

Landscape orientation was chosen to allow for larger font sizes since the application is not demanding on vertical space.

The landscape screen orientation is also likely to be more familiar to seniors than a portrait one: TVs, ATMs, airport Check-in kiosks, etc are typically landscape.



Welcome! This is a quick screen of your ability to read medication labels.

Touch here to start ->

Emphasis on the font and button sizes (width/height) used in this mock-up, since this app is for people who are potentially visually impaired. Emphasis on the use of the displayed colours as well - e.g. green for "continue" or "done" buttons.

Buttons should be located towards the bottom and bottom right due to easier/more ergonomic access by a standing user. Most people are right handed and all users will be standing, so shorter travel is required to reach the bottom-right area.

Emphasis on large, basic, functional aesthetics.

Tried to keep words simple due to literacy issues. 1-2 syllables.

Touch any box to check it.

Do you use...

Glasses or contact lenses

Are you wearing your glasses or contact lenses right now?

Bifocals or reading glasses

Are you wearing your bifocals or reading glasses right now?

Large print materials

A magnifier

Are you using your magnifier right now?

Does anyone help you take your medications at home?

Do you have difficulty reading...

Prescription labels

Non-prescription labels

Worn prescription labels

Glossy papers (magazines)

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

The disabled (grayed-out) labels should only appear if the user checked the box above them. Would be preferable if they appeared as a new row via a smooth animation instead of a sudden appearance, which might throw users off.

Emphasis on the size and close proximity of the checkboxes with respect to their associated labels.

Touch here when done

Cancel

Size this list such that font size is large but all questionnaire items remain on-screen. The need to scroll should be avoided.

If, via future client requests, list becomes too long and scrolling becomes necessary, add scroll bar. the "Touch here button" should be at the bottom of the list, not overlaying the questionnaire itself, since users may simply view the button as the bottom of the questionnaire and neglect the rest of the items.

"Start Over" changed to "cancel" because it may be confused with starting over this particular screen.

Also, moved to lower left:

lower: out of user's sight, one of the later elements to be noticed. We want the instructions to be noticed first.

left: associated with back.

Buttons are located towards the bottom and/or to the right due to easier/more ergonomic access by a standing user.

Most people are right handed and all users will be standing, so shorter travel is required to reach the bottom and right areas.

This text should have large, red font. It should appear with some degree of animation (e.g. swipes down from the top bezel, or simply flashes a few times). It will remain on the screen until the user interacts with ANY other UI element (including dragging the pills). NOTE: this element should appear/animate AFTER the animation, with a small delay in between. This will ensure that no simultaneous animations/effects are occurring on the screen, and the app will successfully drive the user's attention towards the correct elements.

Please repeat the test.

Follow the instructions on the drug label below by dragging the tablets into the correct boxes.

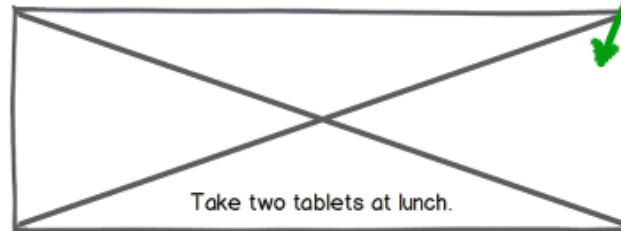
The instructions on the label should be randomly generated, with certain reasonable constraints, for example:

"Take { random (1-3) } tablets at { timeslot }

OR

"Take { random (1-2) } tablets at { timeslot 1 } and { random (1-2) } tablets at { timeslot 2 }"

Users should not have to drag more than 2-3 tablets per question, as shaky hands and poor dexterity may make it difficult to repeat these dragging motions.



Touch here if you can not read label

Emphasis on the colour. Used orange to have it noticeable enough but so it does not become more salient than the green "done" button.

Serves the same function as an incorrect response: user must repeat test with the next larger label font size. NOTE: If largest font size is displayed (18pt) and user presses this, they are taken to the next screen.

Tablets:

Pills should have the same label - "Pill" - a simple vector graphic of a pill will do, with the "Pill" label built-in.



Dinner

Bedtime

1. Emphasis on the distance between each time slot box. This makes the user less prone to interaction error if he/she has shaky hands.

2. A bounding box should be drawn around these boxes to slightly resemble real-life pill boxes.

3. Users should be able to drag pills out of box. Pills should appear as large as possible, depending on the number of pills dragged into each box (i.e. they should resize appropriately).

4. Each time slot box should slightly enlarge itself when a user hovers a pill over it. This makes it easier for users with poor dexterity to drop the pill into the enlarged target. Note that the size of the bounding box should be STATIC - it should accommodate for the enlarged timeslot box size.

Cancel

Touch here when done

Emphasis on size, colour, and location of button. Button is disabled until at least one tablet is dragged into a time slot

When this button is tapped, OR when the user fails a trial, I would suggest adding an effect/animation which makes it appear as if the current label has been discarded and is being replaced by a new label. For example, the current label swipes to the right and disappears, while the new label swipes left from the same location and takes its spot.

If no effect or animation were present, due to the almost negligible step in font size, the user may not notice a change at all and press the button again.

Also, during the label replacement animation, the button should be DISABLED (and visually so) so as to discourage repeated tapping. This animation should occur BEFORE the "please repeat test"

If user gets the answer right and presses DONE, the game is finished and the app progresses into the next screen.

If user gets the answer wrong, the same screen is presented with the same label size, but with a larger label font size.

This is repeated until:

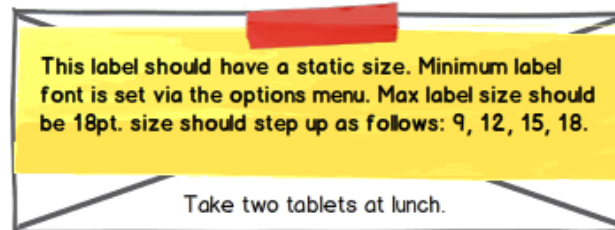
a) the user gets the answer right

OR

b) the user fails the test with the largest font size available

In both (a) and (b), the user is taken to the next app screen and the pharmacy staff will receive an appropriate recommendation depending on the patient's performance in the game.

Follow the instructions on the drug label below by dragging the tablets into the correct boxes.



Touch here if
you can not
read label

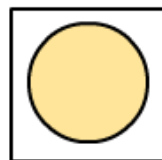
Tablets:



Pills should have static positions.



Morning



Noon



Dinner



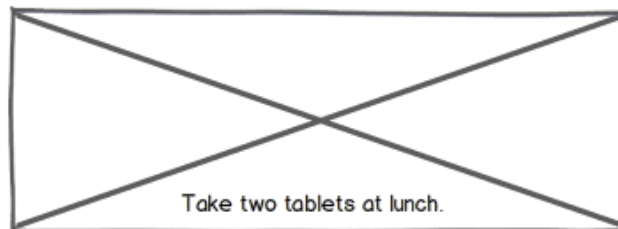
Bedtime

Cancel

Touch here when done

- If a tablet is released anywhere outside of a box, it should move (animate) back to its original position. Users should be able to drag tablets out of a box.
- When tablet is within a few pixels of the border of a box, the box should slightly enlarge, indicating a release action is required to drop the tablet.

Follow the instructions on the drug label below by dragging the tablets into the correct boxes.

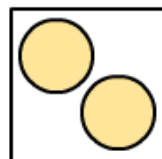


Touch here if
you can not
read label

Tablets:



Morning



Noon



Dinner



Bedtime

Cancel

Touch here when done

You are done!

Show this screen to your pharmacist.



Pharmacist access

Cancel

Ideally, keep the UI consistent between the patient and pharmacist portions of the app...such as button locations and sizes. Take advantage of screen space and use large buttons to allow for a better experience in a crowded and faced-paced work environment.

Medications

Select any of the patient's medications/medical conditions that could contribute to poor vision.

- ☒ Corticosteroids
- ☐ Anticholinergics
- ☐ Eye drops
- ☒ Diabetes
- ☒ Hypertension

☐ Glaucoma

☐ Cataracts

☒ Other 1

☒ Other 2

☒ I

☒

Arrange items such that no scrolling is required. Allow for a few customizable text entry fields. Space items out so they are easy to touch.
If user enters text in a custom field, automatically check

Done

"Done" is disabled until at least one box is checked.

Skip

Cancel


Advice for pharmacy staff

- Use the standard label
- Print second label (18pt)
- Colour/number code
- Do not tape
- Recommend patient to follow-up with an optometrist

What is the smallest label font size printed at your pharmacy?

- ☒ 9pt font (this text is 9-point font)
- ☐ 12pt font (this text is 12-point font)

Start Over

Options 

simple slide-up menu:

- Tapping "Options" will expand the menu
- Radio buttons
- NO save/apply/OK button. selection is saved instantly
- tapping anywhere outside the box (except "Start over") will collapse the menu. User should be able to tap "start over" button even when this menu is expanded.