Heuristic Evaluation of Reclaim

1. Problem/Prototype Description

Reclaim is a mobile app that creates a reverse marketplace for used items, making it easy for people to sell their unused old belongings.

2. Violations Found

1. **H2 Match b/w system & world/ Severity: 2/ Found by: B**
    a. Problem description: Item description hierarchy
    b. On the home page, items are listed by person first, then item. Conventionally, the title (bigger text) goes above details, which have a smaller font size. The first thing users want to see the item first, then tags, then the user selling and the description.
    c. Fix: swap large font item name with username. Consider moving tags to be second after title

2. **H3: User Control & Freedom/ Severity: 2/ Found by: B**
    a. Problem description: Back button errors across entire app
    b. After selecting "Desk lamp" on the home page and posting an offer, the back button deletes my post rather than bring me home. The back button continues to fail throughout this flow, and also fails after viewing "used airpods" under the home button.
    c. Fix: wire the back button to lead back to the home page. Consider pop-out notification if leaving the page with an unfinished post.

3. **H8: Aesthetic & Minimalist Design/ Severity: 3/ Found by: B, C**
    a. Problem description: Description images are too small
    b. When posting images in an offer, the images show up fairly small and there is no way to enlarge the images. Users may be confused on what they are being offered with such a small thumbnail.
    c. Fix: make thumbnail enlarge when clicked on

4. **H2: Match b/w System & World/ Severity: 2/ Found by: A,B**
    a. Problem description: The green "Open" tag is confusing
    b. The "open" tag purpose may be unclear to user. I assume it means that the offer is still up for grabs, but the wording of open doesn't capture that meaning.
    c. Fix: Use a different icon to indicate purpose, or re-word tag

5. **H2 Match b/w system & world/ Severity: 2 / Found by: B**
    a. Problem description: information hierarchy

    b. The first thing a user would want to see after their offer is accepted is the checkmark "xyz accepted your offer." However, in the prototype, the first information displayed is the reply comment.

    c. Fix: move accepted offer notification above comment

6. **H3: User Control & Freedom/ Severity: 2 /Found by B**

    a. Problem description: No reply option after offer is accepted

    b. After your selling offer is accepted, there is no way to reply to the buyer in case there are any questions or concerns.

    c. Fix: Create reply button

7. **H3: User Control & Freedom/ Severity: 3/ Found by: B, C**

    a. Problem description: No emergency exit when creating a new request

    b. There is no back button on the "create a new request" page and users may find it confusing to navigate to the previous page.

    c. Fix: add back button on create new request page so users can always "undo" or go back to a previous page.

8. **H4: Consistency & Standards/ Severity: 2/ Found by B**

    a. Problem description: No option to save request draft

    b. In the middle of creating a request, a user might accidentally switch tabs on the menu and lose all the information they were inputting for creating a request.

    c. Fix: create a "save request draft" option if exiting out of a half-filled request/ post

9. **H5: Error Prevention/ Severity: 3/ Found by: B,C**

    a. Problem description: Lacking option to include pictures in request

    b. There is no way to add pictures of what you are looking for when creating a request. Users may find it helpful to include a picture of what they are looking for in case description is not sufficient.

    c. Fix: add an option to add photos to request in the create a new request page

10. **H6: Recognition not Recall/ Severity: 3/ Found by: B,C**

    a. Problem description: Conversation difficult to follow

    b. Under "your posts" CS107 textbook item, the conversation between the user and Melissa is hard to follow at first glance. Especially if the conversation has a lot of comments, it would be easier to discern which comments are your own.

    c. Fix: create a layout that is more like a chat or messaging platform. Consider using speech bubbles or aligning the replies to the left or right depending on who is talking. (If the user is replying then the textbox should align to the right, but if someone else is replying to the user, the textbox should align to the left).

11. **H4: Consistency & Standards/ Severity: 3/ Found by: B**

    a. Problem description: inconsistent buttons

    b. The buttons on the accepting offer popup can create an implicit bias with one filled green and another filled white. The user is more likely to click the filled green button than the empty white button. If you want the user to decide on their own, the buttons should be identical without any implications.

    c. Fix: make both buttons filled white

12. **H3: User Control & Freedom/ Severity: 3/ Found by: B**

  a. Problem description: No emergency exit when accepting offer
  b. There is no way to exit the accepting offer pop-out without having to click leave open or decline all. It would be good to have an exit option in case someone accidentally clicks accept offer.
  c. Fix: under figma prototype, select the "close when clicking outside" overlay option or add a "x" button.

13. **H4: Consistency & Standards/ Severity: 2/ Found by: B**
  a. Problem description: confusing icon
  b. Your posts icon in menu does not match "your posts." Watchlist icon could use improvement too.
  c. Fix: Create an "your posts" icon that represents feed, a list, or a mailbox. Create a "watchlist" icon that represents an eye or list.

14. **H4: Consistency & Standards/ Severity: 2/ Found by B, A**
  a. Problem description: Confusing button/icon
  b. The number under number of days on your posts page may be confusing to users, especially the blue highlighting.
  c. Fix: Notification/ unread icons are often red circles with a number on it. Consider something like this:

15. **H10: Help & Documentation/ Severity: 1/ Found by: C,B**
  a. Problem description: No help desk
  b. There is no "help desk" option or FAQ for users who run into problems with the app are face confusion.
  c. Fix: create a help button option under profile

16. **H2: Match b/w System & World/ Severity: 2 / Found by: C, B, A**
  a. Problem description: Changing username is unconventional
  b. When changing username, the "new" box may not be intuitive to users. In addition there is no need for an entire new page for something simple like changing a username.
  c. Fix: Create a layover pop up for when the user clicks on "name". Create an edit button where they can just type a new name instead of a "new" box".

17. **H3: User Control & Freedom/ Severity: 2/ Found by: B**
  a. Problem description: Privacy
  b. It appears as though the user must input a location that is public on Reclaim. Users may not want to disclose their location / they may want to personalize privacy settings.
  c. Fix: Create an option to meet up to exchange.

18. **H4: Consistency & Standards/ Severity: 1/ Found by: B**
  a. Problem description: Inconsistent instances of recency description

  b. In "your posts" the recency of the post is in the upper right corner of the post, whereas in "notifications" the recency is in the bottom left corner.

  c. Fix: make both recency appearances consistent on the right side of the notification/ post.

19. **H1: Visibility of System Status/ Severity: 3/ Found by: C, B**
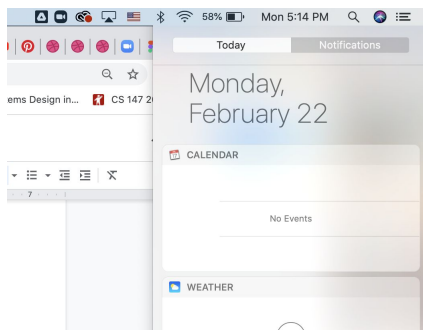
  a. Problem description: no Notifications

  b. There is no icon indicating that the user received new notifications.

  c. Fix: add a small notification number or bubble overlaying bell icon in the upper righthand corner to indicate a new notification has arrived.

20. **H1: Visibility of System Status/ Severity: 2/ Found by: B**

  a. Problem description: No indication of read notifications

  b. In the list of notifications, there is no indication of which were read and unread. This decreases efficiency on the app since users have to take time to discern which notifications are not read yet.

  c. Fix: highlight the notifications that need to be checked.

21. **H7: Flexibility & Efficiency of Use/ Severity: 3/ Found by: B**

  a. Problem description: Excessive number of pages for trivial info

  b. Notifications can be condensed and do not need to take up an entire page. The more pages there are, the more likely users will get disoriented and confused about where they are on the app.

  c. Fix: create notifications page as a slide out overlay coming from the right. An example of this would be the notifications on a mac laptop (upper right corner).

22. **H3: User Control & Freedom/ Severity: 3/ Found by: B, A**

  a. Problem description: No emergency exit

  b. There is no back button on the notifications page. Users may be disoriented on app without being able to backtrack.

  c. Fix: same as fix in #21

23. **H4: Consistency & Standards/ Severity: 2/ Found by: B**

  a. Problem description: Confusing to edit

  b. Users may get confused how to edit an item on the watchlist because the box under "What item should we alert you about" appears fixed

  c. Fix: create an "edit" textbox in a light color for the right side of the box to indicate that the item name is editable

24. **H5: Error Prevention/ Severity: 3/ Found by: A, B**

   a. Problem description: Watchlist only has 1 purpose - confusing
   b. The word watchlist can imply watching out for specific items to buy (not sell). Will I only be notified if an item specifically contains the words "Sunglasses." What if there is a typo? What if an item is described as "Shades" instead? This ties to H2 because the conception of what a watchlist is has been established among many to be tied to a specific item, whereas here it seems multiple items would fit the bill by nature, and that can be confusing.
   c. Fix: Create tabs (buy vs. sell) similar to the ones found in the "your posts" page can clear up confusion and offer more flexibility within the app.

25. **H8: Aesthetic & Minimalist Design/ Severity: 3/ Found by: B**
    a. Problem description: Too text heavy
    b. Overall the app is very text heavy with barely any images. Users could potentially be driven away from using the app if it looks too wordy or technical.
    c. Fix: Images can be the largest component when advertising for an item. It can definitely replace the profile photo, since that is not as important as identifying the item.

26. **H8: Aesthetic & Minimalist Design/ Severity: 2/ Found by: B, C**
    a. Problem description: Lack of color
    b. Right now the color palette contains a lot of grayscale colors with only 1 more vibrant color. This can be very off-putting for users and can take away from their experience, which can discourage app use.
    c. Fix: add another color to your color palette (consider one that pops and can be used for notifications icons). Play around with gradients.

27. **H4: Consistency & Standards/ Severity: 1/ Found by: B**
    a. Problem description: Excessively long page
    b. After making a request, the page with the request post contains excessive length. Users may be confused if there is too much empty space at the bottom.
    c. Fix: limit the height of the frame

28. **H4: Consistency & Standards/ Severity: 4/ Found by: B**
    a. Problem description: No place for profile picture
    b. Though there is a profile picture of users on the home page, there is no option to add your own profile picture or edit it on the account tab. If the app contains profile pictures, there should be a place to edit them under account.
    c. Fix: create profile picture editor in account

29. **H2: Match b/w System & World/ Severity: 3/ Found by: A,B**
    a. Problem description: no option to select price lower than $10
    b. Users may want to sell or buy items that are less than $10, but with the number scroller, there is no option to request a price lower than $10. It only goes free, then $10-$20.
    c. Fix: One way to streamline pricing is to have an average price input and a plus minus input so that then users can request/ offer a more specific price.

30. **H4 Consistency & Standards/ Severity: 2/ Found by: A**
    On the first screen, only first names are shown for most of the people selling items, but

the first and last name are shown for "James Landay." It's unclear why this is. It's also unclear what would happen if multiple people with the same first name were selling items, especially since profile pictures can change.

Fix: Give each seller a unique usernames that is shown in addition to that user's display name. Also, consider only showing a seller's full name to a buyer once a deal has been arranged.

31. **H1: Visibility of system status/ Severity: 2/ Found by: A**

There are tabs for different sections at the bottom of the first screen, and it shows that the first screen is the "Home" screen. However, it seems that the home screen is exclusively for seeing products available on the marketplace. The other tabs have descriptive names, whereas the "Home" name is meaningless since a homepage could be anything and this one is more of an "Community posts" page.

Fix: Either nix the "Home" label for the first screen and name it appropriately, or make an actual homepage.

32. **H5. Error prevention/ Severity: 3/ Found by: A**

There is no documentation on the limitations of renaming oneself on the app, making it seem like one can change their identity as often as they would like with no limitations.

Fix: There should be guidelines on how often someone can change their name shown proactively on that screen so that someone is aware of the implications of renaming their profile on the app.

33. **H6 Recognition rather than recall/ Severity: 3/ Found by: A**

I'm including this because I noticed that someone can rename their profile at any time, yet only the profile name and phone number is shown even after a deal is finalized, which could lead to confusion if a user changes their name after a deal is finalized and the buyer has attributed their contact info to the previous name.

Fix: There should be more limitations on name-changing to reduce confusion among the users.

34. **H10 Help and documentation/ Severity: 2/ Found by: A**

There is no guide on communicating with the buyer after a deal is made; the seller just gets their contact information. For a service like this, there should be documentation on community best practices to help reduce issues and confusion.

Fix: Add link(s) to community guidelines, rules, best practices, etc. under the options to "Withdraw offer" and "Report a problem" when interacting with a buyer.

35. **H3 User control and freedom/ Severity: 2/ Found by: A, C**

There is no back button when adding or editing an item on the watchlist, meaning someone would have to click on the navigation at the bottom of the screen to go back to the main watchlist page.

Fix: Add a "Back" button underneath the "Set Up" button when on the screens to add and edit a watchlist item.

36. **H10 Help and documentation/ Severity: 3/ Found by: A**
On the watchlist page there is a note saying that users will receive notifications about items on their watchlist, but there is no description of how notifications work elsewhere in the app, nor is there a place to set notification preferences (other than implicitly via the watchlist.) Notifications are one of the most highly demanded areas for customization of preferences among app users.
Fix: Add to the notifications screen and any other applicable screens a clear description of how the notifications work and a way to toggle / personalize sufficiently to reduce annoyed users.

37. **H2 Match between system and the real world/ Severity: 2/ Found by: A, C**
I was confused by the option to "automatically decline all other offers" when accepting an offer as the seller. In the real world, accepting an offer would inherently decline all others is my understanding. I could see how maybe this would be useful if the deal somehow falls through after acceptance, but in that case wouldn't you always want the fallback? I'm confused about the pros/cons here.
Fix: Clarify what this prompt means or remove it altogether if there are not clear pros/cons that would cause users to consider either option.

38. **H4 Consistency and standards/ Severity: 1/ Found by: A**
On the "Home" page we can see that posts are sorted in accordance with a filter such as "Newest," but such filters cannot be found on the "Your Posts" tab.
Fix: Add the same ordering filters to the "Your Posts" tab that are usable on the "Home" tab.

39. **H4 Consistency and standards/ Severity: 2/ Found by: A**
There is a search option on the "Home" screen but not on the "Watchlist" or "Your Posts" screens, which I found confusing along with the aforementioned lack of filtering on those latter screens.
Fix: Add search functionality to the "Watchlist" and "Your Posts" screens a la "Home" screen.

40. **H7 Flexibility and efficiency of use/ Severity: 2/ Found by: A**
When viewing someone else's post, there is only the option to "Post an offer…" when commenting, which seems unnecessarily limiting.
Fix: Offer users the opportunity to comment on and flag posts in the comment space instead of only labeling their option as "Post an offer…"

41. **H8 Aesthetic and minimalist design/ Severity: 1/ Found by: A**
There is some unnecessary text on the page for adding something to the watchlist that doesn't really share anything useful, like where it says, "*Our algorithm will intelligently notify you*" the words in italics come off as a bit much.
Fix: Reduce the fluff and replace with a meaningful description of how the notifications work or none at all for simplicity.

42. **H1: Visibility of System Status/ Severity: 3 / Found by: C**
In the user's 'CS107 Textbook Post', Mary's softcover offer subtly pops up in the middle of the user's negotiation with Melissa. The user doesn't get any indication on screen that this new offer was just made.
<u>Fix:</u> Put a blue dot (similar pattern to the unread posts in Home) in-front of Mary's post to indicate that it is new/unread

43. **H2 Match between system and the real world / Severity: 2 / Found by: C**
In the user's posts, the distinction of 'Requested' and 'Offered' is a bit unclear if the user isn't familiar with Reclaim's terminology. Offered might mean the items that the user has been offered, which goes against the intended meaning of the app that refers to 'Offered' as the items that the user has offered to someone else.
<u>Fix:</u> Use a more common and easily differentiable terminology like 'Buying' and 'Selling'.

44. **H2 Match between system and the real world / Severity: 2 / Found by: C**
When adding to the watchlist, the final action is called 'Set Up'. This is vague since it doesn't qualify what's being set up and also implies a different meaning from the rest of the task flow, which actually asks users to add items to their watchlist.
<u>Fix:</u> Change button text to 'Watch' (would also be consistent with the Unwatch button later on)

45. **H3 User Control and Freedom / Severity: 4 / Found by: C**
The user is forced to wait until they accept someone's offer before they can see their accepted payment methods. This can be quite inconvenient if the user doesn't support their payment method, as they'd have to likely either cancel their offer (and scramble to reopen others that they may have already denied) or try to figure out how to pay them.
<u>Fix:</u> Allow users to (anonymously) view a seller's accepted payment types before they accept their offers. Perhaps a short line underneath seller posts that says 'Accepts Venmo and Cash'

46. **H4 Consistency and Standards / Severity: 1 / Found by: C**
In Notifications, the first notification shows Sarah's picture (the user) and the second notification shows Mary's picture (the person who made an offer), even though both requests are of the same nature.
<u>Fix:</u> Make all pictures belong to the other (non-user) party, including the first notification where we should see Melissa's picture, not Sarah's.

47. **H4 Consistency and Standards / Severity: 1 / Found by: C**
Some notifications bold the text concerning the product name and others don't. Example: Mark's first notification shows 'Airpods' in bold but his second notification concerning the declined offer shows 'Airpods' in plain font.
<u>Fix:</u> Make all product names bold to clearly emphasize the nature of the notification.

48. **H4 Consistency and Standards / Severity: 2 / Found by: C**
When the user posts their offer for a lamp, the ellipsis icon next to their post does not convey that their offer is being reviewed. Instead, in general app convention, that icon represents a settings/menu. This icon is also different from the clock 'in review' icon that we see in the 'Your Offers' list.
<u>Fix:</u> Change 'in review' icon to be consistent with the clock icon

49. **H5 Error Prevention / Severity: 3 / Found by: C**
    App allows users to remove items from their watchlist without any confirmation. Since the 'adding to watchlist process' takes a few seconds, it would be cumbersome to have to re-add an item just because of an accidental click on a button.
    Fix: Add a quick confirmation message to a user when they remove an item from their watchlist

50. **H5 Error Prevention / Severity: 2 / Found by: C**
    Even after the user accepts an offer and declines all other offers, the app still shows options to decline other people's offers. This is confusing and may result in users interacting with other people's offers in unpredictable ways e.g. try to reopen them in the hopes of 'properly' declining them.
    Fix: Remove the option to decline other people's offers once the user has already decided to decline all other offers.

51. **H6 Recognition rather than recall / Severity: 2 / Found by: C**
    Once the user has accepted an offer, it's cumbersome to go back into the post and specific thread where they accepted the seller's offer to view the seller's name and payment details.
    Fix: Show the accepted seller's summary on the request in the user's list of posts.

52. **H6 Recognition rather than recall / Severity: 1 / Found by: C**
    The tags/labels for each request are only shown in the list view but cannot be accessed in the actual post. This might make it difficult for the user to remember why they got to a specific post.
    Fix: Show the tags/labels in a line underneath the post header.

53. **H7 Flexibility and efficiency of use / Severity: 2 / Found by: C**
    If users want to remove multiple items from their watchlist, they have to manually go to each one and remove it.
    Fix: Allow skilled users the option to select all items they want to remove from their watchlist and remove them all at once.

54. **H10 Help and documentation / Severity: 1 / Found by: C**
    When adding items to the watchlist, the information about the historical frequency of alerts for a specific item is unintuitive to grasp immediately without any guidance on what it means.
    Fix: Add some helper text at the bottom to illustrate what it means ('On average, this is the number of users who request this item per month')

3. Summary of Violations

Category	# Viol. (sev 0)	# Viol. (sev 1)	# Viol. (sev 2)	# Viol. (sev 3)	# Viol. (sev 4)	# Viol. (total)
H1: Visibility of Status	0	0	2	2	0	**4**
H2: Match Sys & World	0	0	7	1	0	**8**
H3: User Control	0	0	4	3	1	**8**
H4: Consistency & Standards	0	5	7	1	1	**14**
H5: Error Prevention	0	0	1	4	0	**5**
H6: Recognition not Recall	0	1	1	2	0	**4**
H7: Efficiency of Use	0	0	2	1	0	**3**
H8: Minimalist Design	0	1	1	2	0	**4**
H9: Help Users with Errors	0	0	0	0	0	**0**
H10: Help & Documentation	0	2	1	1	0	**4**
Total Violations by Severity	**0**	**9**	**26**	**17**	**2**	**54**

Note: **check your answer for the green box by making sure the sum of the last column is equal to the sum of the last row (not including the green box)**

4. Evaluation Statistics

Severity / Evaluator	Evaluator A	Evaluator B	Evaluator C	Evaluator D	Evaluator E
Sev. 0	0	0	0		
Sev. 1	22.22%	33.33%	55.55%		
Sev. 2	38.46%	50%	34.67%		
Sev. 3	35.29%	70.5%	41.1%		
Sev. 4	0%	50%	50%		
Total (sevs. 3 & 4)	37.21%	68.4%	42.11%		
Total (all severity levels)	33.33%	53.7%	42.6%		

*__Note that the bottom rows are *not* calculated by adding the numbers above it.__

5. Summary Recommendations

It was difficult to identify many issues with Reclaim's medium-fi prototype. Overall, the design is clean and lightweight. The content feels front and center for the most part, and the icons and descriptions that do appear in the app are usually helpful and concise.

The main issues we observed have to do with lacking documentation, inconsistencies, lack of appealing aesthetics and odd departures from our understanding of interactions in a traditional marketplace like this. Some of the language and options (or lack thereof) also felt out of place.

The first thing a user wants to see is 1) what the item is and 2) how much the item costs. Consider making the home page more like an infinite scroll feed, emphasizing images, rather than the current email layout. For the "your posts page," users who post a lot might get confused with a list of all of the items they have posted. If a user posts a lot, this layout might require a lot of scrolling and mental juggling to keep track of all the information. It would be useful to grid the images of items so there is more quick, visual recognition and less of a need to scroll.

One big picture recommendation for Reclaim is to focus more on aesthetic. It is clear that a lot of time was spent on functionality and less time was spent on aesthetics. Right now there is only 1 green color on the app and white, whereas conventional color palettes include 1 main color, at least 1 secondary color, and 1 "pop" (often complementary) color. Consider subtle gradients and make the text a dark green color, rather than just black. Rounding sharp edges and adding more images can make the app more user friendly too. For example, removing the profile pictures on the home page and replacing them with images of the item will not only make the app more visually appealing but also increases functionality.

Another big picture recommendation is to avoid creating new pages whenever possible, especially if the information doesn't take up a whole page. Users can only keep track of a small sequence of pages and might get disoriented with too many clicks leading to new pages. Instead, consider using overlays that pop-up or condense information to fit on less pages. For example, editing one's username on the account page doesn't require an entire new page (if so, most of the page will be empty space). Instead, have an edit button on the right where you can type directly into the name box or have an overlay pop-up.

Lastly, we also wanted to share some feedback beyond the scope of Nielsen heuristic violations. One concern we have is about your Task 3 (Accepting Offers). In your prototype, accepting an offer involves getting access to the seller's payment details and making the transaction. But we're not sure what post-purchase support (if any) Reclaim would provide to its users. Upon approving an offer, there is a button in the prototype that says 'Report a Problem' but we're not sure what exactly this does. Is it limited to logistical issues around completing the transaction or can users also use it to lodge a complaint against a seller or enact any checks/balances on them (e.g. a ratings/review system) if they do not conscientiously fulfil their obligations (faulty/misrepresented item)? Additionally, it would be helpful to see how much money a user has made in a certain time period and how much a user has spent. This can incentivize users to use the app more and help them keep track and organize all of their interactions.

Overall, we were really impressed by Reclaim's design. Really looking forward to seeing how it works out!

Severity Ratings

0 - not a usability problem
1 - cosmetic problem
2 - minor usability problem
3 - major usability problem; important to fix
4 - usability catastrophe; imperative to fix

Heuristics

H1: Visibility of System Status
- Keep users informed about what is going on

H2: Match Between System & Real World
- Speak the users' language
- Follow real world conventions

H3: User Control & Freedom
- "Exits" for mistaken choices, undo, redo
- Don't force down fixed paths

H4: Consistency & Standards
- Words, actions, and UI elements should be consistent across the entire platform
- Follow platform and industry conventions

H5: Error Prevention
- Minimize error-prone conditions
- Remove memory burdens, support undoing, and warn your users when necessary

H6: Recognition Rather Than Recall
- Make objects, actions, options, & directions visible or easily retrievable

H7: Flexibility & Efficiency of Use
- Accelerators for experts (e.g., gestures, keyboard shortcuts)
- Allow users to tailor frequent actions (e.g., macros)

H8: Aesthetic & Minimalist Design
- No irrelevant information. Focus on the essentials.

H9: Help Users Recognize, Diagnose, & Recover from Errors
- Error messages in plain language
- Precisely indicate the problem
- Constructively suggest a solution

H10: Help & Documentation
- Easy to search
- Focused on the user's task
- List concrete steps to carry out
- Not too large