



Experience Optimization of

Data Collection in AI

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A challenge for feedback design

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Design pattern summary for data collection

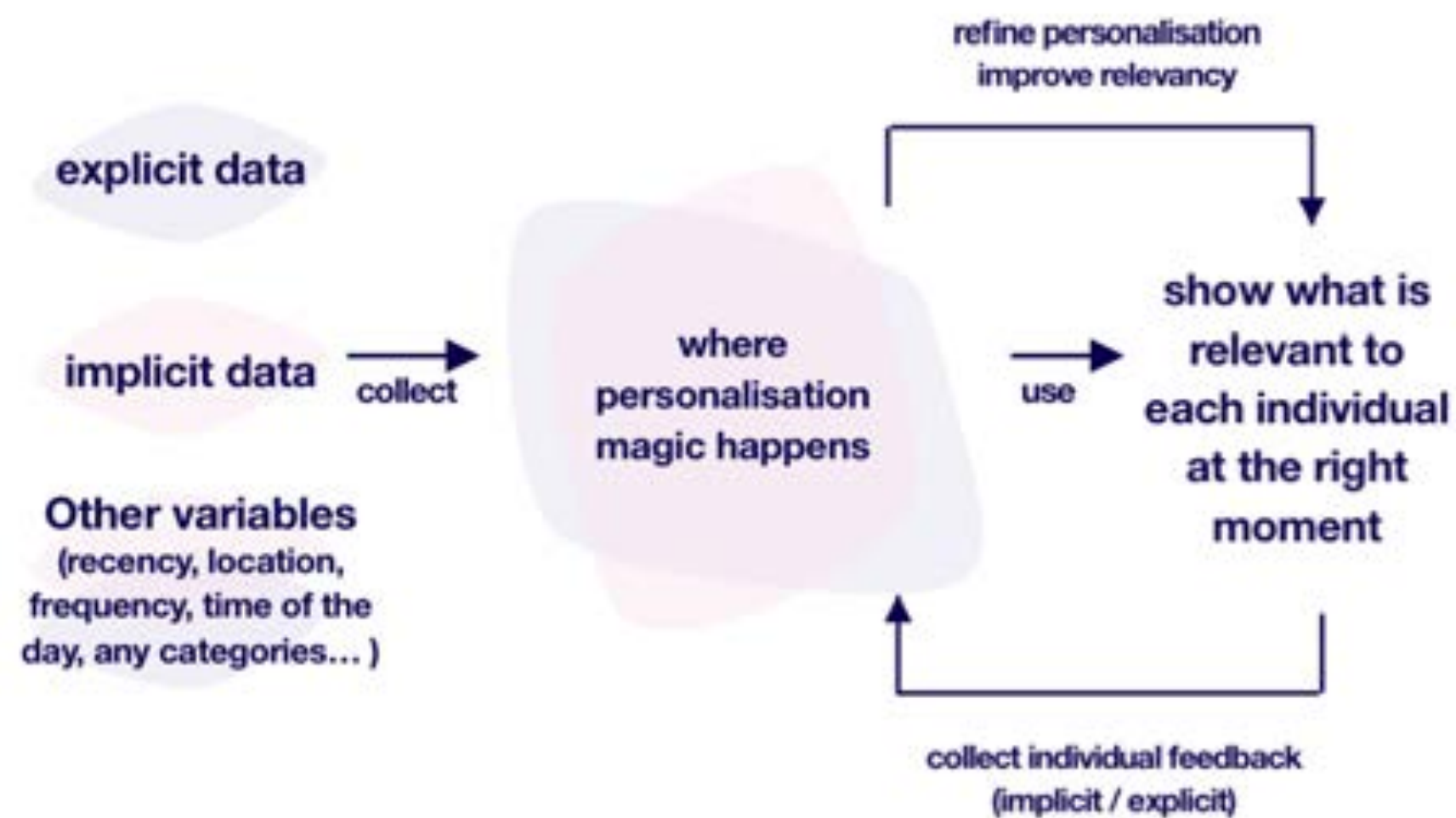
03 **SCENARIO SELECTING**
Appropriate scenario for testing

04 **DESIGN IDEATION**
8 new design patterns for testing

05 **SURVEY**
20 answers, 3 patterns won

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Further analysis on the 3 patterns

Problem Definition



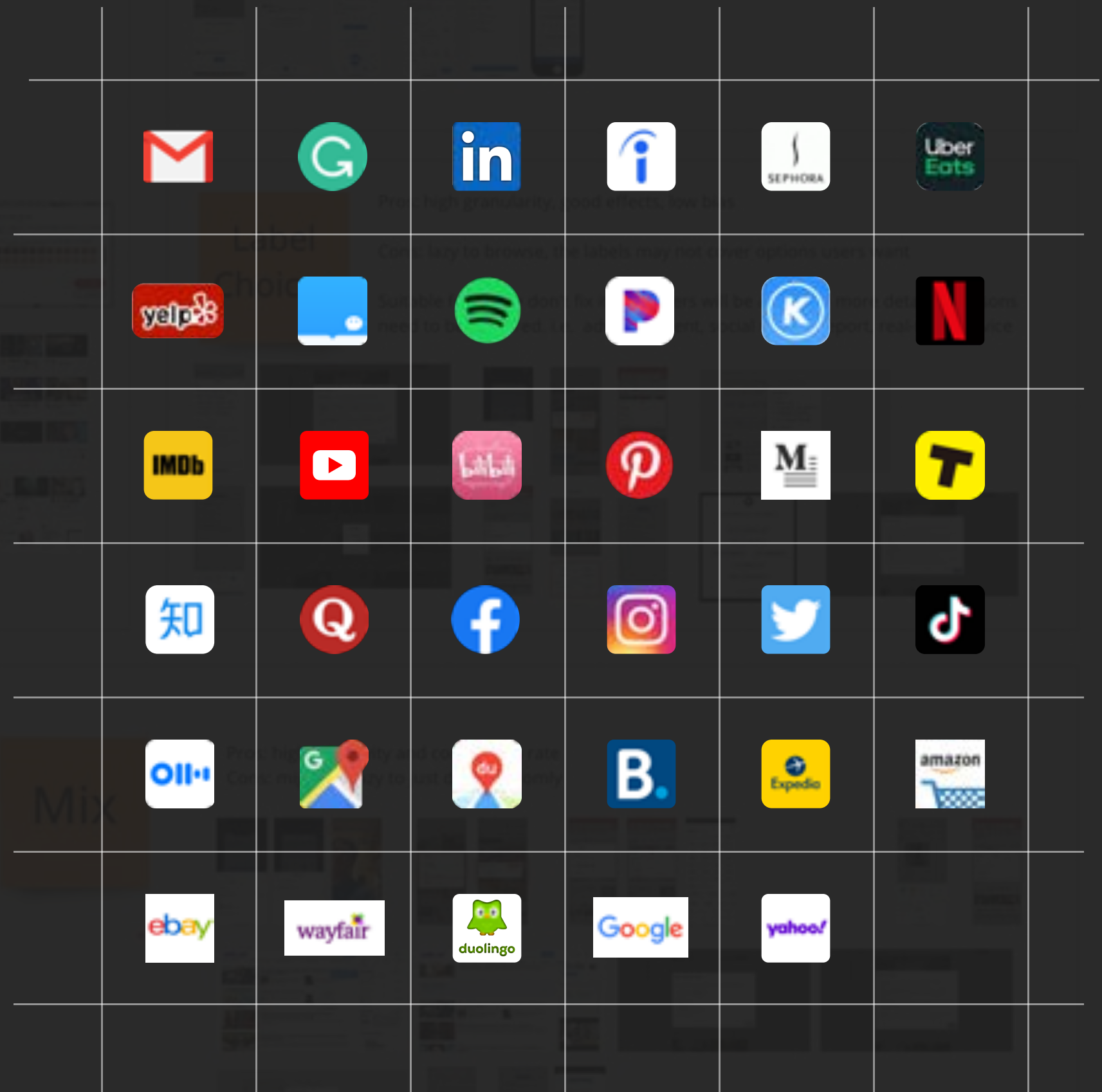
- Algorithm accuracy is one of the key elements to solve issues like trust, transparency and privacy
- The experience of data collection to improve accuracy is not always enjoyable for users
- How to improve end users' willingness to provide feedback during the entire lifecycle?

Pattern Research

35 product apps/webs

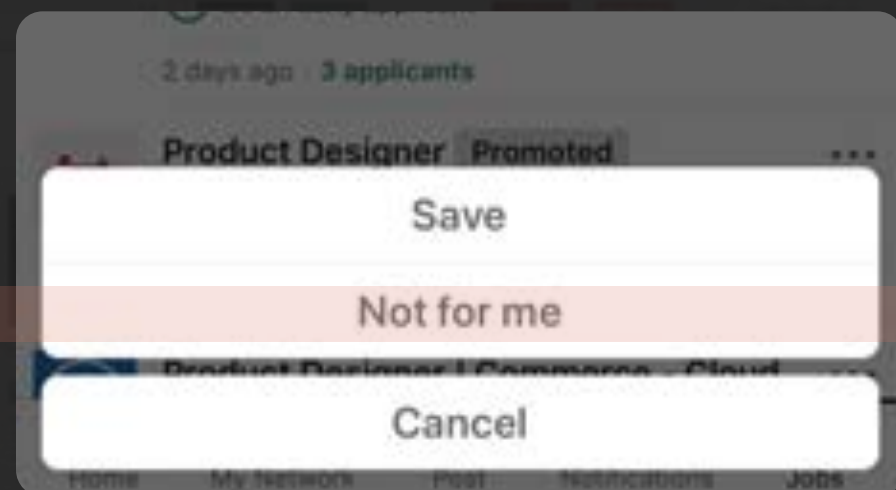
90 relevant interfaces

4 ui patterns

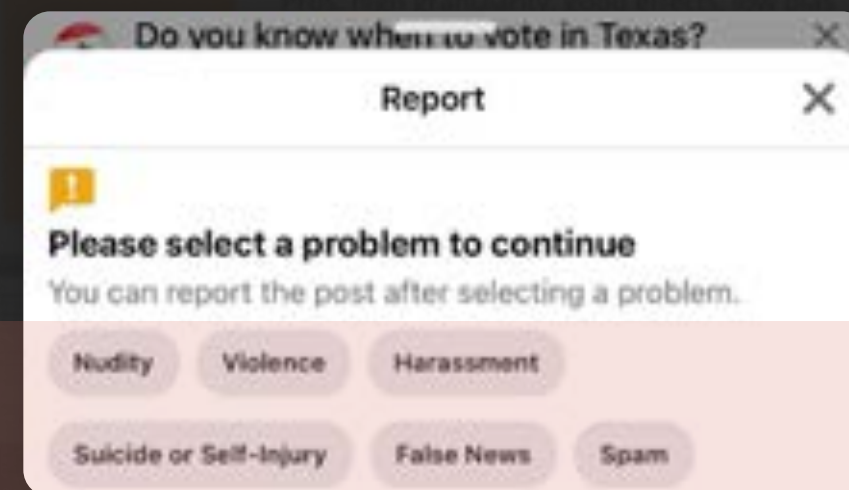


Pattern Research

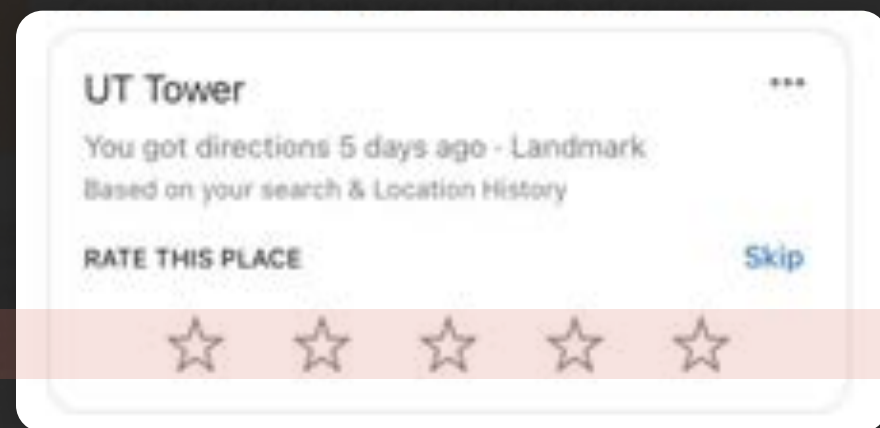
Pattern 1- Binary Choice



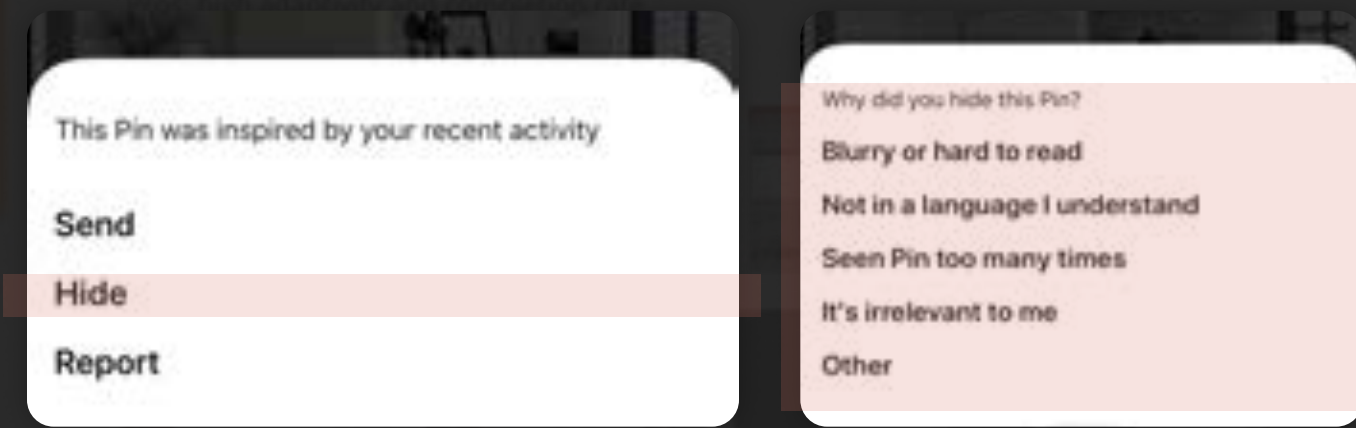
Pattern 3- Lable choices



Pattern 2- Scale



Pattern 4- Mix & User Input



Pattern Research

01

UI Pattern

6/8 of the users know where are the entries for feedback

02

Incentives

All of them have had intention to give feedback but they 'seldom' do

03

Time

Only when they are quite annoying

04

Intention-Action Gap

Distrust, troublesome, unawareness

SCENARIO SELECTING

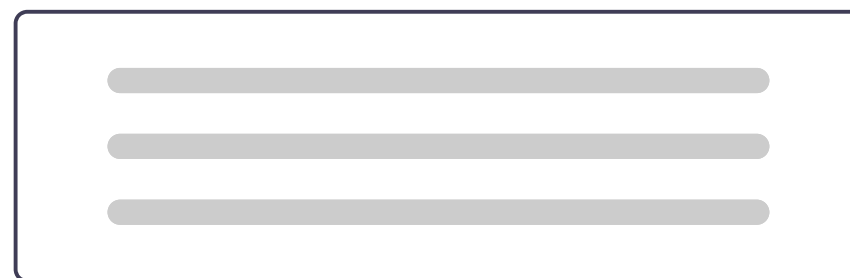
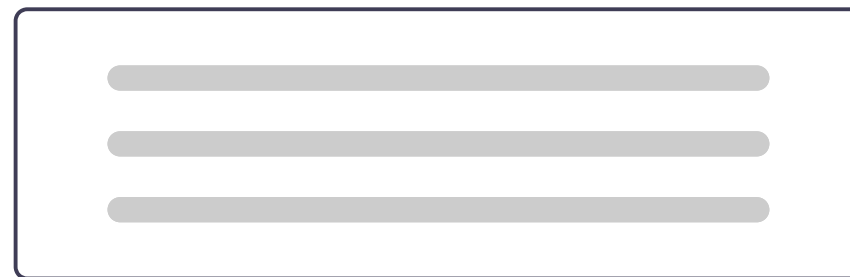
Broadly-used

We will select a broadly-used product and scenario which many of us are already familiar with, so they will not have bias because of the scenario or prototype itself.

Practical Needs

We will evaluate whether user feedback is a real need for all stakeholders (different end-users, clients and the platform itself)

Project Reframing



We decide to focus more on improving users' willingness to give explicit feedback by

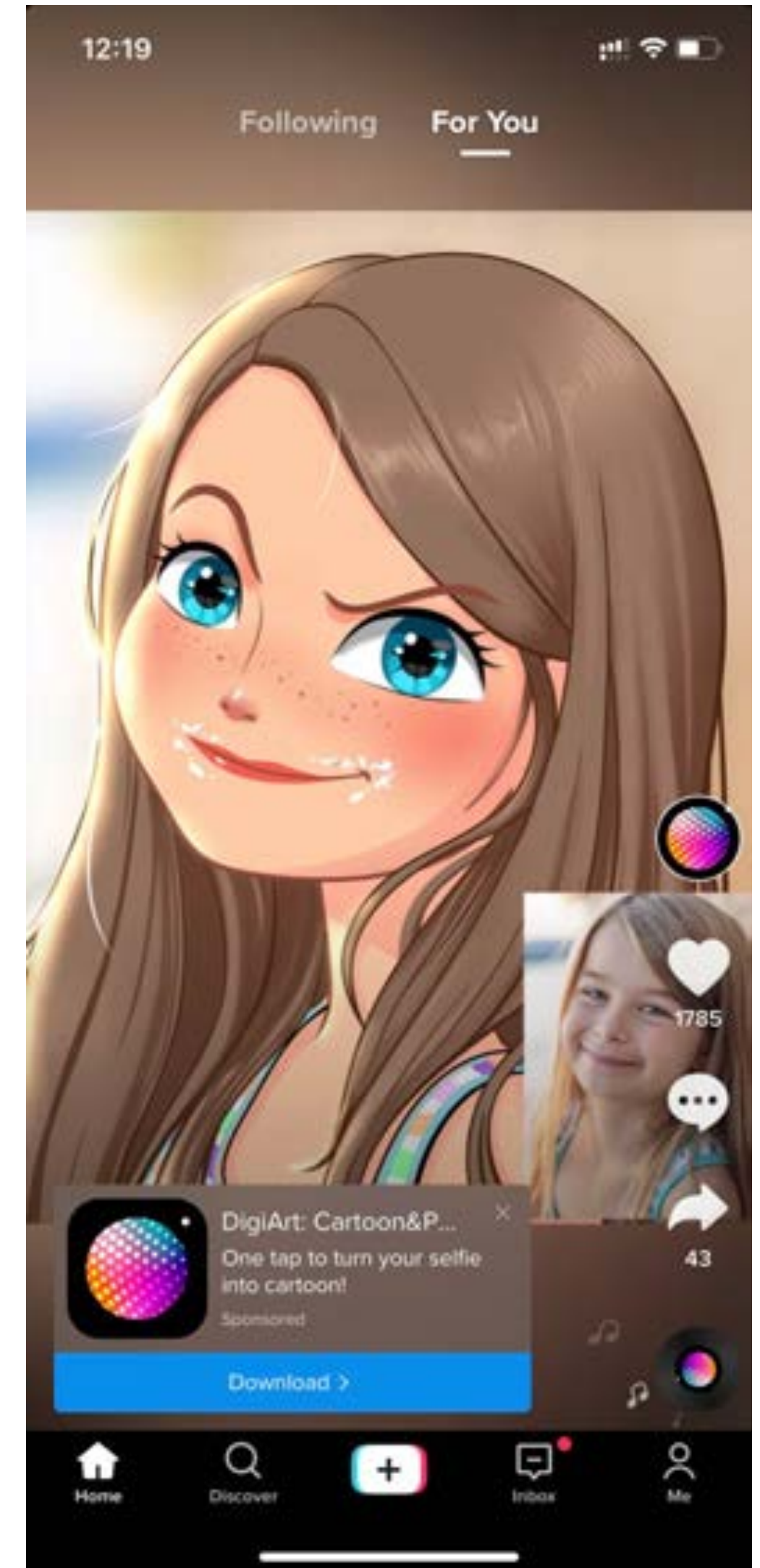
1. Enhance user incentives
2. Improve timing to ask for feedback
3. Explore novel UI patterns

SCENARIO SELECTING

Tick Tock Ads

The Platform

- Began advertising since 2019
- Still under experiments
- User feedback proves greater business value



SCENARIO SELECTING

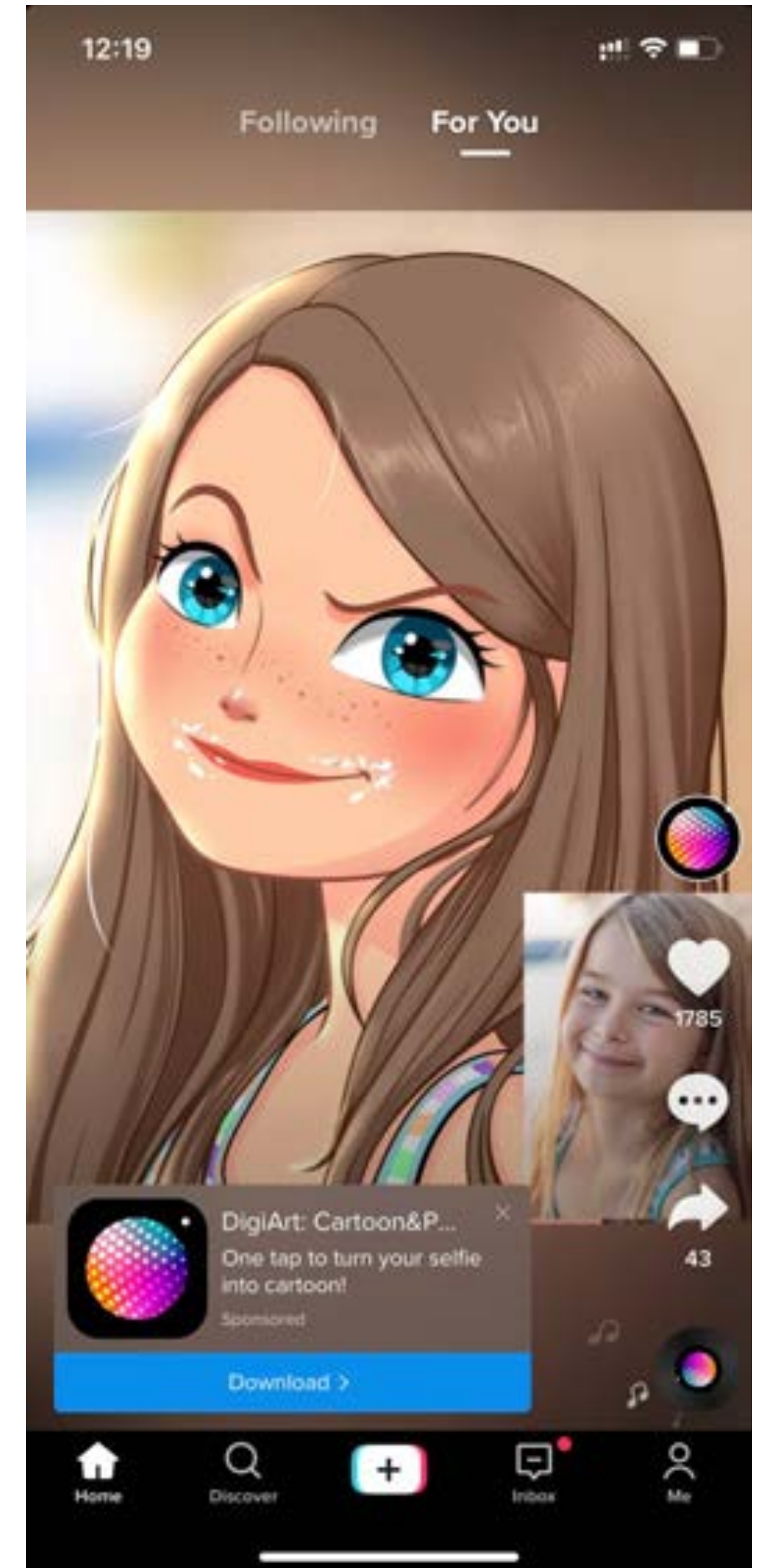
Tick Tock Ads

Advertisers

16-24
years old

\$50-120k
each ad

- The age range has increasing purchasing power
- Considering the price, it's crucial to target to the right audience



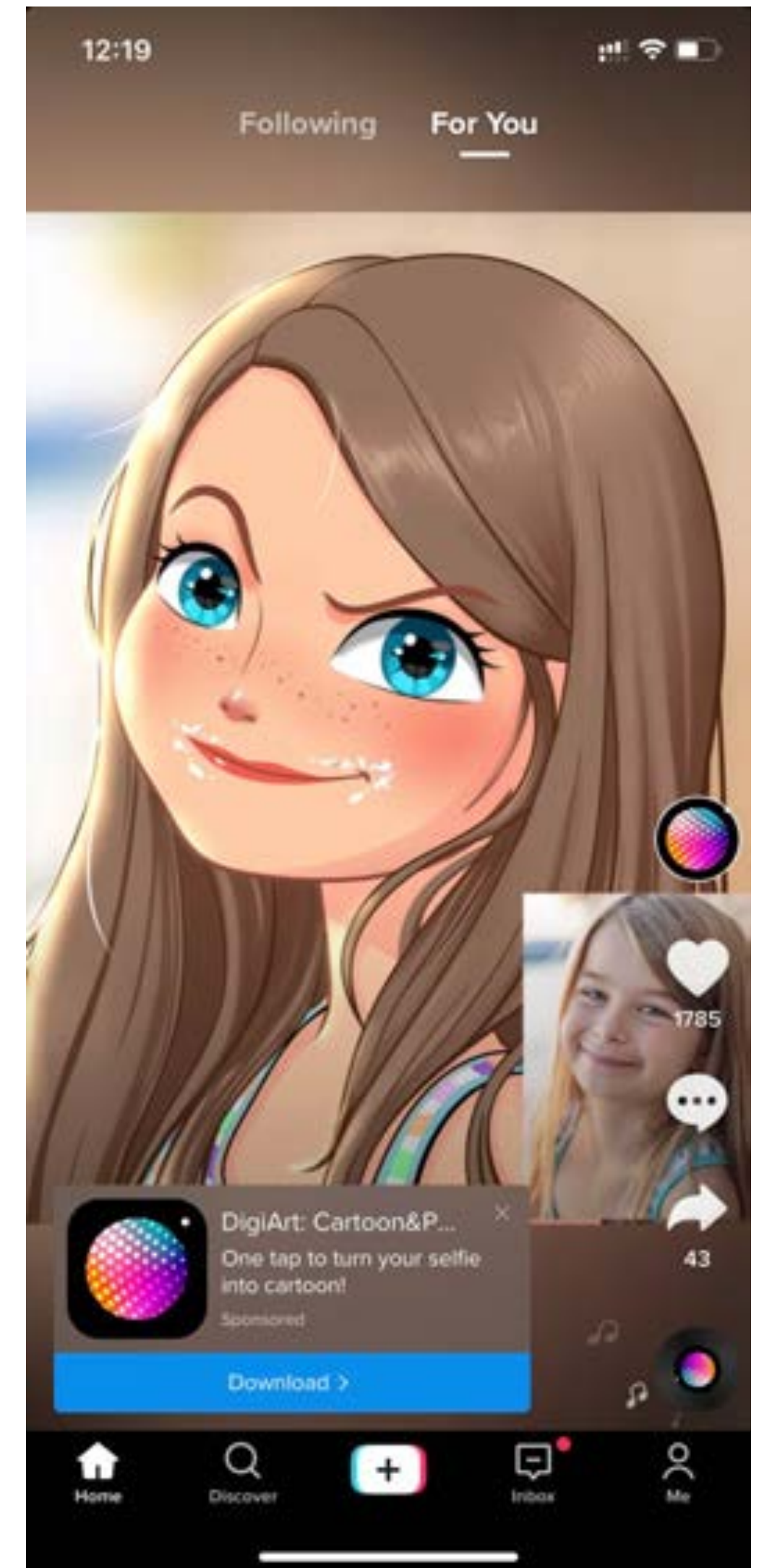
SCENARIO SELECTING

Tick Tock Ads

End-users

According to feedback from big social platforms such as Twitter and Reddit, among which 72% have negative experiences. they dislike some of the Tik Tok ads because:

- Not relevant to their interests
- Think it's stupid / rude
- Advocates for harmful values
- The product is fake

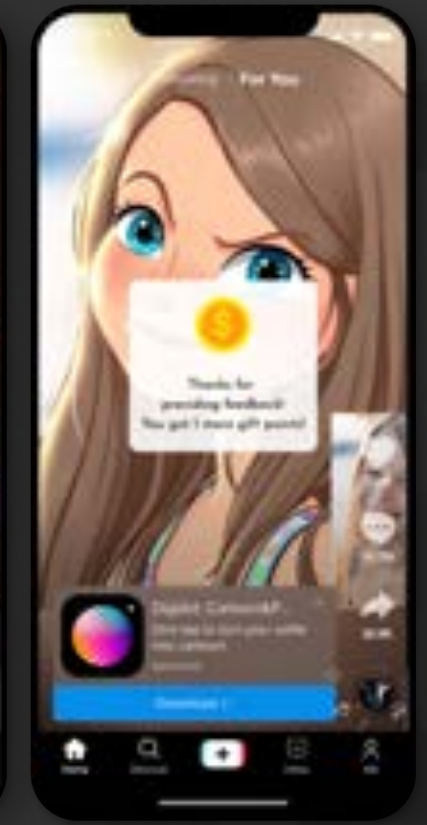
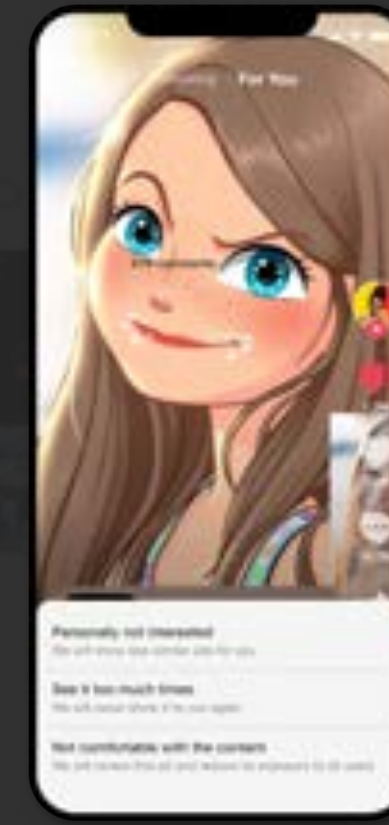
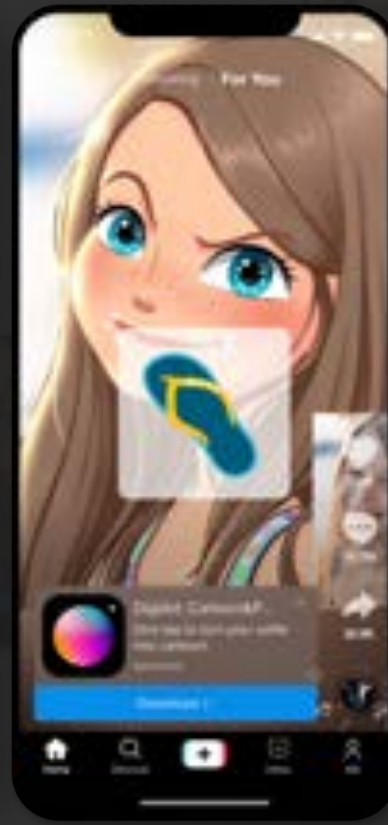
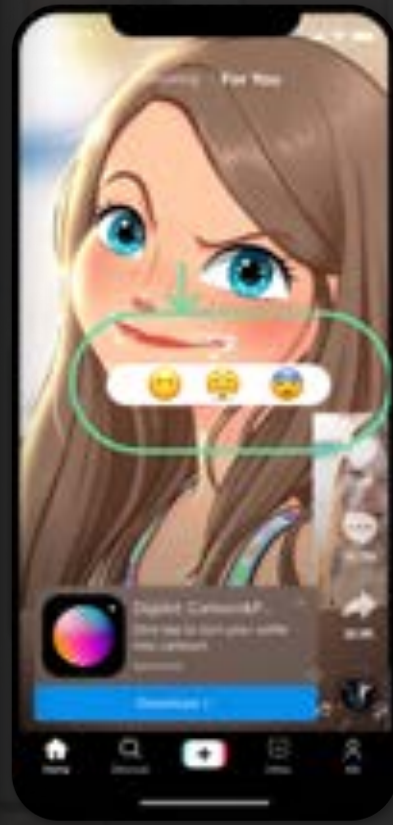


IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



↑
Specify negative thoughts

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



↑
Metaphors

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



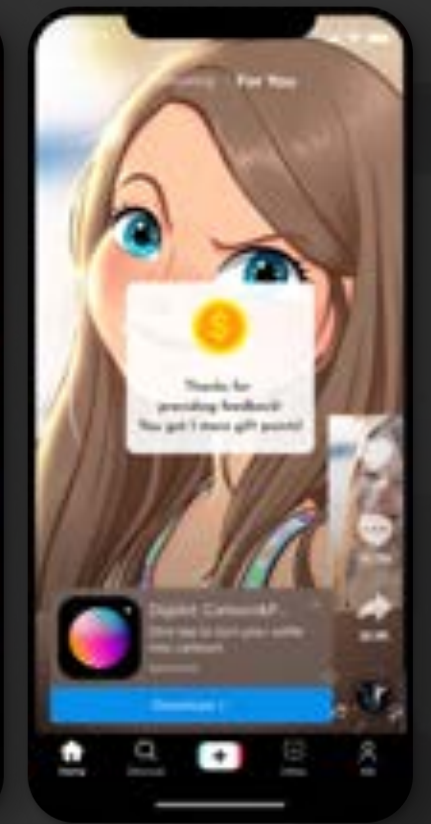
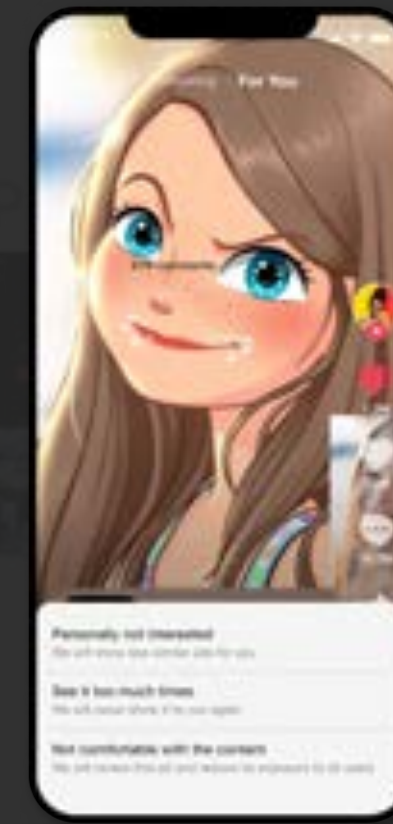
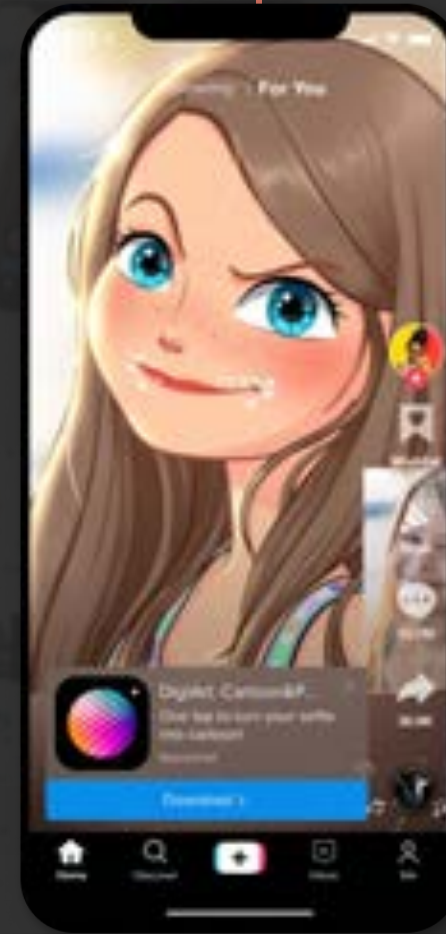
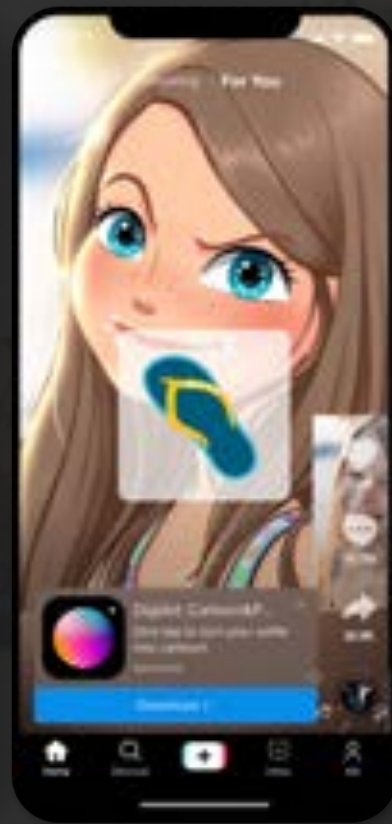
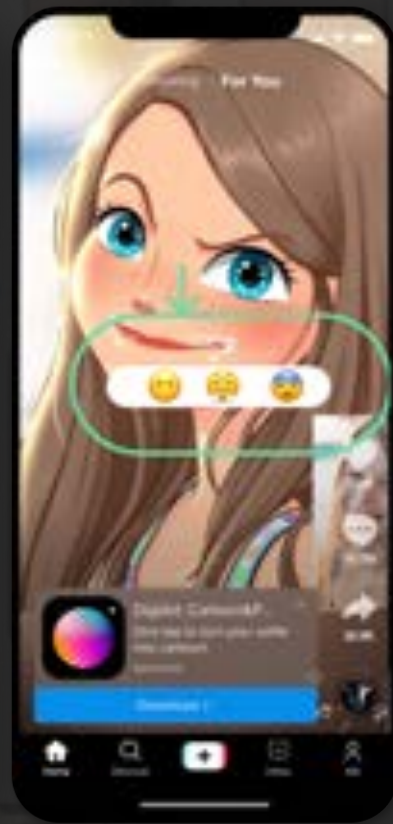
↑
light the fire

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



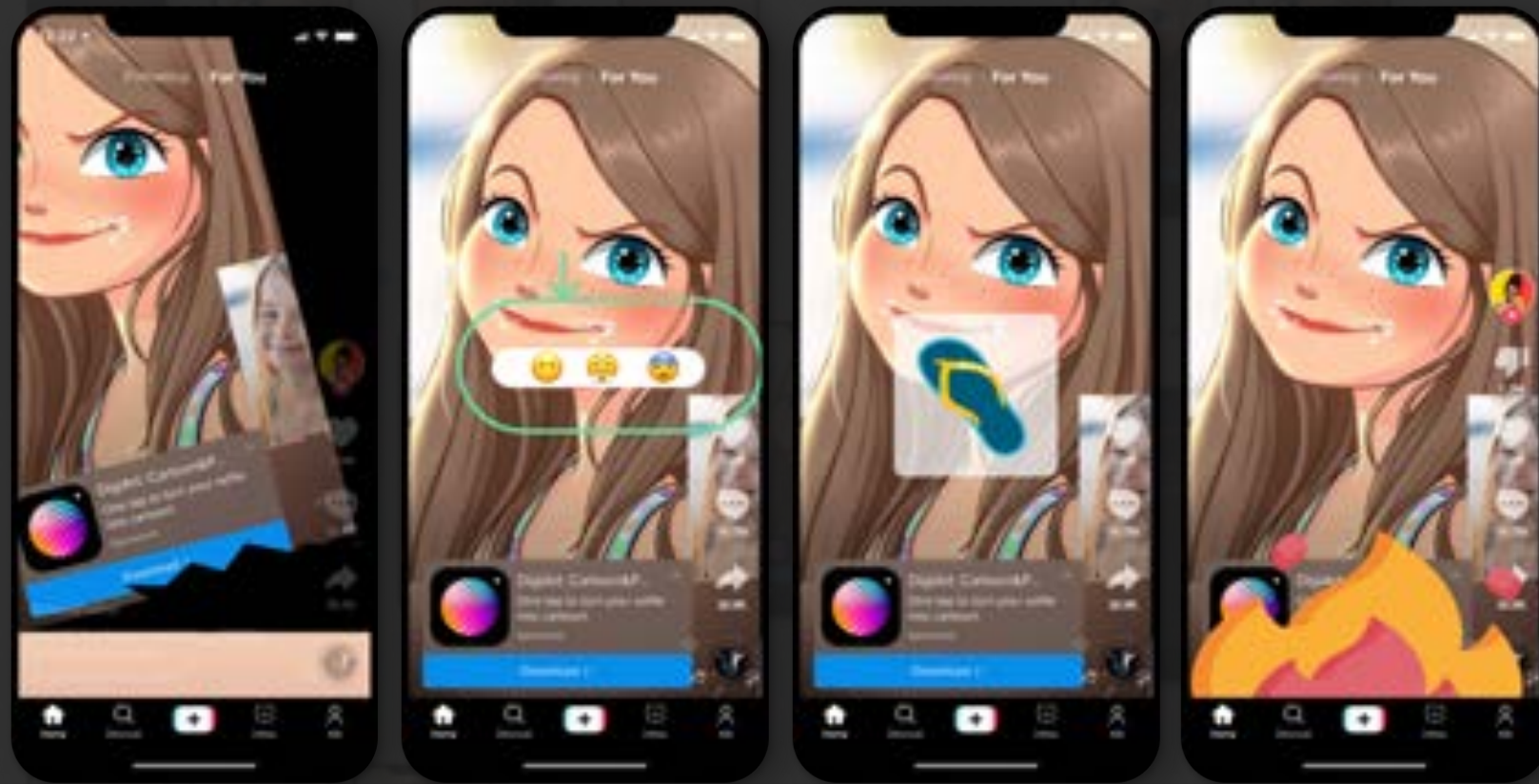
Specify positive thoughts

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



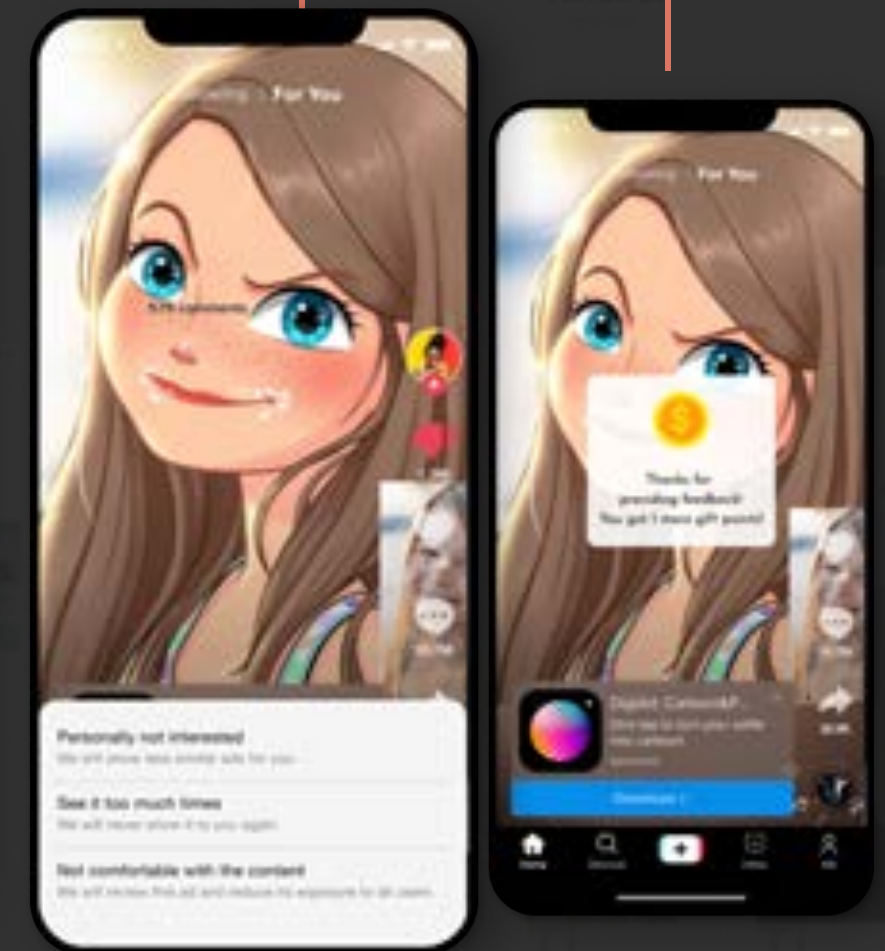
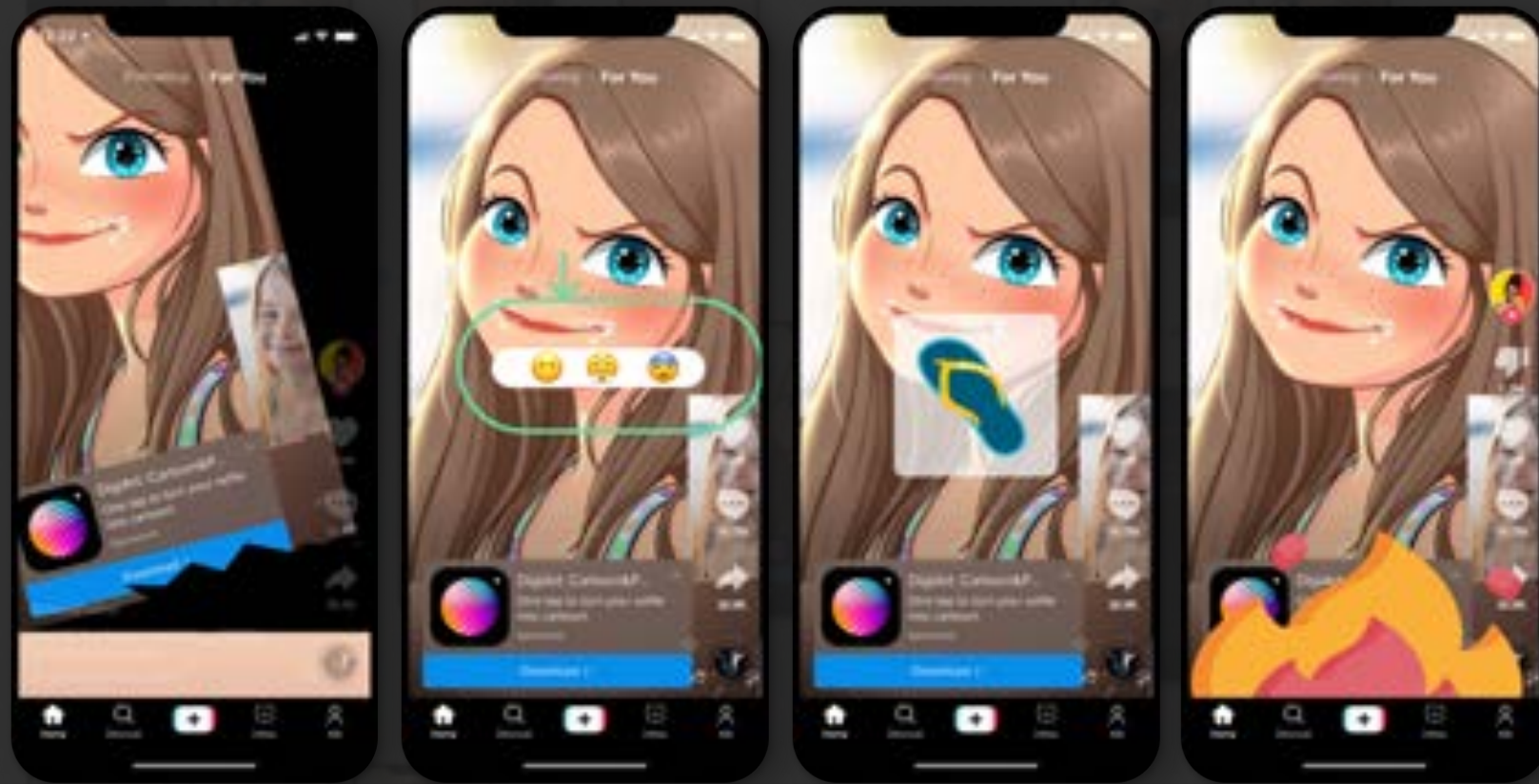
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Specify reasons

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



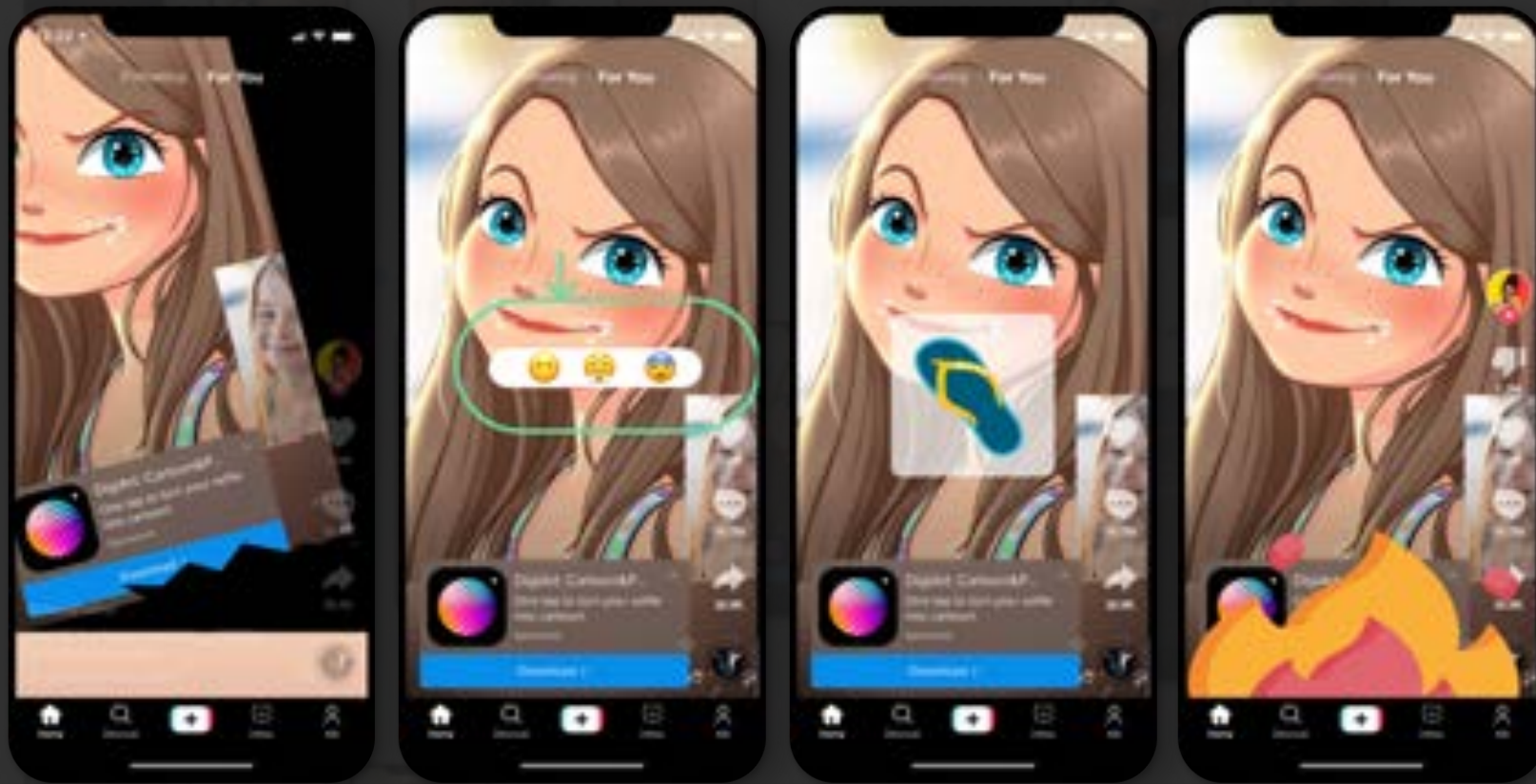
↑
Explain what will happen

IDEATION

Novel UI Patterns

Improve Timing

Enhance Incentive



↑
Reward

SURVEY

15 responses

show attitudes toward the 8 design ideas with the like-scale of 1-5

Interaction to Provide Feedback

Hi there, we're doing a small course project to find out how people think about and react to the design of providing feedback (i.e. Rating, Like/Dislike, etc.). Imagine you are using TikTok and you see an Ad that you strongly like/dislike (i.e. for personal interest/ product quality/ Ad content...) Here follows different interactions to ask for your feedback toward Ads. We would like you to rate how likely you are to use the design to provide feedback.

* Required

Design 1

Design 1 - Swipe upper-left/right to show like/dislike.*



I would like to use this interaction to provide feedback ;

1 2 3 4 5

Strongly Agree

Strongly Disagree

Why do you like/dislike Design 1? (Optional)

Your answer

Design 2

Design 2 - Specify types of positive thoughts.



INITIAL FILTERING

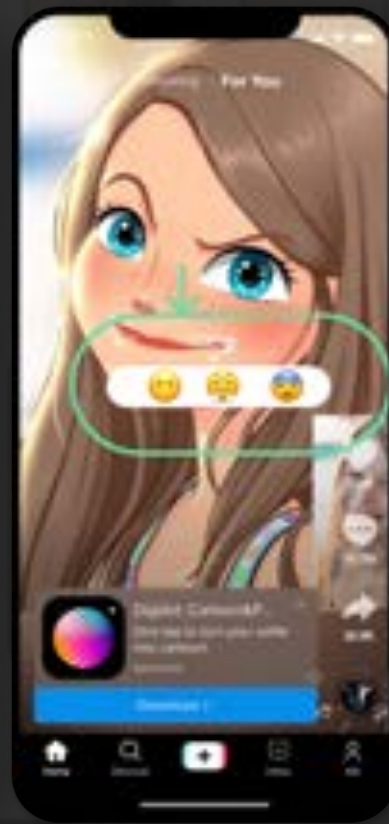
Novel UI Patterns

Improve Timing

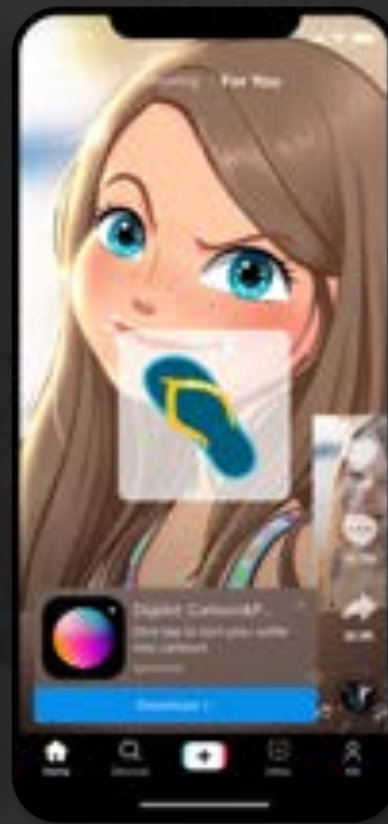
Enhance Incentive



2.53



2.26



3.53



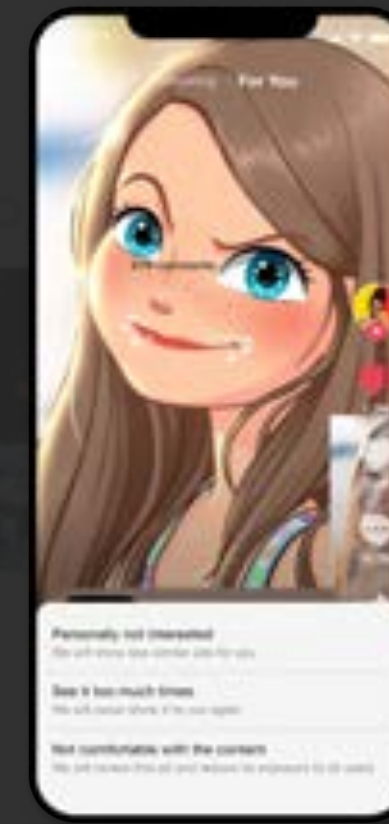
2.86



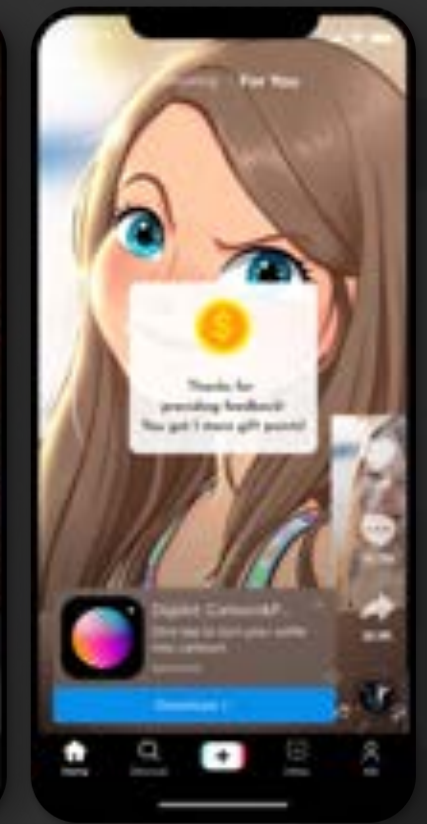
2.2



2.4



1.66



1.93

INITIAL FILTERING

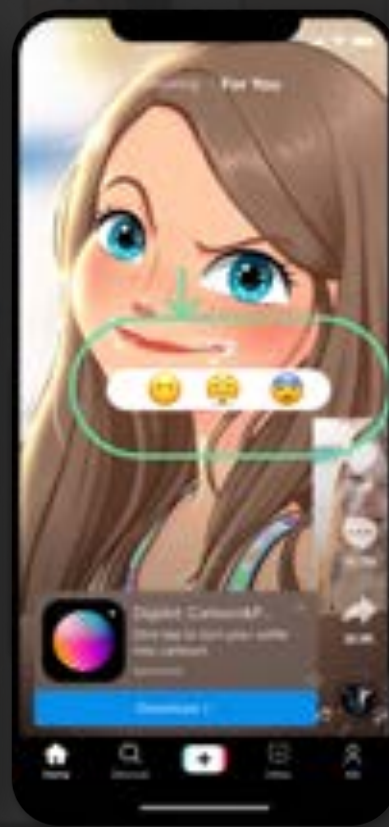
Novel UI Patterns

Improve Timing

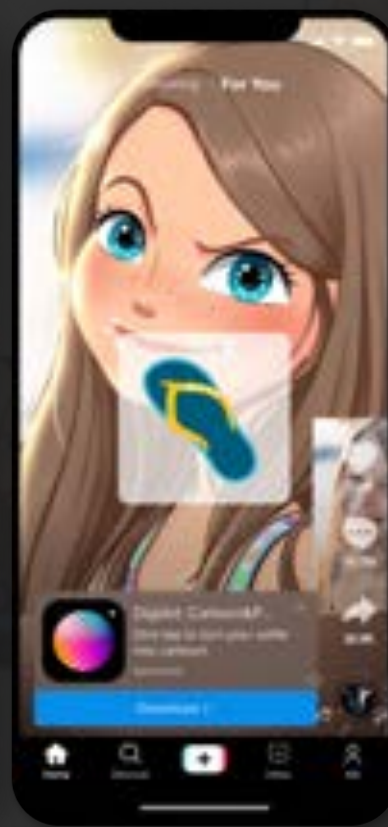
Enhance Incentive



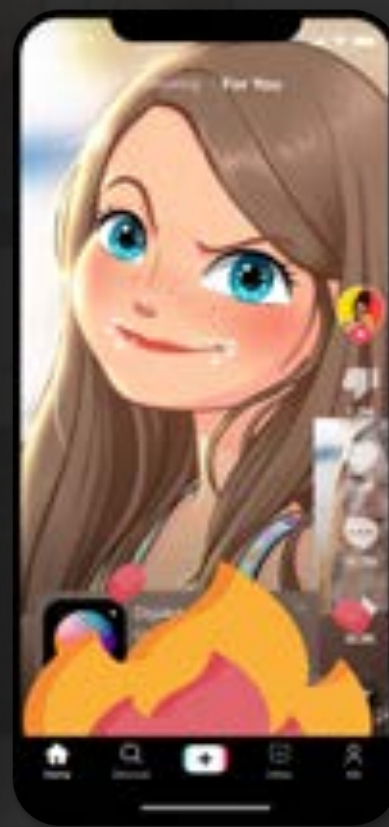
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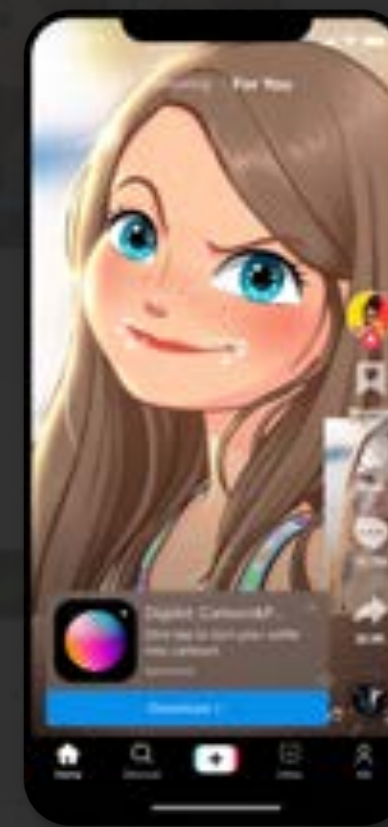
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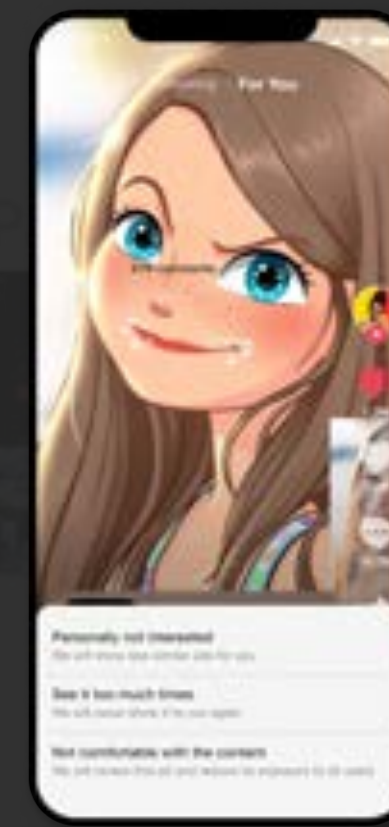
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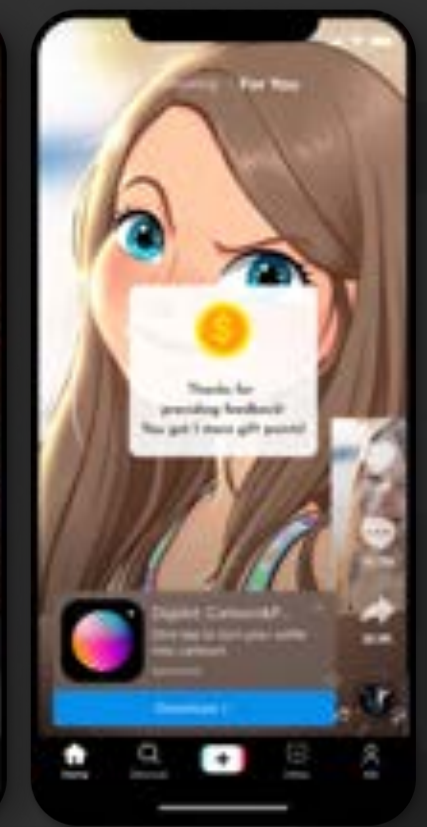
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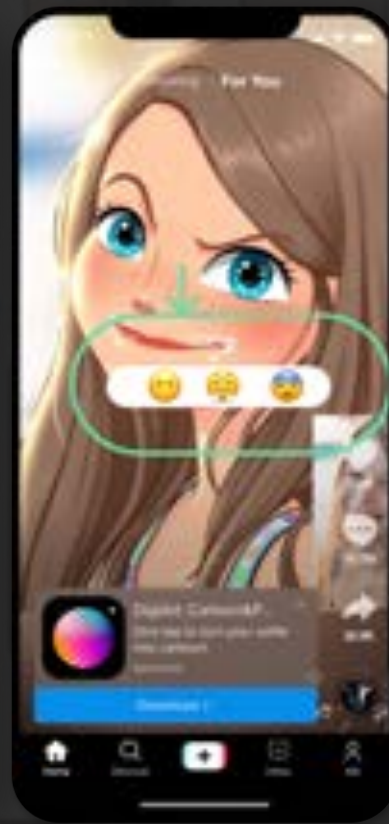
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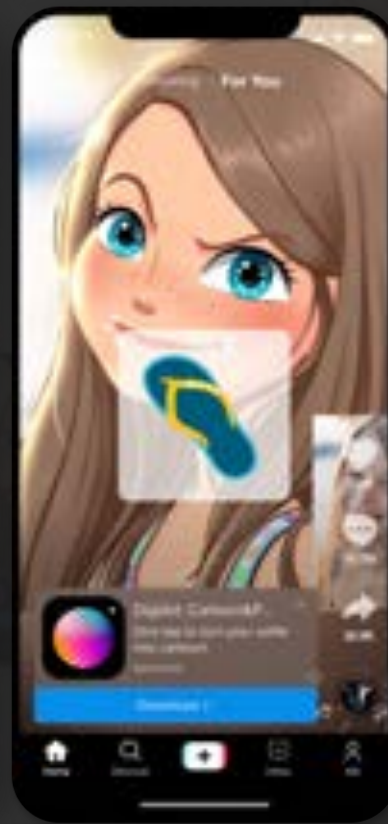
Enhance Incentive



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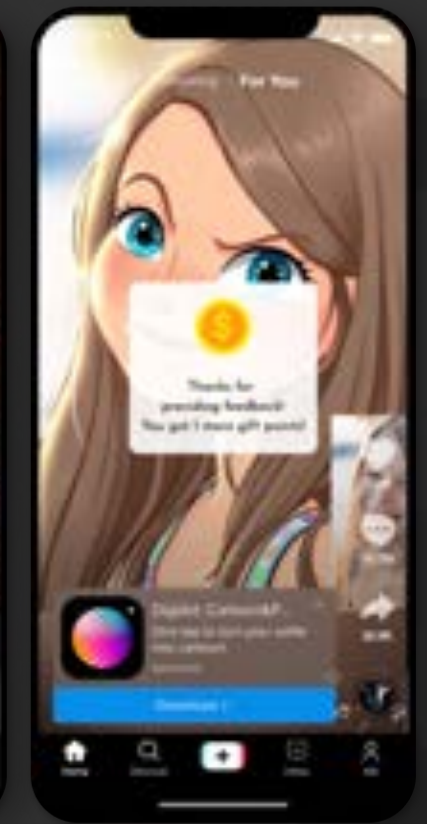
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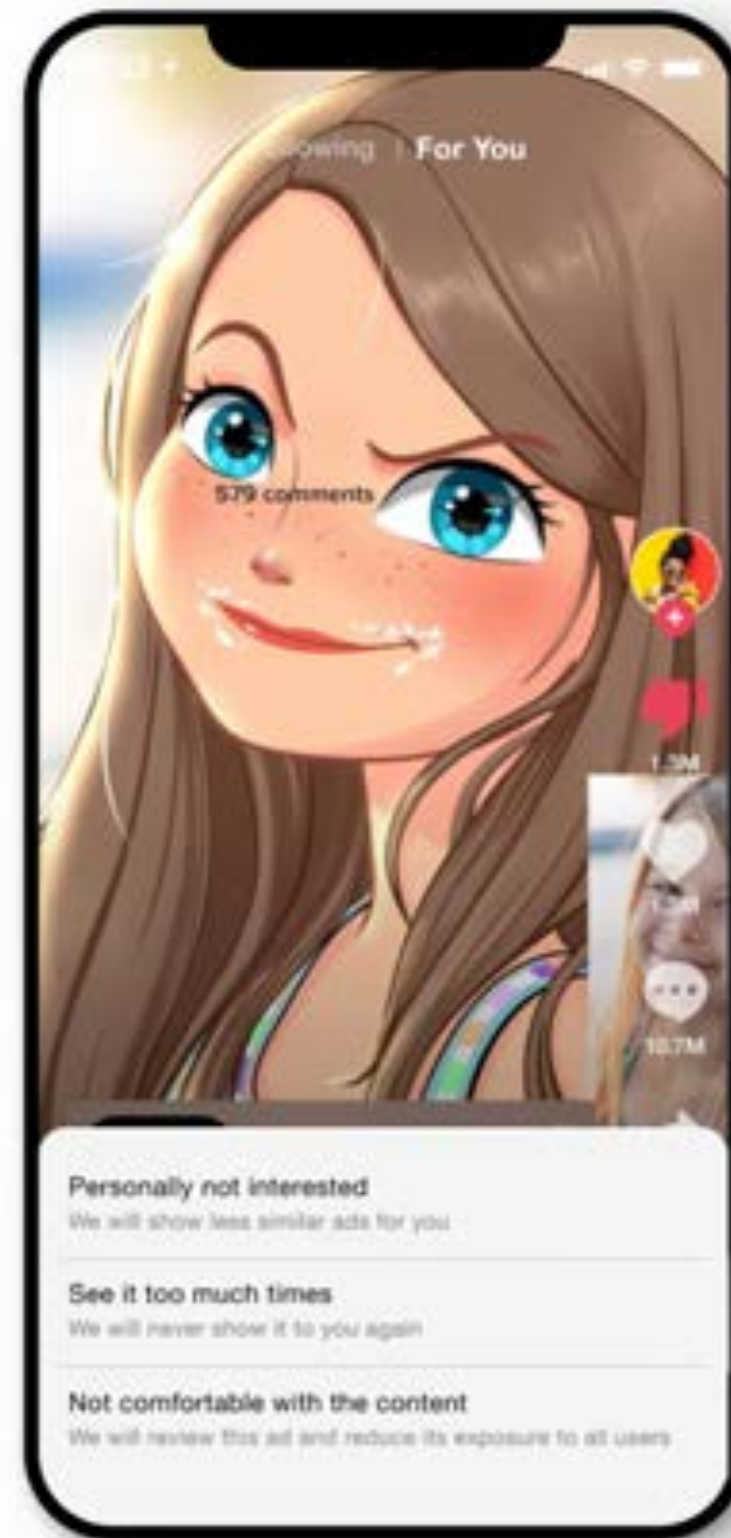
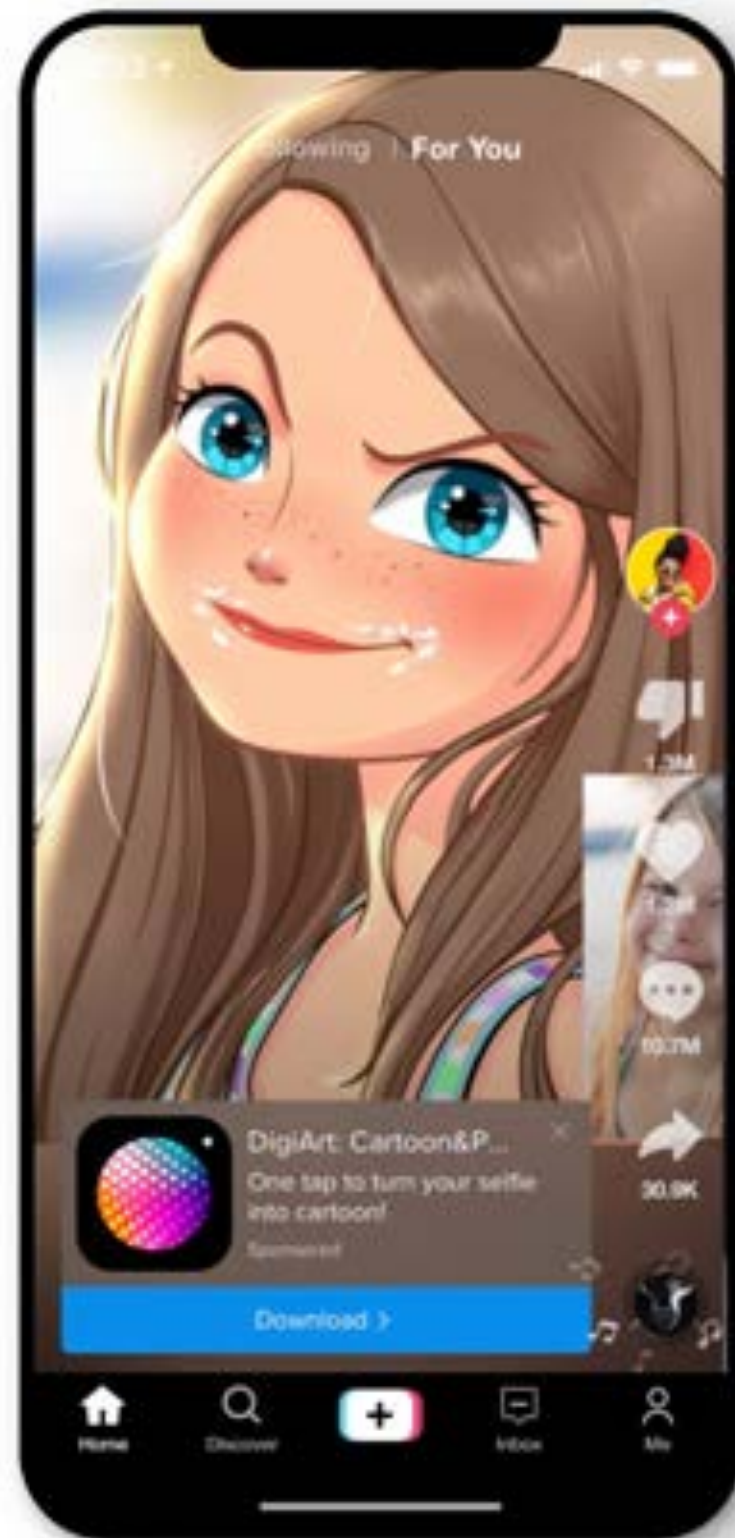
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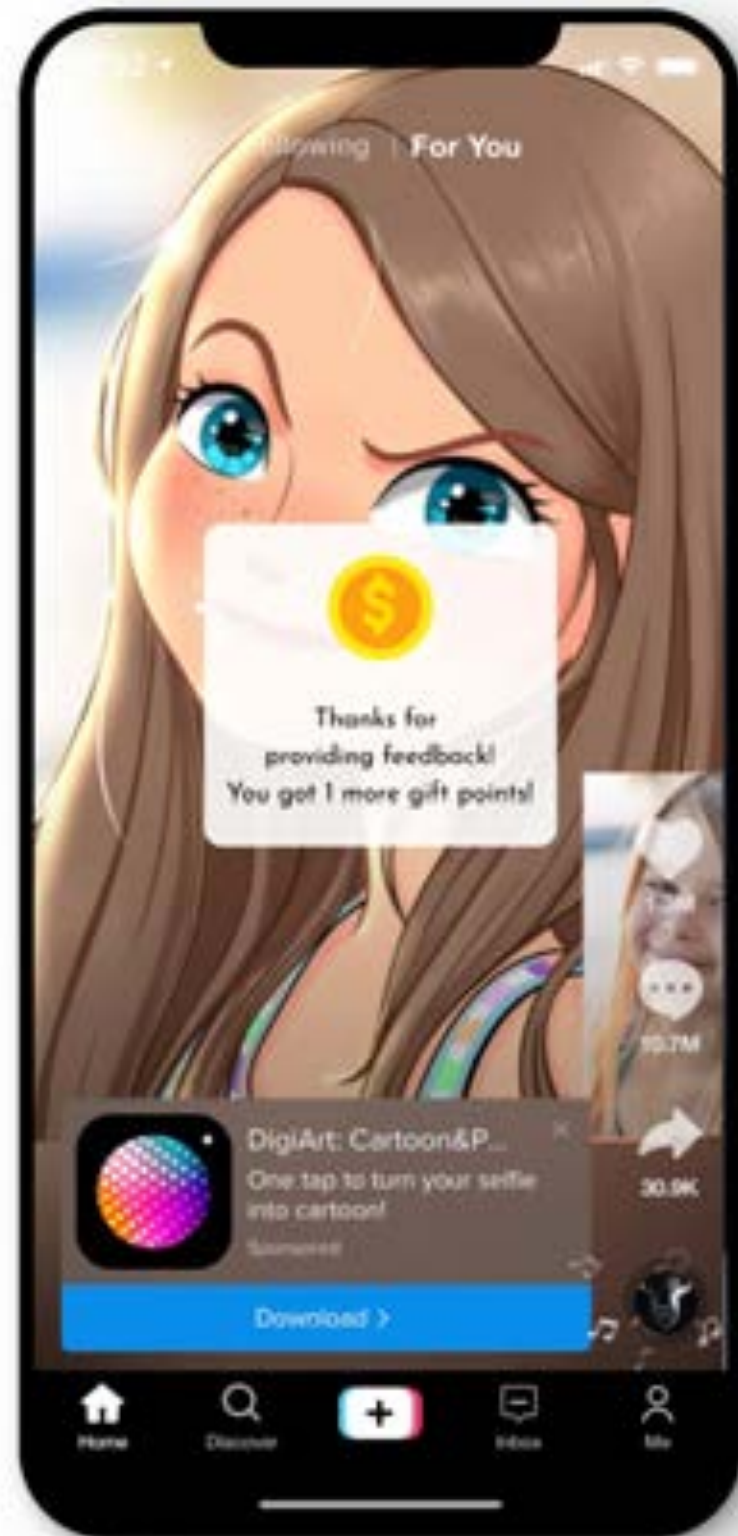


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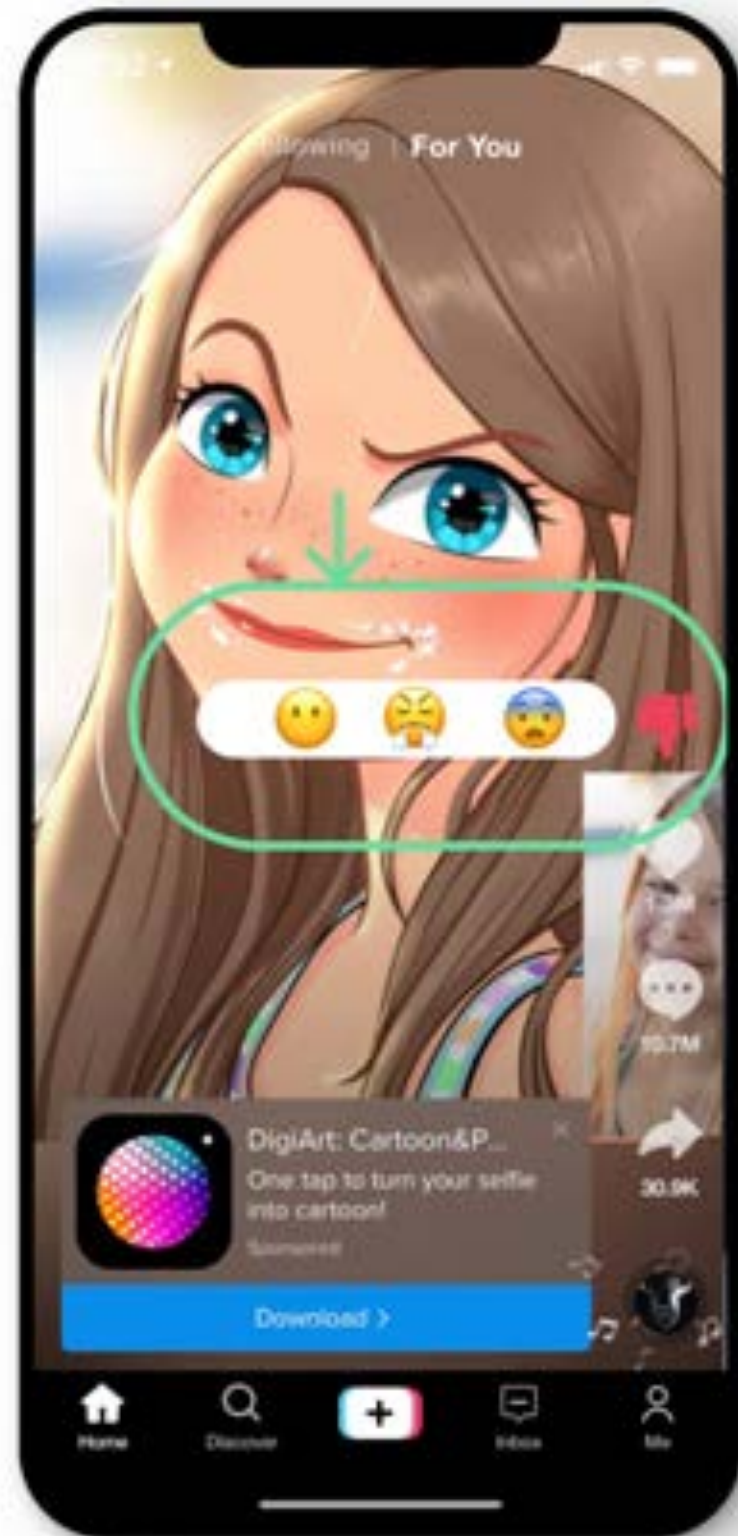
Idea Direction - Enhance incentives

Tell users what consequence
their feedback will bring to



Idea Direction - Enhance incentives

**Offer users real benefits
like membership if they
provide feedback**



Idea Direction - Novel UI Patteren

**Let users specify reasons
why they think negatively
toward this ad**

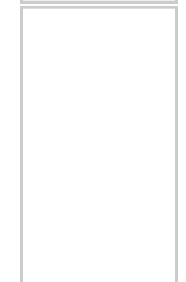
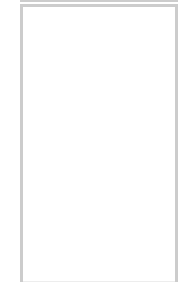
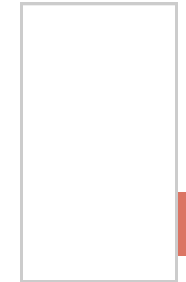
Comparison Experiments

Between Subjects Study

Compare those 3 picked ideas in a between-subject study using clickable prototype to calculate feedback rate of these 3 ideas

Recruit 15 people
5 as a group, 3 groups in total
One group for one design idea

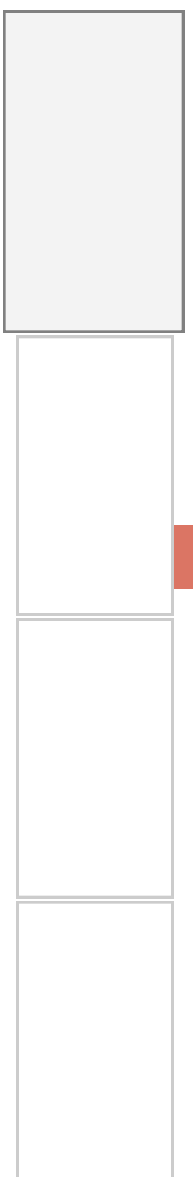




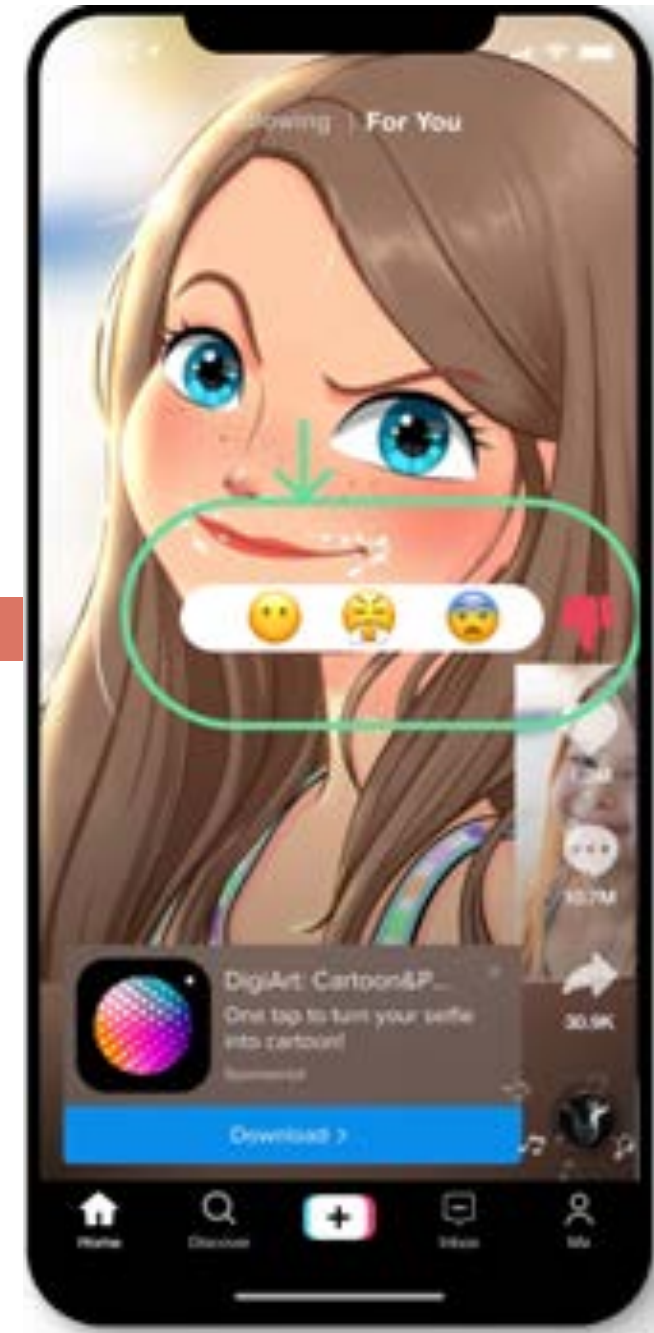
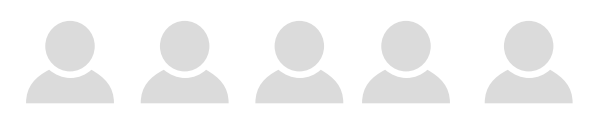
50 trials
for each idea



A serial of videos & 10 Ads

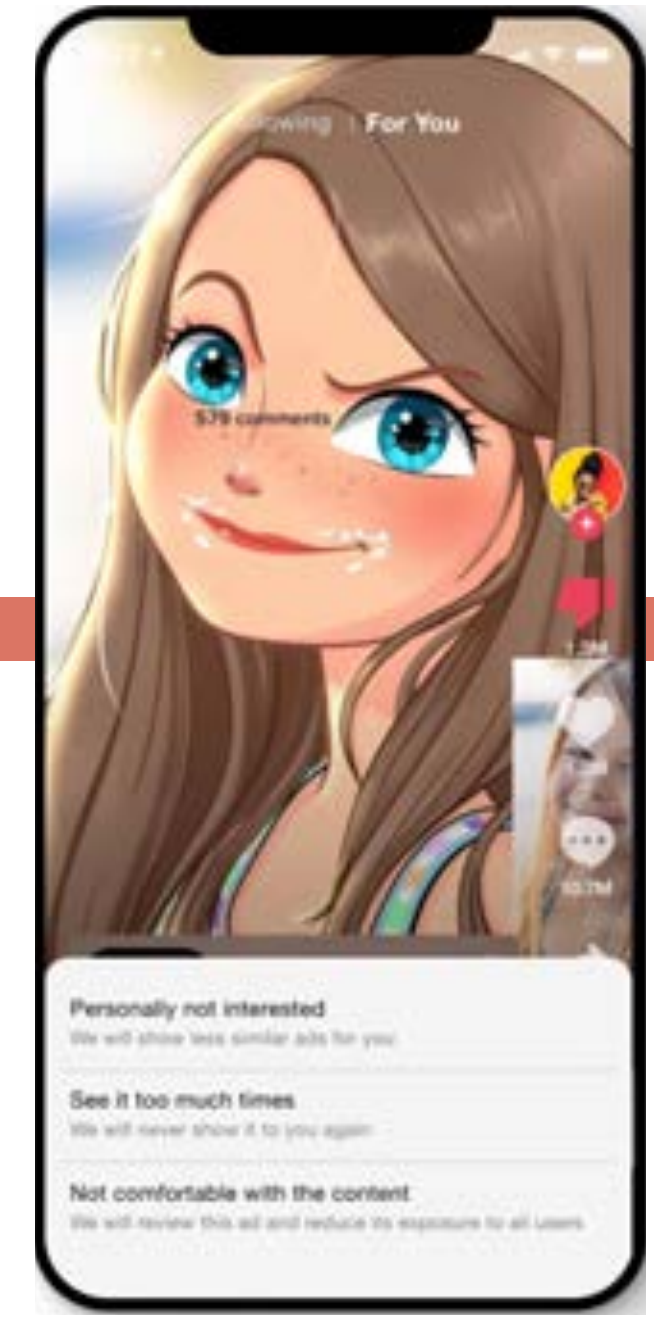


Group A



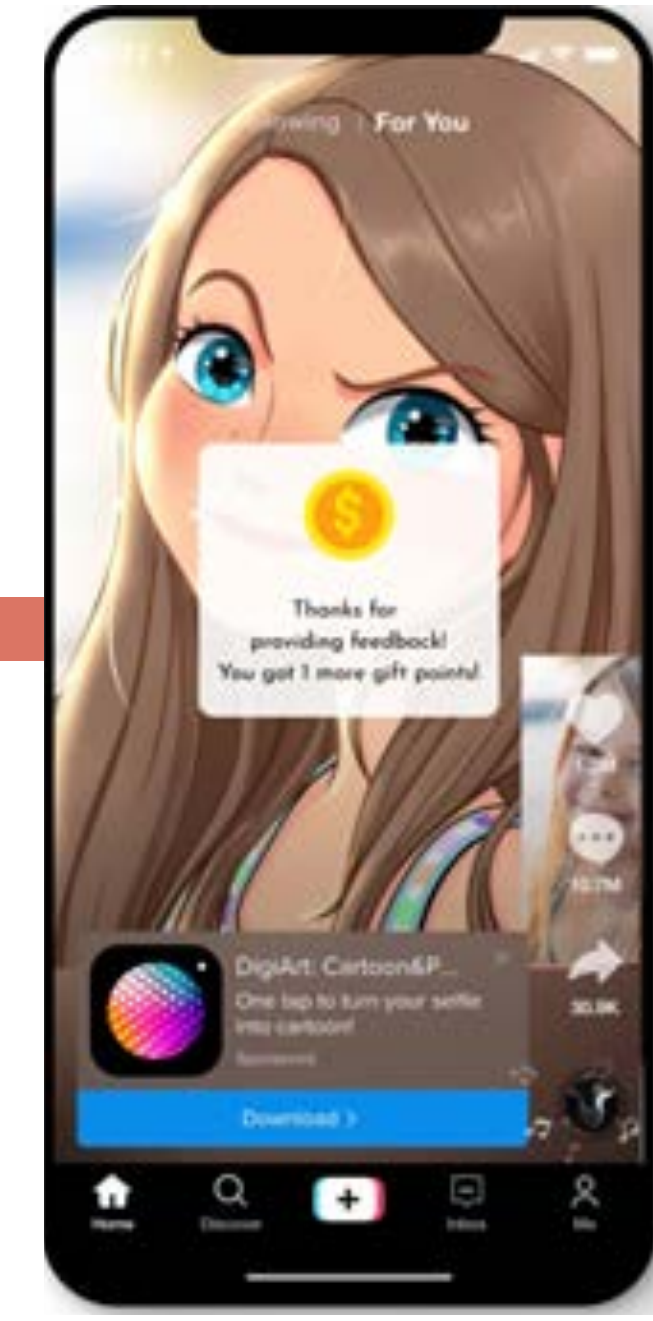
Idea A

Group B



Idea B

Group C



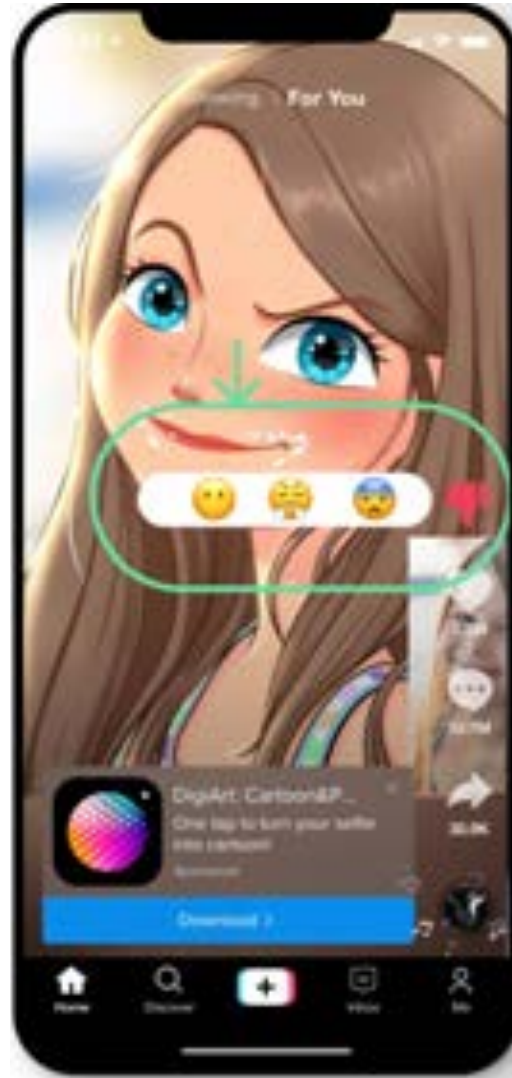
Idea C

50 trials for each idea

DEMO

Conclusion

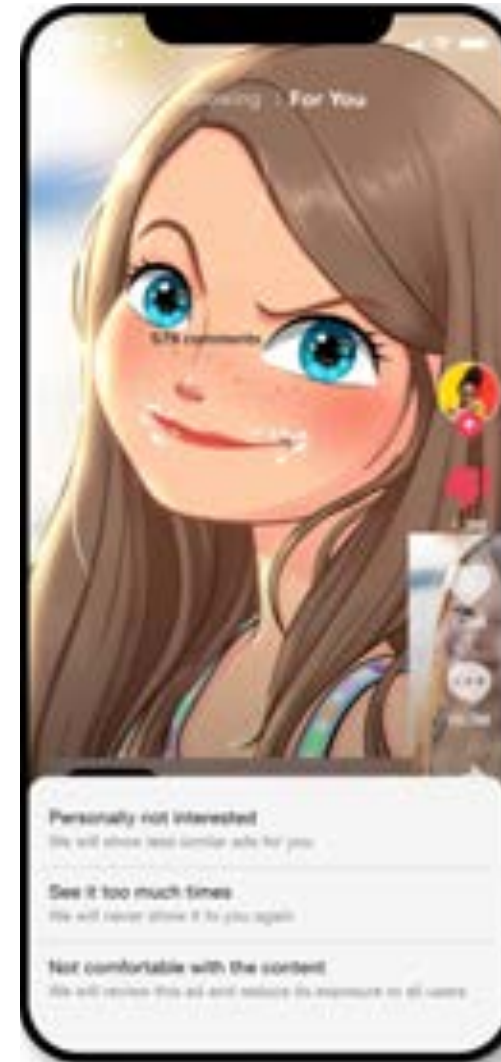
Idea A



6/30 Click Rate

2.67/5 Comfortable level

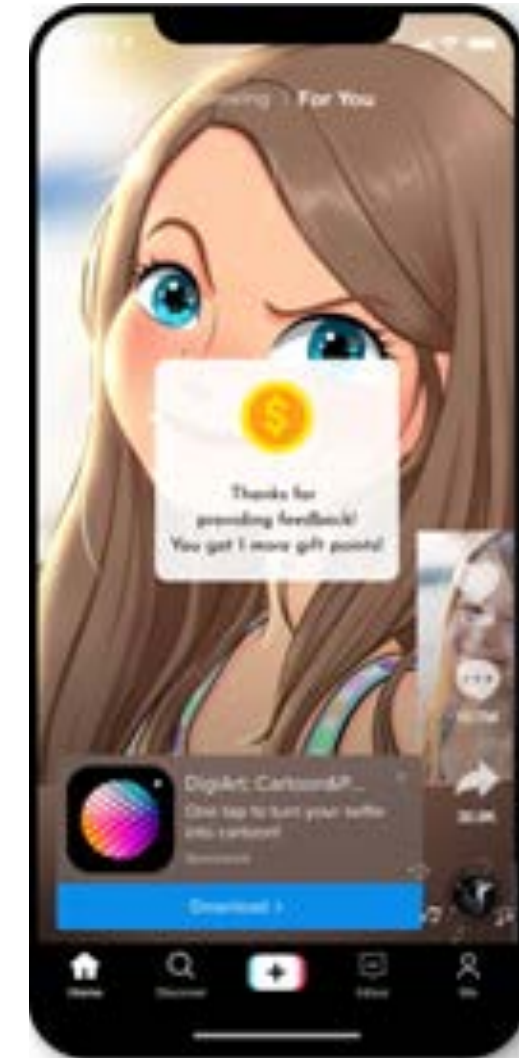
Idea B



15/30 Click Rate

4.33/5 Comfortable level

Idea C

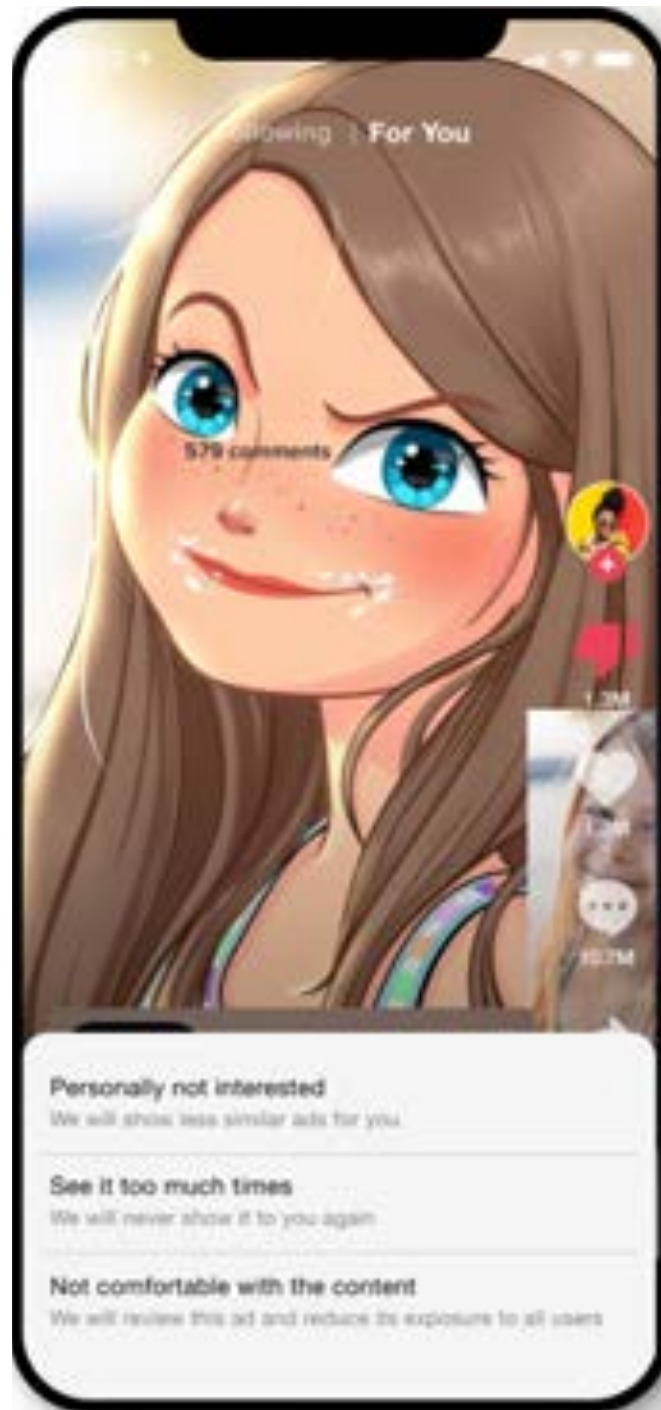


3/30 Click Rate

3.67/5 Comfortable level

Conclusion

Temporary Winner



Tell users what consequence their feedback will bring to

1. People have stronger willingness to give negative feedback
2. Benefit-driven thoughts have less influence on real actions compared with sense of avoiding trouble

Future Work



Get more participants
to finish comparison test



Find other possible ways to test
the ideas of 'improve timing' direction

Reflection

- 1. Balance of fun design, emotion, motivation and interaction**
- 2. Deep relationship of human feelings and technology**
- 3. Help and support from the class**