

## Ethical Implications

Answer the following questions. In your answers, please distinguish which implications follow from your *conceptual* design and which follow from your *UI* design.

**1. Did you make cultural or other assumptions about your users that affect how they interact with Fritter?**

**[UI design and Concepts]** Since I don't explain them anywhere, I assumed that the users were familiar with the underlying concepts of posts (frets), upvoting/liking, reposting, user accounts, and following, probably from exposure to similar concepts on different social media platforms and online forums. I also assumed that the icons I chose (heart, cycle, logout, magnifying glass, person, house) would be understood by the user, and that users can read English. I also assumed that users understand certain UI components and conventions, such as typing into search bar, tabs shape, and not being able to click grayed-out button.

**2. Would an effective use of design heuristics to maximize engagement with Fritter be manipulative?**

**[UI design]** Applying design heuristics to make the product easier/more convenient to use have the side effect of maximizing engagement, since a user is more likely to engage, and for longer periods, if the product is easy to use. Reducing interaction friction in the UI is not inherently manipulative. However, if design heuristics are applied **solely** to maximize engagement, then it is manipulative. Examples of this include infinite scrolling feed (maximize time spent on social media since you can only view a few posts at a time rather than all at once) and popup ads (maximize engagement with ad content). Both of these features are user-antagonistic and increase engagement by making the product **harder** to use, which is manipulative.

As long as the design heuristics are applied to **help the user accomplish what they intend to do** on the app, this is not manipulative, regardless of engagement. User intention, however, is nuanced. For example, YouTube recommended videos that appear on the side of the video player help a user discover new videos they may be interested in. This feature was designed to be addicting. For some users, discovery may be the intention; however, as is often the case, users may find themselves spending more time on YouTube than they had intended, so the user should be able to toggle on/off recommendations, or else it's manipulative.

3. **How would you adjust your design if your only goal were to: get children addicted to Fritter? or make it hard for older people to use Fritter? or stop fake news spreading? or prevent harassment? How, if at all, do your answers to these questions inform how you would actually design Fritter?**

**[UI design and Concepts]** To make Fritter more addictive for children, I would make the UI more flashy, colorful, pictographic, pleasant, and simple (employ grouping, Fitt's Law, keep paths short, easy to navigate, etc.), i.e. kid-friendly and engaging. On the concepts side, I'd introduce gamification concepts into my Fritter design, such as having streaks or points for continued daily engagement with freets and other users.

To make it harder for older people to use Fritter, for the UI, I would shrink the text size, increase path lengths/complexity of interactions, and introduce more contemporary slang or tech jargon into feature names and dialogs (opposite of speaking user's language). On the concepts side, I would introduce more distracting concepts (Freet character limit, hashtags, comments, superlikes, saves, messaging, stories, etc.) to make the app confusing to use for people who are not accustomed to using technology.

To stop fake news spreading, I would introduce the concept of reporting freets. A freet that has been reported by enough users will be investigated and removed if it is fake news. Users who post fake news will have their accounts suspended (new concept) or deleted.

To prevent harassment, I would introduce the concepts of follow request, blocking, and reporting users. I would implement a follow request feature, where to follow a user, you must first request and wait for approval from the followee. Another feature that mitigates this problem is having the ability to "block" certain users, to prevent them from following you or seeing your freets. Additionally, I'd implement a feature where users can report other users for inappropriate behavior to increase accountability. Users who harass other users will have their accounts suspended or deleted.

**[Concepts design]** The above answers mention how I would change the concepts/design/UI of Fritter to meet each need. Since only the last two goals are desirable, they would inform the design by necessitating additional concepts (mentioned) to prevent the app from being misused in the listed ways. For the first two goals, I might reverse the suggested changes in the UI to inform the design (make Fritter easier to use by older people and less addictive for kids).

4. **You have the option to allow users to see which other users have upvoted a Freet. What forms of engagement between users (positive or negative) would be encouraged by allowing this?**

**[UI design]** Positive engagement: by seeing who upvoted his/her post, a user can potentially discover people with similar interests/opinions and make new friends/connections. Also, with this design, Fritter is more transparent, and users can feel more comfortable knowing the identities of users who choose to like their freet. It can help users identify unwelcome viewers and block them if that feature is implemented.

Negative engagement: users can become obsessed over who did or didn't upvote their freet. A user can feel less close to or even harass another user for not upvoting his/her freet, or interpret someone else liking the freet in the wrong way and harass them too. By being able to view who upvoted OTHER users' freets, a user could feel alienated ("why don't those people upvote MY freets?") or interpret upvoting in the wrong way (e.g. jealous bf/gf), and harass other users over it. Additionally, seeing exactly who liked your own freets might make users more prone to pander to a certain target audience for upvotes, leading everyone to become more narrow-minded and polarized (echo chamber effect).

5. **In A3, we asked about stakeholders who aren't your immediate users. Identify a design choice you faced that would benefit or harm such a stakeholder, and explain how.**

**[Concepts and UI design]** One such stakeholder would be family members of Fritter users who are not users themselves, particularly parents of young users. A design choice that makes Fritter more addictive is upvoting, and displaying upvoting count and users who upvoted a freet (design choice). It can have a negative user effect (especially on young people) when a freet doesn't get as many likes as a user expected, or a user relies on Fritter likes for validation.

By being addictive, upvoting harms the family member stakeholder by increasing the time the Fritter user spends on Fritter (reducing the time spent with family).

By establishing dependence on Fritter for validation, upvoting has the potential to lower the user's self-esteem and make the user sad, which has a negative effect on those who care for/are around them frequently, i.e. family members who don't use Fritter.

**6. What are the accessibility implications of your design for people with different abilities?**

**[UI design]** In terms of colorblindness, though I incorporate color in the UI, no features rely solely on color. I could increase contrast of colors to make it more accessible, however. For users with low vision, blindness, or dyslexia, my design contains consistent headers (tabs, logout) and freeet/user object layout, which make it easier for assistive screen reader technology to work. However, I could include more navigation and button text, e.g. adding the word 'Logout' to the logout icon so it can be picked up by screen reader. If implemented correctly, my UI should be fully keyboard accessible, since the navigation links on every page should prevent keyboard traps, and there are no cursor dependent dynamic interactions (interactions are button clicking, scrolling, and form-entering).

**7. One of the heuristics is to “speak the user’s language.” In retrospect, assuming you followed this, can you identify what kind of user you had in mind?**

**[UI design]** Assuming I followed this heuristic, the kind of user I would have in mind is someone with English literacy and very basic knowledge of technology and software, at least at the data abstraction level. For example, the error message I mentioned in my Heuristic Evaluation, “Could not find Freets, try again later,” assumes the user understands that Freets are stored remotely (server), and the thing which gets (connection) the remote freets is not good right now, but might be better later. Also, the lack of complete sentences hints that I had younger users in mind, since the message reads more like a text/IM than a letter, and younger people are more used to this form of communication.

**[Concepts design]** Lastly, as mentioned in (1) above, I assumed that users have some basic familiarity with the upvoting, refreet, and follow concepts from other social media platforms, so my design is worded in a way to make it obvious that they parallel those features on different platforms (same names), so the user I had in mind is familiar with social media technology (likely younger). In short, the user I most had in mind were essentially my peers: younger, somewhat technologically-inclined people.