Synopsis draft AP 2018

Short description of the program

We want to make a program, that consist of a throbber that analyzes the qualities of the users emotions and sets the amount of time the user has to wait to get to the content accordingly: patience will reward a shorter wait time where impatience add further wait time.

It uses webcam to capture data and an external library to process and analyze the data. The idea is to reward people who are patient with less waiting time and penalize people who are impatient.

We want the throbber to share similarities with established throbbers (like the one on Youtube or Instagram) and our canvas to share similarities with some of these platforms. The notion of risk/reward in terms of surveillance and social credit would be emphasized if it's presented as established conceptual models. Lastly, we want the program to offer feedback (subsequently functioning as a nudging-element) to the user, informing about the newly updated wait time. This element will give the sensation that the program is trying to correct your emotions/behavior and make you feel like some emotions are wrong to have.

Conceptually thoughts

We want to focus on how software can reward or punish the user based on how he/she interacts with it. You get rewarded for pleasing the program by for example producing content/data and acting accordingly to the agenda of the program. In our program we want to emphasize this by either rewarding the user when acting patient while the natural behavior would be the opposite. In order to please the system, the user will have to be patient even though the content of the page is delayed and the only thing visual is a throbber. Normally, this will cause great frustration for most people. This is a critical comment on the way social media works and also, and maybe most importantly, on China's social credit system that monitors social behavior.

We have a suspicion that this program can change your behavior when interacting with it. We base this suspicion on previous experiences with surveillance- and social media-behavior. We think this is an interesting subject and it can easily be criticized in a society matter. Often, by changing your behavior, you are trying to fit into a certain social accepted box. This is repeatedly seen on multiple social media sites, where people try to compress into the "perfect"-form for a human. The desire to post the "right"-things, look the "right" way and be your perfect self.

Technical aspects and difficulties

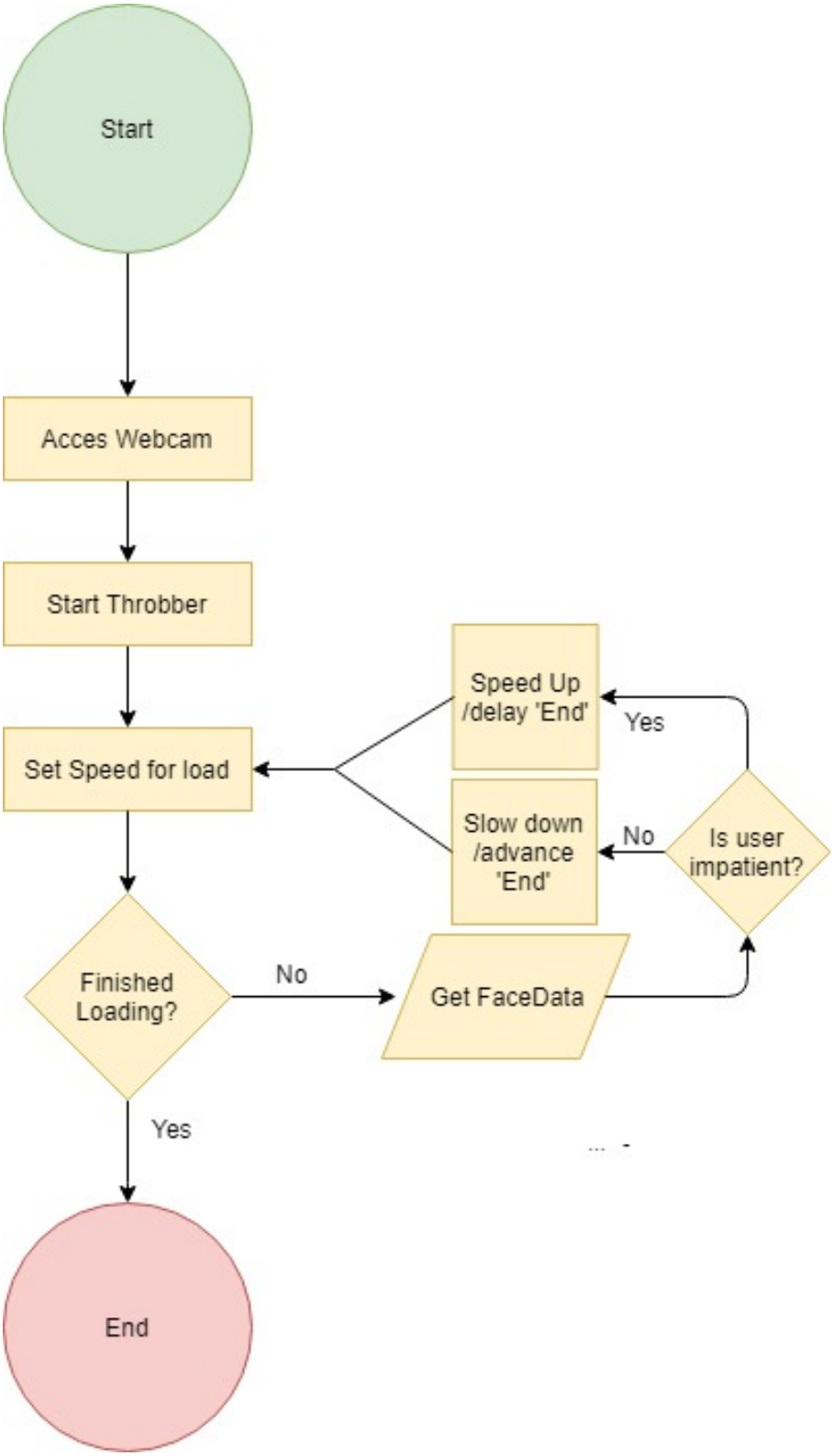
The primary challenge in this idea is finding, understanding and implementing a face tracking library, capturing the webcam data and then connecting it to the throbber. In order to make the program run smoothly and without errors, we need to make sure we not only find and use a face tracking library, but seek a proper understanding of its functionality. If we don't, we might constrain ourselves and our program to the surface-level-variables we can change. This could be a problem, as the understanding and aesthetics of the throbber will not be conveyed. Clmtrackr looks to be an easy library to use, and there are many examples of programs using this library, so its almost perfect for us to use. What will become a difficult task, is adding expressions/emotions to the library. As it looks like, the library already have defined a bunch of facial qualities, but impatience does not seem to one of them; so a task to overcome is figuring out clmtrackr's emotion-classifier and how we define the emotion as numbers used in the emotion-model. This looks to be big task for the project, since it involves quantifying emotions into metrics that the clmtrackr can accept.

We also have to consider how the program provides feedback to the user and what the feedback should consist of. Should it be the numbers that the program generates, so that the user have a clear view of what is going on and how his/her emotions are being be perceived? Or should it consist of written statements, such as "You seem impatient"? And what should these be? We will have to consider it they should encourage user positively or negatively - and how these statements influences the users interaction with the program. Another thing in relation to this, we also have to consider what the reward for the user displaying the 'correct' emotions and how this can be used a motivation to push the user into 'correct' behavior and emotions.

Another challenge lies in defining both the qualities and our conceptual understanding of this throbber - does the data impact how fast this throbber 'loads' and how will we convey this message to the user.

Lastly, it's important that we find a way to balance the penalty from being impatient and the reward for being patient. As an example: if the 'end goal' is instantly reached when patience is registered, the user won't understand the impact she has on the program - same goes if the 'end goal' is never reached if impatience is registered.

Flowchart


Start
Acces Webcam
Start Throbber
Set Speed for load
Speed Up /delay 'End'
Yes
Slow down /advance 'End'
No
Is user impatient?
Finished Loading?
No
Get FaceData
Yes
End

References

Ed Finn, "What is an Algorithm," in What Algorithms Want, MIT Press, 2017, pp. 15-56.

We want to use this text to provide a perspective on, how algorithms are prescriptive - in our case; what emotions that are correct and how an algorithm can force users into certain behavior. This will also examine how algorithms impact our everyday. Ed Finn uses the example of spell checking program:

"[…] harder to distinguish from broader cultural environments: to what extent are spell-check programs changing diction and grammatical choices through their billions of subtle corrections, and how do we disentangle the assemblage of code, dictionaries, and grammars that underlie them?" – p. 16

We will also use the text to provide a perspective on the ideological choices, that programmer take when code and how these influence users. As Finn puts it:

"But software engineers construct the datasets mined by scoring systems; they define the parameters of data-mining analyses; they create the clusters, links, and decision trees applied; they generate the predictive models applied. Human biases and values are embedded into each and every step of development. Computerization may simply drive discrimination upstream." – p. 21

Transmediale (2015): Capture All

Transmediale's 2015 "Capture all" dealt with data and how it quantifies our lives and how we can make sense of a culture that's becoming dependent on metrics and measurements, automations of procedures and tasks and in general how we move towards an everyday existence controlled by algorithms. As an example, the exhibition "Body Scan" could help us reflecting upon how machines 'see us'.

Additional sources (Articles and libraries)

The face tracking library:
https://github.com/auduno/clmtrackr

Articles on Chinas social point system, that share some similarities with our concept:

http://www.wired.co.uk/article/chinese-government-social-credit-score-privacy-invasion

https://futurism.com/china-social-credit-system-rate-human-value/

https://www.wired.com/story/age-of-social-credit/