

## HEURISTIC EVALUATION

# Take Your Pills

6.831 HW2: April 25, 2013

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This document lists some of the potential issues in both the doctor and patient interfaces. I have ignored issues of functionality (things like missing or incorrectly implemented actions) as this is expected to be a shallow interface, and have instead focused on the usability of the front-end.

## DOCTORS' DESKTOP INTERFACE

SEVERITY:

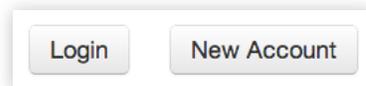
Minor

HEURISTICS:

Efficiency

Graphic Design

### Login vs. New Account confusion



The two action buttons on the login page look very similar and are easy to confuse.

Consider coloring the "Login" button to make it more prominent, and placing it as the rightmost action (where users generally look for the primary action for a form).

SEVERITY:

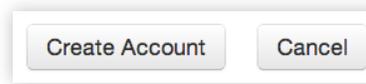
Minor

HEURISTICS:

Efficiency

Graphic Design

### Create Account vs. Cancel confusion



Similarly, the two action buttons on the account creation page look very similar and might confuse users.

Again, consider using something like color to make the main action stand out, and consider placing it furthest right.

SEVERITY:

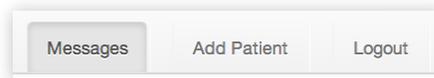
Cosmetic

HEURISTICS:

Efficiency

Graphic Design

### Logout just like other navigation items



The "Logout" button looks very similar to the other items in the main navigation, so users

might mistake it for a link to another page in the interface rather than the difficult-to-undo action it is.

SEVERITY:

Cosmetic

HEURISTICS:

Graphic Design

### Doctor's name affords clicking, does nothing



With its hover state and consistent styling and positioning with the other navigation items in the top menu bar, the doctor's name looks and feels like it should be clickable and actionable, but it is not.

SEVERITY:

Catastrophic

HEURISTICS:

Learnability

Visibility

User Control

### Only way to access patient page is search

The navigation links across the top offer access to the "Messages" page and the "Add Patient" form. However, it is unclear that the doctor can access pages with information specific to each patient by searching the patient's name.

As far as I can tell, there is no other way to access these patient

pages, and doctors are likely to want to access the pages at times other than when they are searching.

SEVERITY:  
Minor

### Default page shows only messages

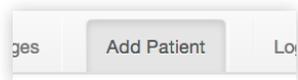
HEURISTICS:  
Efficiency

The first page that a doctor sees when he or she logs in is the “Messages” page. An overview page, perhaps with a recent history or a feed of actionable items and time-sensitive information, might be more appropriate as a landing page for a doctor visiting the application.

SEVERITY:  
Cosmetic

### Patient page has “add patient” highlighted

HEURISTICS:  
Graphic Design



When on a patient’s page, the “Add Patient” item in the main navigation is highlighted, offering the confusing suggestion that the user is at the “Add Patient” form (which is not the case).

SEVERITY:  
Minor

### Autocomplete on add & edit drugs

HEURISTICS:  
Efficiency  
Safety

The “add” and “edit” drug forms would benefit greatly from an autocomplete feature. Right now, fields like “Pill Name” and “Dose” allow for free-form text input, while more structured inputs and suggestions would allow for safer user interaction and perhaps more efficient usage of the form.

SEVERITY:  
Minor

### Dose frequency wording

HEURISTICS:  
Learnability



The “Dose Frequency” dropdown uses phrasing like “cycle” and “specific time” which could be unclear to a doctor trying to

prescribe a new medication to a patient. Perhaps there is a way to change the frequency portion of the form to offer improved usability.

SEVERITY:  
Minor

### Save vs. Delete Drug confusion

HEURISTICS:  
Efficiency  
Safety  
Graphic Design



The “Save” and “Delete Drug” action buttons on the edit form are visually very similar and right next to each other.

Consider reworking these actions so that it is unlikely that a user accidentally clicks “Delete Drug.” There is a good confirmation dialog which helps prevent accidental deletion of drugs, but inadvertently clicking the delete button might frustrate a user.

SEVERITY:  
Major

### General navigation difficulties

HEURISTICS:  
Visibility  
Learnability  
User Control

While using the application, I often found myself “lost” and wondering if there were pages that I was missing or wondering how to return to an interface I was viewing earlier.

The application doesn’t seem to expose a clear “map” of its hierarchical organization to the user, causing such confusions.

SEVERITY:  
Major

## Clear form action on patient edit form

HEURISTICS:  
Safety  
Graphic Design

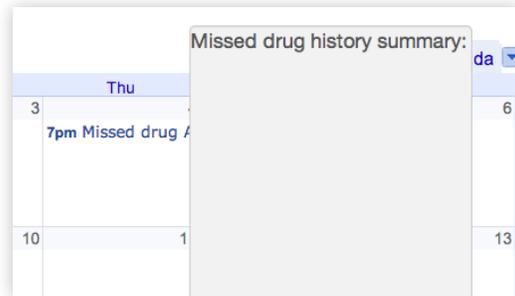


Two prominent and destructive actions are placed right next to the main "Save" action on the patient edit form. Consider removing the "Clear Form" action altogether, as I suspect a doctor will not frequently have to clear a form already filled with submitted patient data.

SEVERITY:  
Catastrophic

## History summary overlaps calendar view

HEURISTICS:  
Accessibility  
Visibility  
User Control  
Graphic Design



The grey "Missed drug history summary" box obscures the calendar behind it, hiding very important information and making certain days of the month inaccessible.

I suspect that this might be an issue of different monitor resolutions, and I can see that the summary box moves away as the browser window size is increased. However, the browser has to be very wide (wider than most monitors, I'm guessing) before the box does not block the calendar.

SEVERITY:  
Good!

## Consistent graphic design

I like the consistent graphic design throughout the interface: action buttons all look like buttons and afford clicking, text input fields are styled consistently, etc.

SEVERITY:  
Good!

## Confirmation for deleting a patient

I like that the user must confirm the deletion of a patient. Perhaps the confirmation buttons labeled "Yes" and "No" could be labeled with "Delete" and "Cancel" to reinforce the action being taken, as we discussed in lecture. For even better efficiency and safety, perhaps the dialog box could be replaced with a nice undo feature.

## PATIENTS' MOBILE INTERFACE

SEVERITY:  
Minor

### Log in vs. Sign up confusion

HEURISTICS:  
Efficiency  
Graphic Design



As with the doctor interface, be wary of action buttons which are too similar in appearance. Consider which action you consider the primary action, and which actions are secondary, and perhaps change the design a bit to reflect that distinction.

SEVERITY:  
Minor

### Sign up form has a "Log in" button

HEURISTICS:  
Efficiency  
Safety



The registration form has the same two buttons as the login form, but swapped.

The “Log in” button brings the user back to the log in form, where the same button appears and this time logs the user in. Consider replacing the “Log in” button on the sign up form with a “Cancel” or “Back” button to prevent confusion.

SEVERITY:  
Cosmetic

### Padding and alignment issues on pills table

HEURISTICS:  
Graphic Design

<input type="checkbox"/> Vitamin A	4/20/2013	7 : 00 am	2 pills	<a href="#">info</a>
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The text, checkbox, and “info” button in each row of the pills table has some alignment issues—all three are aligned differently. Also, you might want to add some spacing between the drug name and the checkbox.

SEVERITY:  
Major

### Red–green colorblindness issue on pills table

HEURISTICS:  
Accessibility

<input type="checkbox"/> Aspirin	4/20/2013	12 : 00 pm	1 pills	<a href="#">info</a>
<input type="checkbox"/> Sulfonylureas	4/20/2013	3 : 00 pm	2 pills	<a href="#">info</a>

The rows of the pills table are colored red and green to indicate—I’m guessing—that certain dosages are overdue. However, there is no other indication of this alert, so deuteranopic users might have trouble gathering this information.

SEVERITY:  
Minor

### Click target for each pill row, small and confusing

HEURISTICS:  
Learnability  
Accessibility  
User Control

<input type="checkbox"/> Vitamin A	4/20/2013	7 : 00 am	2 pills	<a href="#">info</a>
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Each row of the pill table can be selected with the small checkbox on the left, but it is not immediately apparent what this selection means. Checking one or more rows reveals “Take” and “Miss” buttons at the bottom of the interface (which block the “see more pills” button). The click target is very small—perhaps tapping anywhere on the row could select the row.

SEVERITY:  
Cosmetic

### “See more pills” button vs. infinite scrolling

HEURISTICS:  
Graphic Design

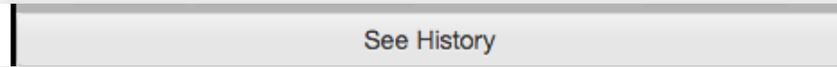
<input type="checkbox"/> Vitamin A	4/20/2013	7 : 00 pm	2 pills	<a href="#">info</a>
see more pills				

A large amount of space—a valuable commodity in a mobile interface—is left blank with a “see more pills” button there to populate it. This might be a good thing to prevent too much information from cluttering the main screen. Keep in mind, though, that some other popular options for long lists of content (standard scrolling, etc.) might provide a better experience to the user.

SEVERITY:  
Minor

### “See history” doesn’t afford clicking

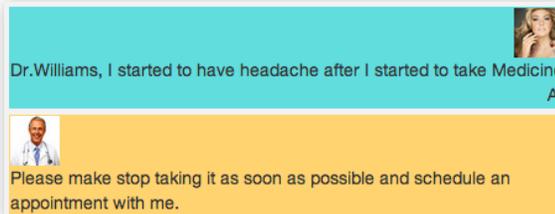
HEURISTICS:  
Learnability  
Graphic Design



The “See History” button at the top of the main page doesn’t afford clicking very much. The gradient on it does improve the situation a bit, but the positioning and size of the button make it seem like a column heading to me rather than an action button.

SEVERITY:  
Good!

### Contrast between users on discussion



Good use of color makes the distinction between the different users participating in a conversation very obvious.

Text alignment is also used appropriately to provide contrast, making the text “feel” like a conversation.

SEVERITY:  
Good!

### Mobile, accessible layout

The interface was obviously designed with a mobile device in mind, with the relatively small amount of screen real-estate used effectively and hit targets for actions kept large. Good work designing within the constraints of a mobile environment!

SEVERITY:  
Good!

### Organization and presentation of information

The mobile interface for the users seems better organized than the desktop interface for the browser. I like the default screen and the content that was chosen to be there, and each screen seems to serve a single important purpose.

With the inclusion of something like “breadcrumb” links, I think the mobile interface would be really easy to navigate and understand.