



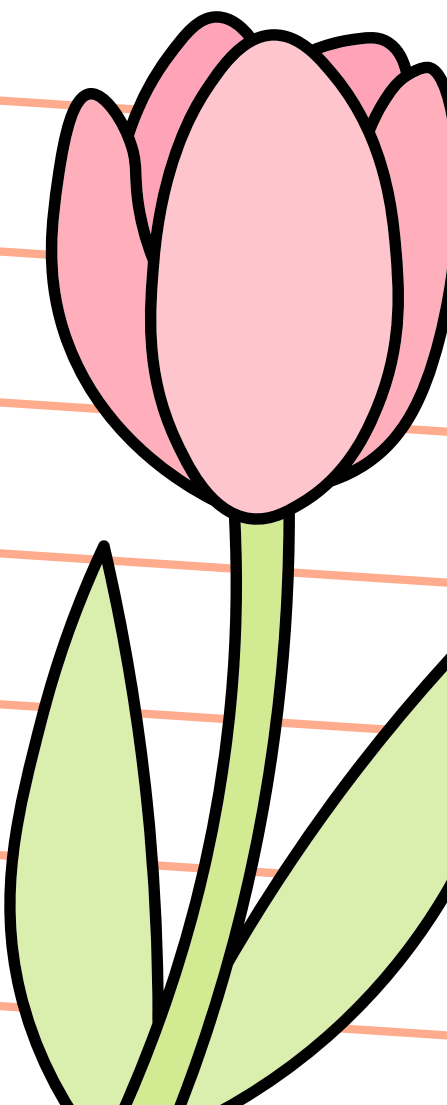
THE HUMAN- CENTERED DESIGN (HCD)



By GROUP 1

WHAT IS HCD ?

- approach that puts human needs, capabilities, and behavior first, then designs to accommodate those needs
- understanding psychology and technology
- is a design philosophy
- start with a good understanding of people and the needs that the design is intended to meet



HOW IS HCD DIFFERENT?

Experience design

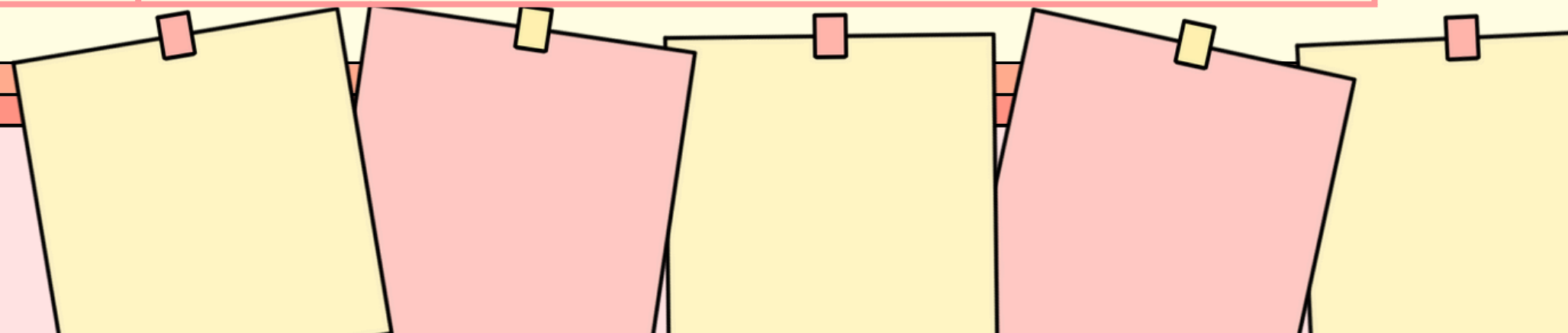
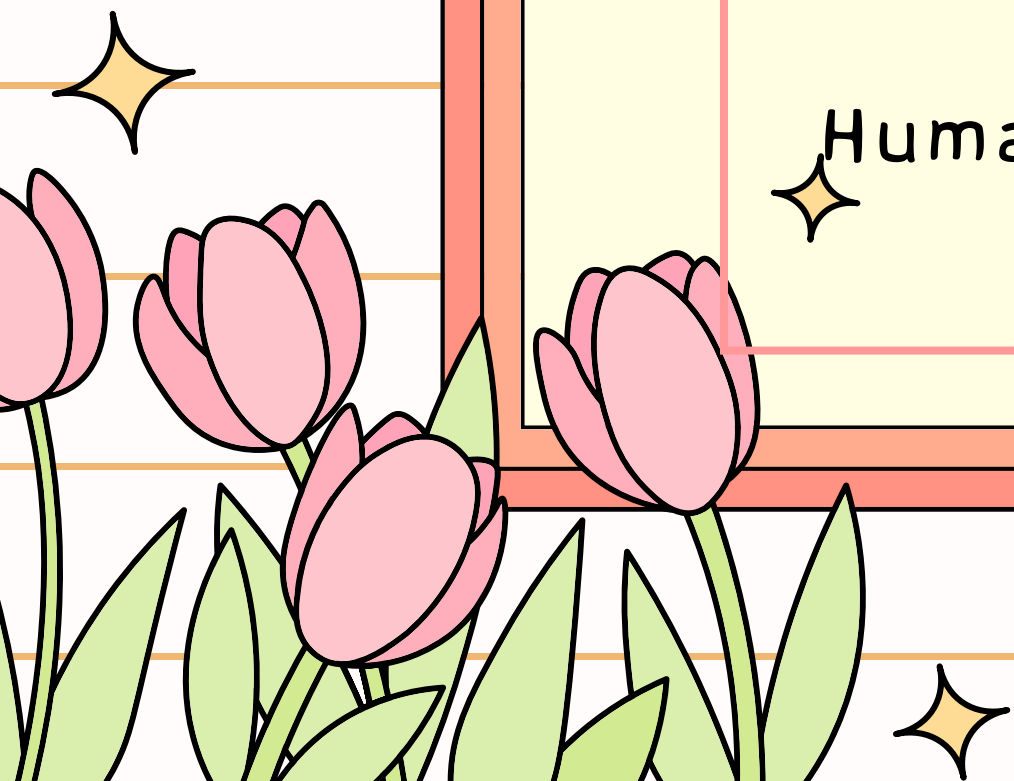
Industrial design

Interaction design

✧ Human - Centered design

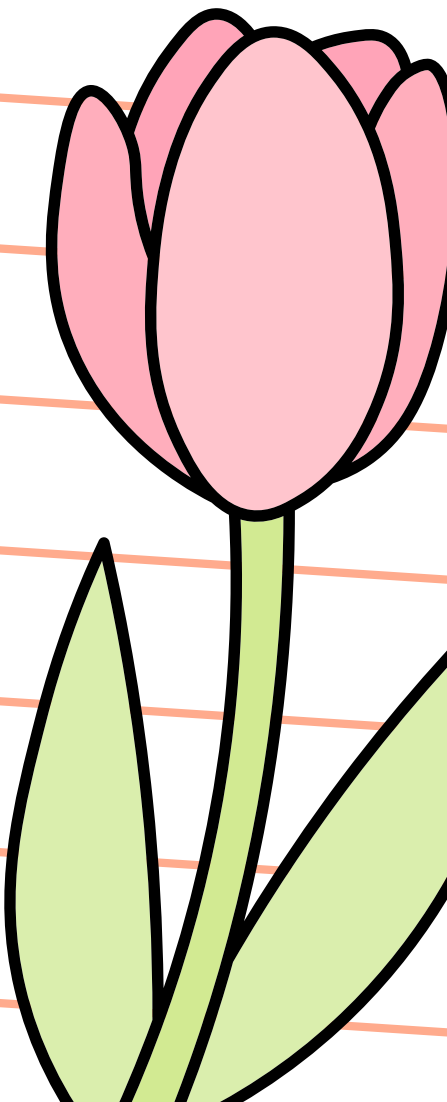
These are areas of focus

The process to ensure that the designs match the needs and capabilities of the people whom they are intended



WHY IS HCD IMPORTANT ?

- Humans are not perfect !
- prevent machines from dictating us
machine will function as programmed,
no matter how illogical it is
- eg; “human error” is inevitable in poorly
designed control panel.



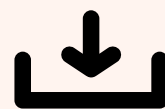
HCD PRINCIPLE

- avoid specifying the problem as long as possible
- instead, iterate upon repeated approximation
- rapid tests of ideas
- modifying the approach and the problem definition

✧ LIMITATION - expensive and time consuming

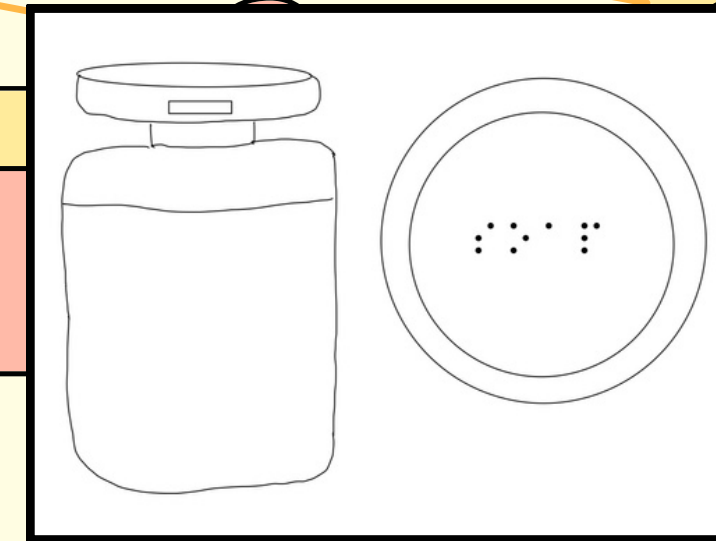


RE-DESIGN EXITING PACKAGING OF EVERYDAY PRODUCT



Number 7

LIQUID SOAP BOTTLE



AFFORDANCES

- Pumping action: The flat surface of the pump encourages pressing down with the palm, elbow, or even forearm → more inclusive for people with limited grip strength or dexterity.
- Stable handling: The flat design provides balance and stability, making it easier to use one-handed or with limited mobility.
- Accessible identification: The Braille on the cap affords tactile recognition → supports visually impaired users to identify the product independently.
- Easy dispensing: The pump design affords controlled dispensing, minimizing waste and spills.

SIGNIFIERS

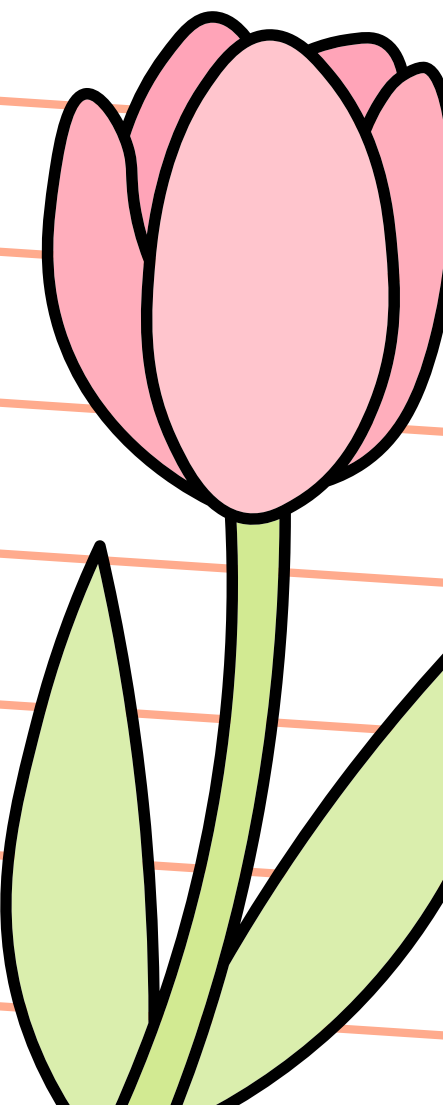
- Braille on the cap: Signals to visually impaired users what the product is (e.g., “shampoo”) → communicates the identity and purpose clearly.
- Flat pump surface: Acts as a visual and tactile signifier that indicates where to press and how the product is activated.
- Raised pump top: The physical elevation of the pump makes it clear that this is the interactive part of the bottle.
- Contrasting texture/color (if added): Could signal the top as the point of interaction for all users (not just visually impaired).

CONSTRAINTS

- The liquid soap has to be watery like, in order to be able to push it out.
- With the round design, it can be hard to pick it up when it slippery
- When it becomes slipper, it can be hard to read the braille

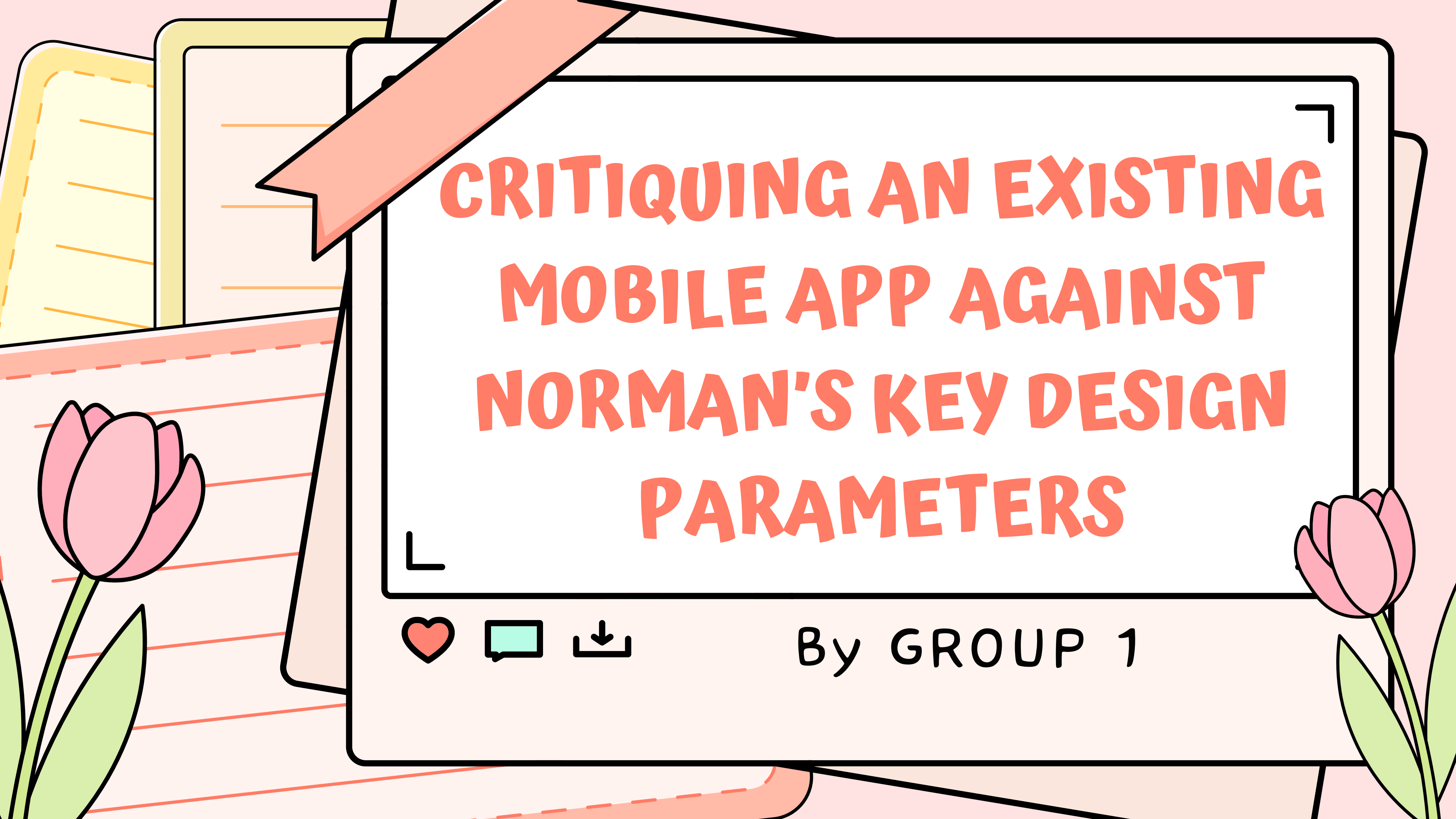
MAPPINGS

- The user can clearly feel and see the braille alphabet on the top of the product that translated to “soap” For user with eyes disability.
- The plum design to be very wide and round in order for it to be easier to pump the product out. For user with mobility issue

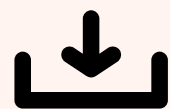


FEEDBACK

- With the braille on the top of the product.
It is obvious for all the user that we want
our product to be easier to use for user
with eyes disability



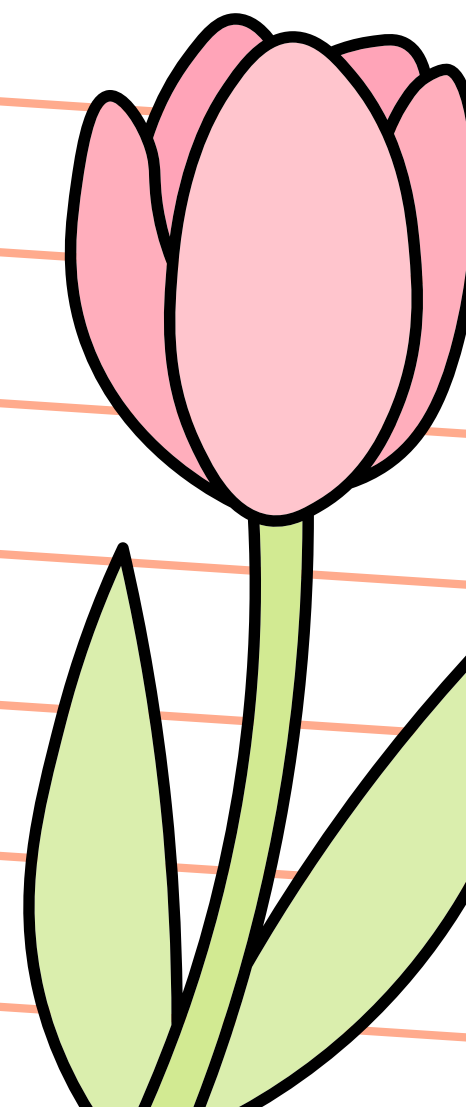
CRITIQUING AN EXISTING MOBILE APP AGAINST NORMAN'S KEY DESIGN PARAMETERS



By GROUP 1



TINDER



What actions should be encouraged, supported, or facilitated?

AFFORDANCES

Swiping left/right affords rejecting or showing interest in a profile.

Tapping the profile picture affords opening a larger view of photos/details.

Message icon affords starting or continuing a conversation with a match.

Super Like button affords signaling stronger interest to a user.

Profile editing tools afford customizing personal information, photos, and preferences.

Notification system affords keeping users updated about matches and messages.

Are there any signs/signals that communicate where the actions should take place, what actions are possible and how they should be done?

SIGNIFIERS

Left/right swipe motion is signified by animations (card moves off-screen left for “no,” right for “yes”).

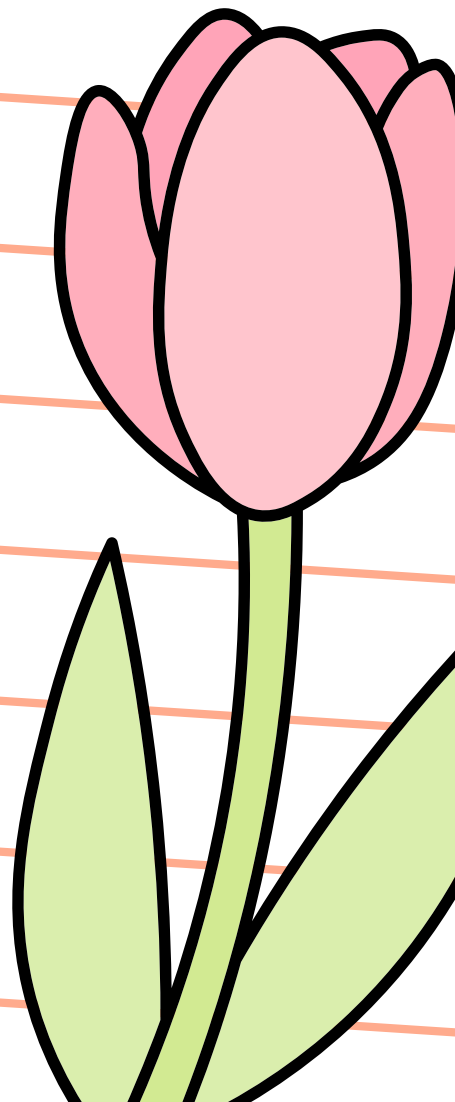
Heart icon clearly signifies “like,” while X icon signifies “dislike.”

Star icon signifies a “Super Like.”

Speech bubble icon signifies messaging and communication.

Camera/photo upload icons signify where to add or edit profile pictures.

Highlighted buttons and color coding (green for like, red for reject, blue for super like) signify clear actions and meanings.



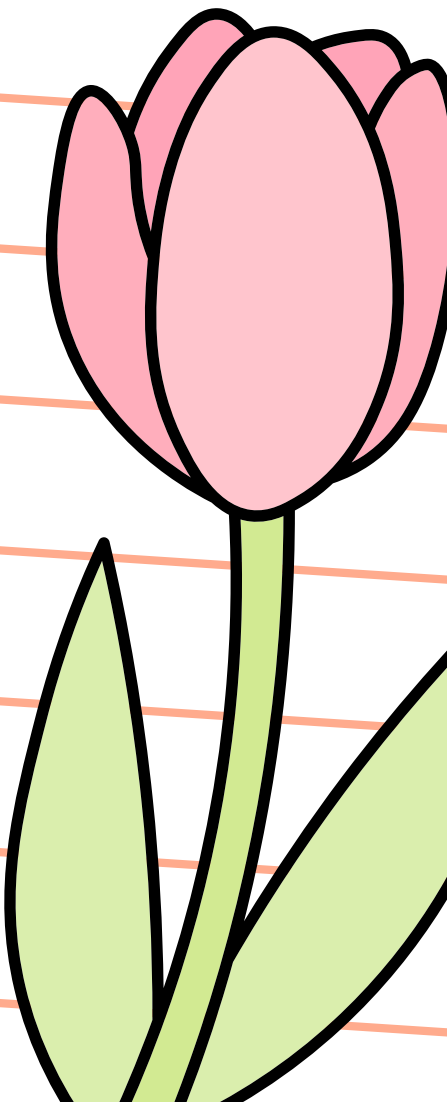
CONSTRAINTS

- Users cannot message someone unless there is a mutual match (both swipe right).
- This prevents unwanted or spam messages from strangers, adding a layer of safety and control.
- Constraints also exist in limited daily swipes unless a user pays for premium features, which discourages excessive use and pushes users toward upgrading.

Are the relationships between controls and desired actions clear?

MAPPINGS

- The swipe gesture maps directly to their intended action:
 - Swipe right = Like
 - Swipe left = Pass
 - Swipe up = Super Like
- This clear directional mapping mirrors physical actions, making it intuitive and easy to learn.
- Profile pictures, names, and basic info are placed front and centre, mapping to the primary goal of deciding quickly on attraction.



FEEDBACK

- Immediate visual and haptic responses confirm actions:
 - Swiping left/right shows a fading “NOPE” or “LIKE” overlay.
 - Super Like displays a blue highlight.
- Push notifications provide feedback when a match occurs (“It’s a Match!” screen).
- However, feedback on why a user might not be getting matches is limited, which could cause frustration and confusion.



THANK YOU

