Is there sufficient data for a fair prediction? Please explain.

Yes, The amount of training data is chosen by the user and is different for different purposes. For predictions over longer periods of time it is preferable to use longer time ranges. This way the predictions are more generalized. When predicting for shorter periods shorter time ranges should be chosen in order to fit the current climate more precise.

1.7 Privacy
Explain to which extent is your data anonymized.

No user data is used