




NurseWatch

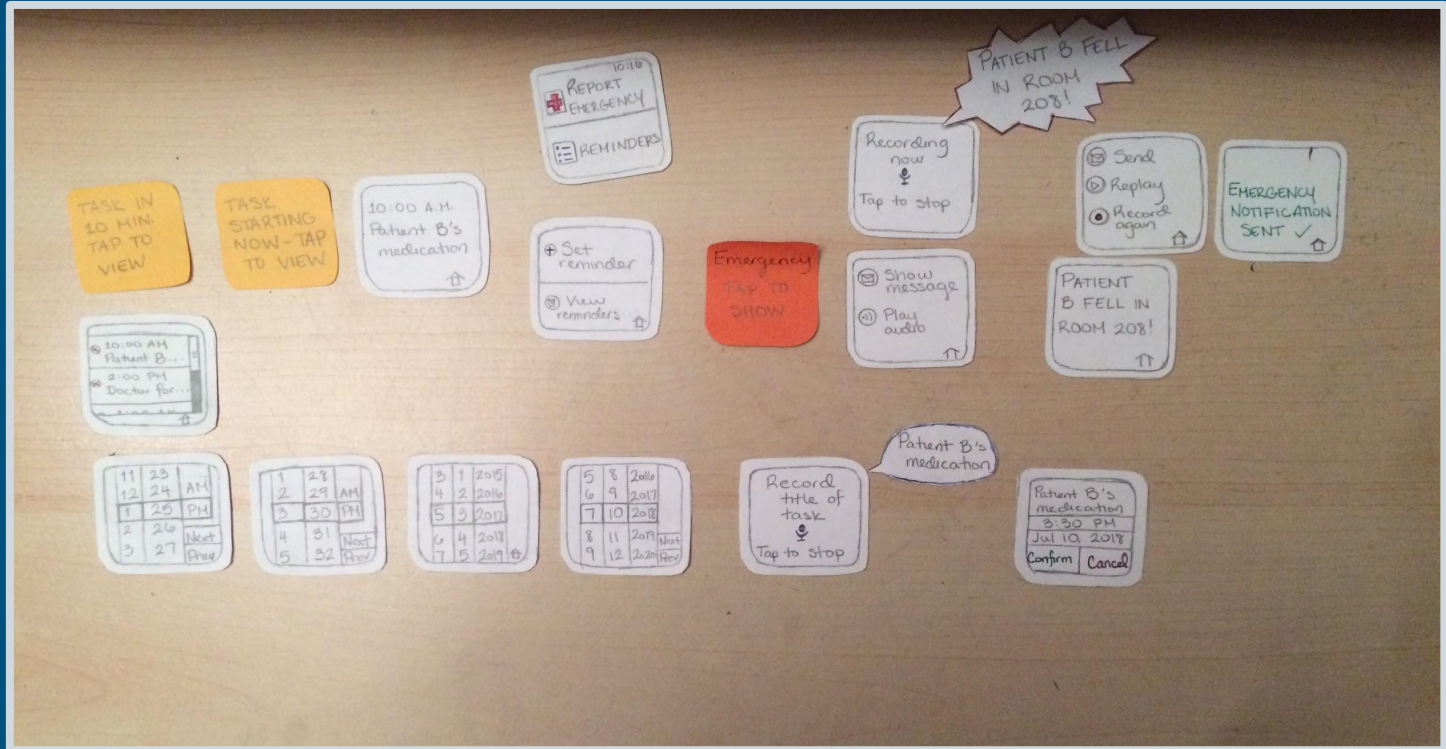
Isidora Vukosav - storyboarder/writer
John Abercrombie - writer/designer
Anupam Gupta - user researcher/designer



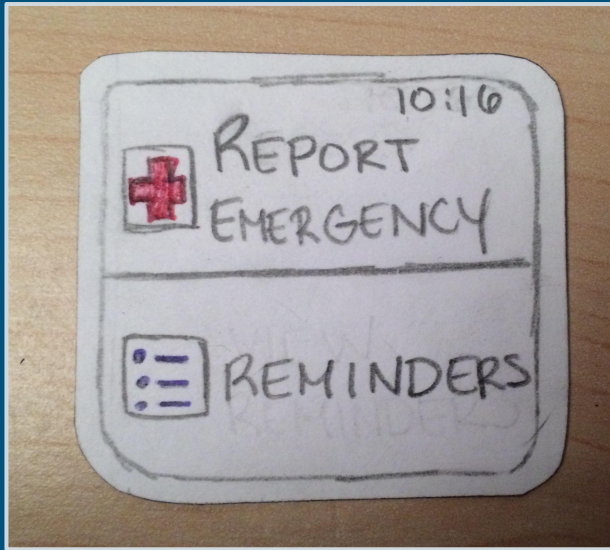
Overview

- “So understaffed they may be endangering patients’ welfare” *
- Average of 0.86 hours a day per patient**
- Important to accurately remember patient information
- Challenge to respond to emergency and notify others

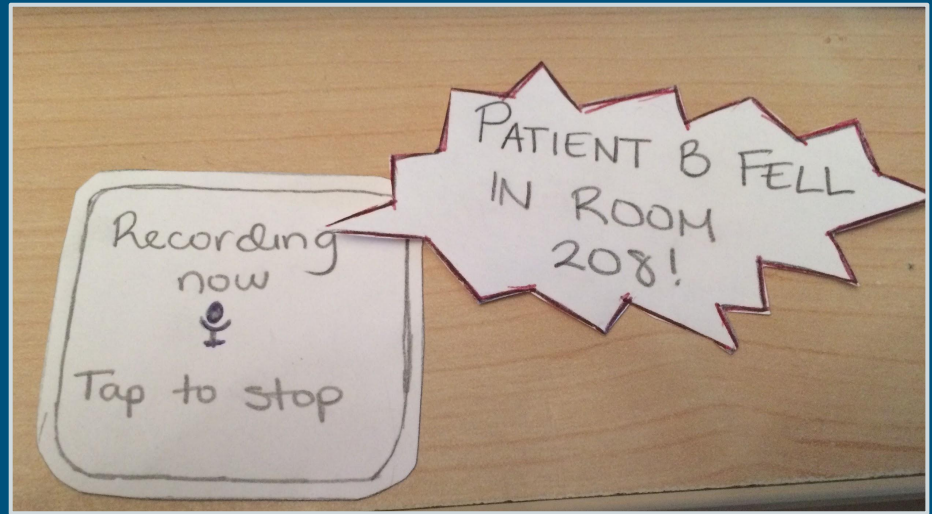
Initial Paper Prototype



Task 1: report/send emergency notification

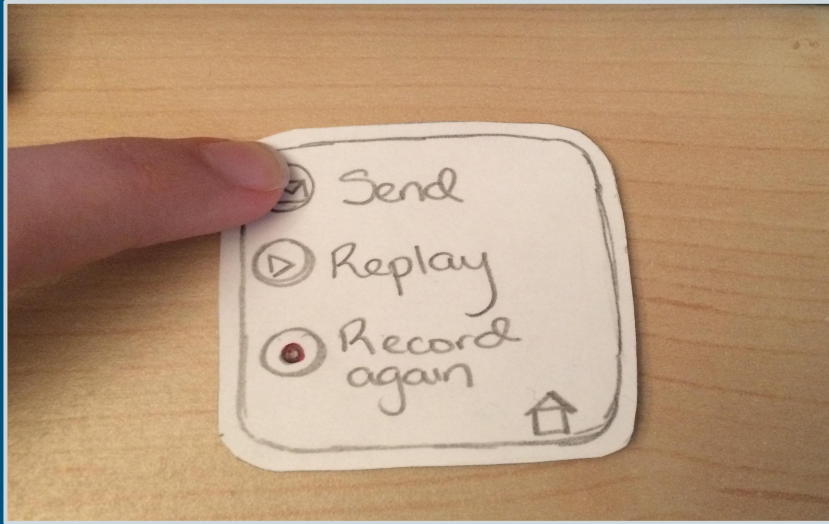


Home screen



Recording title of emergency

Task 1: report/send emergency notification



Options for emergency message

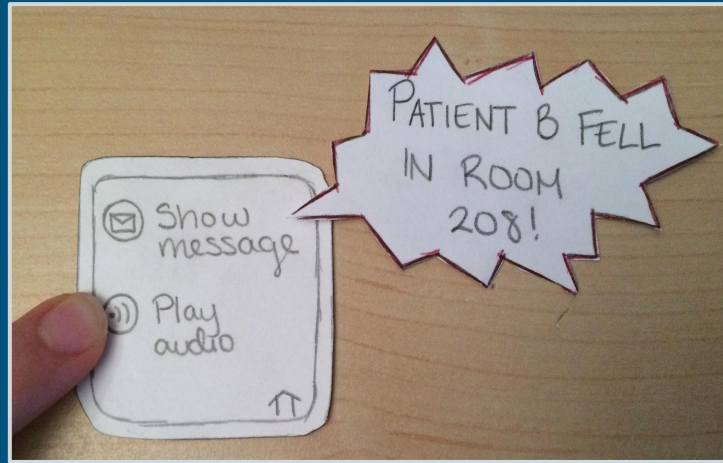


Confirmation screen

Task 1: receive emergency notification



Emergency notification

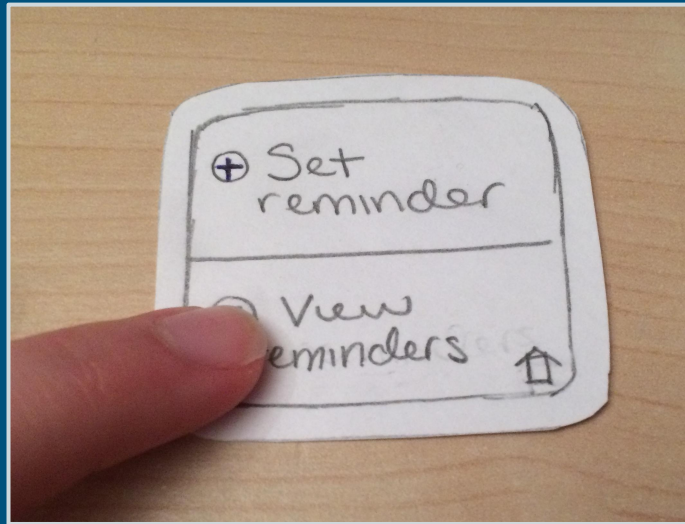


Play recording

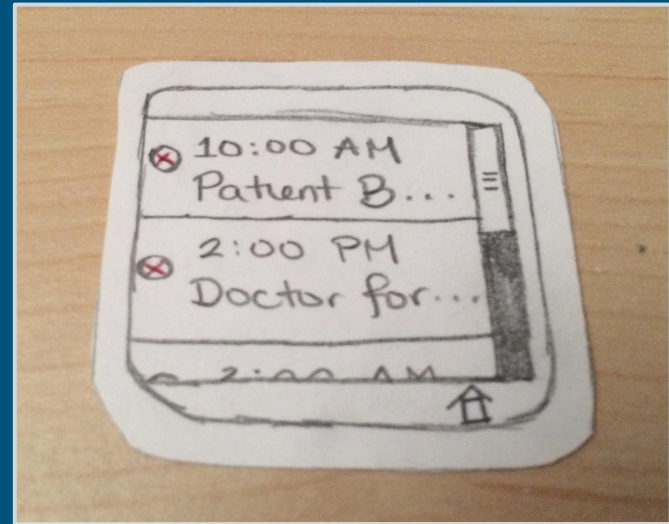


Message text

Task 2: reminders for time sensitive tasks

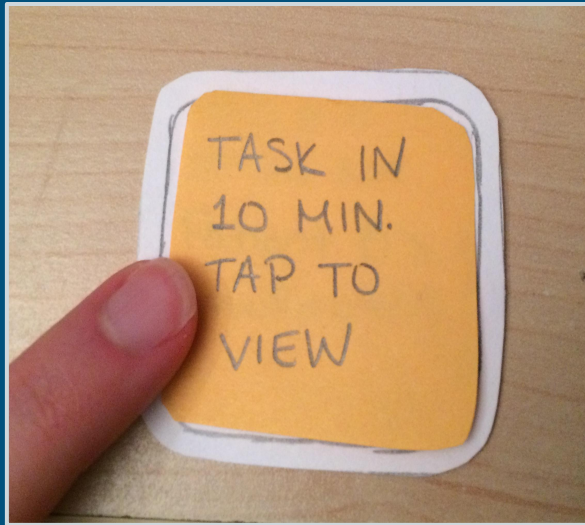


Reminders home screen

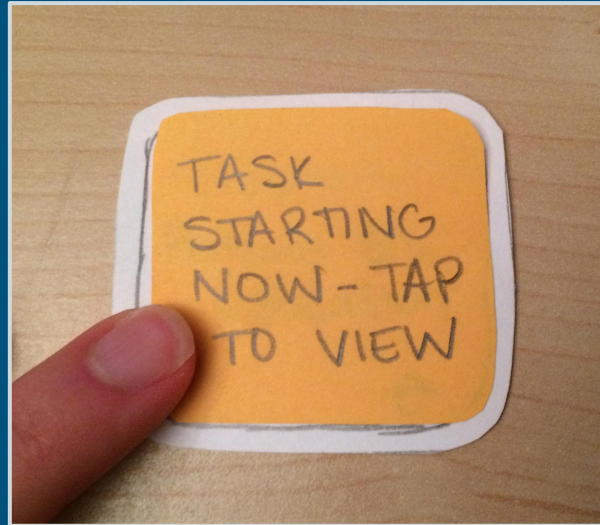


Reminder list

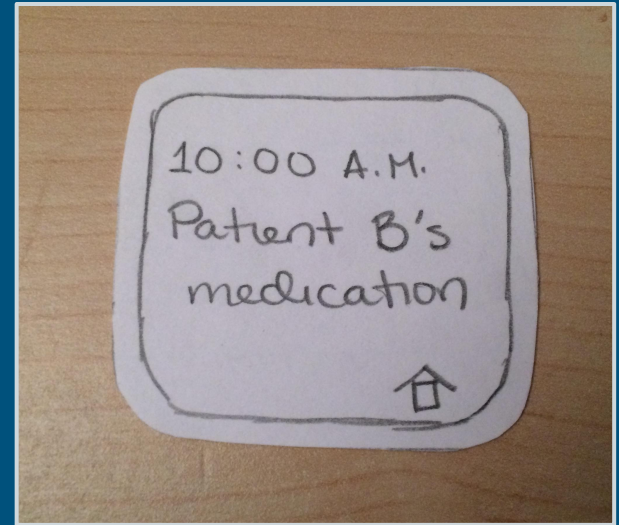
Task 2: reminders for time sensitive tasks



Task reminder 1

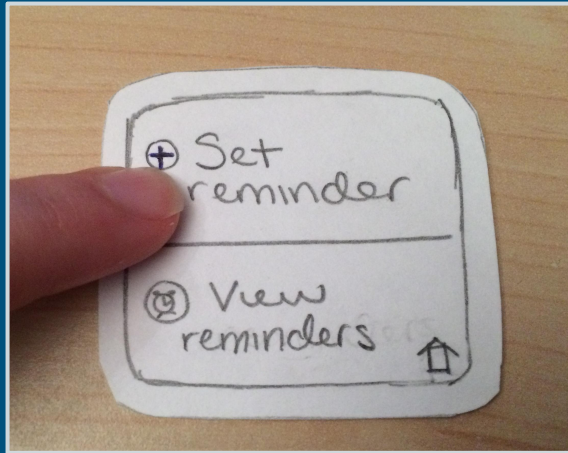


Task reminder 2

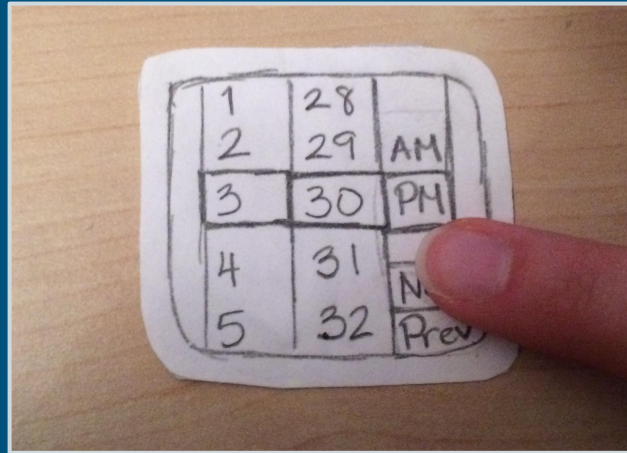


Task reminder message

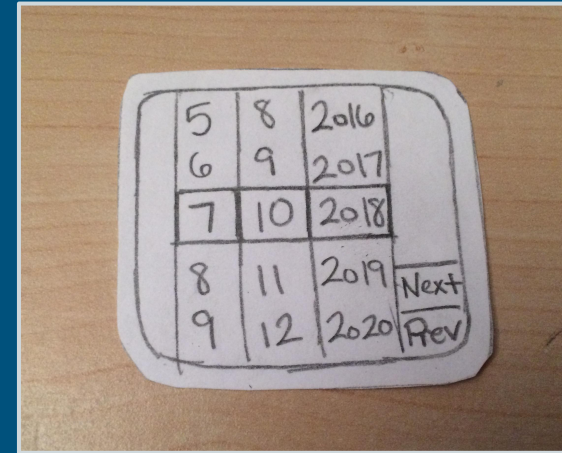
Task 2: setting reminders for time sensitive tasks



Reminders home screen

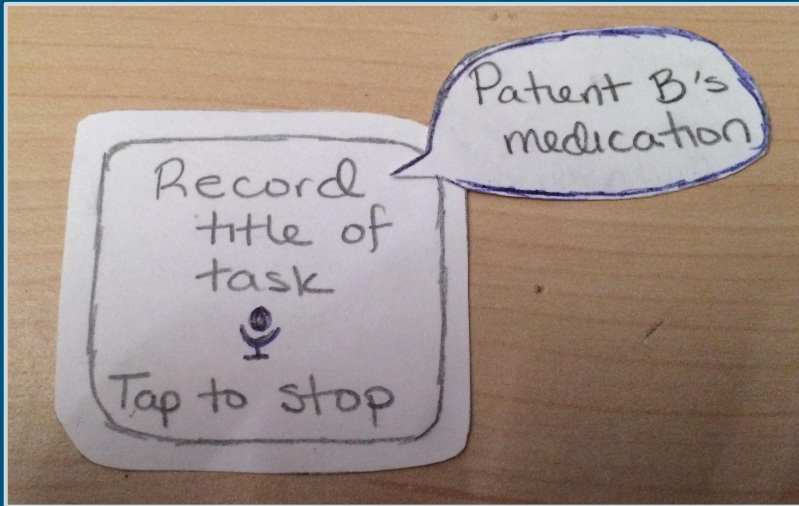


Selecting reminder time

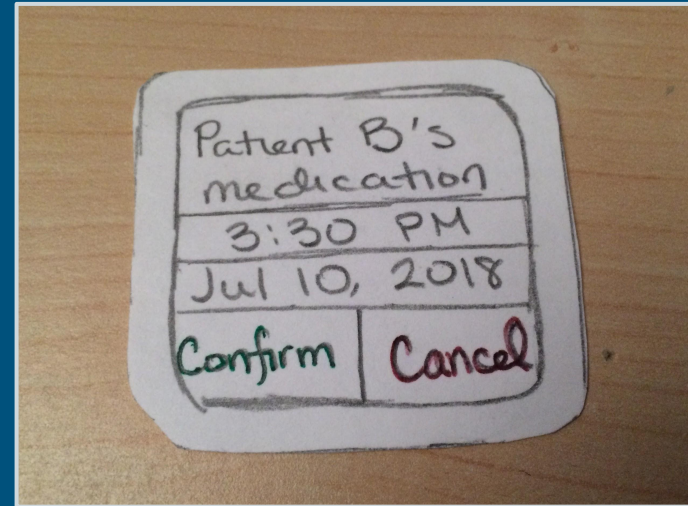


Selecting reminder date

Task 2: setting reminders for time sensitive tasks



Recording task title

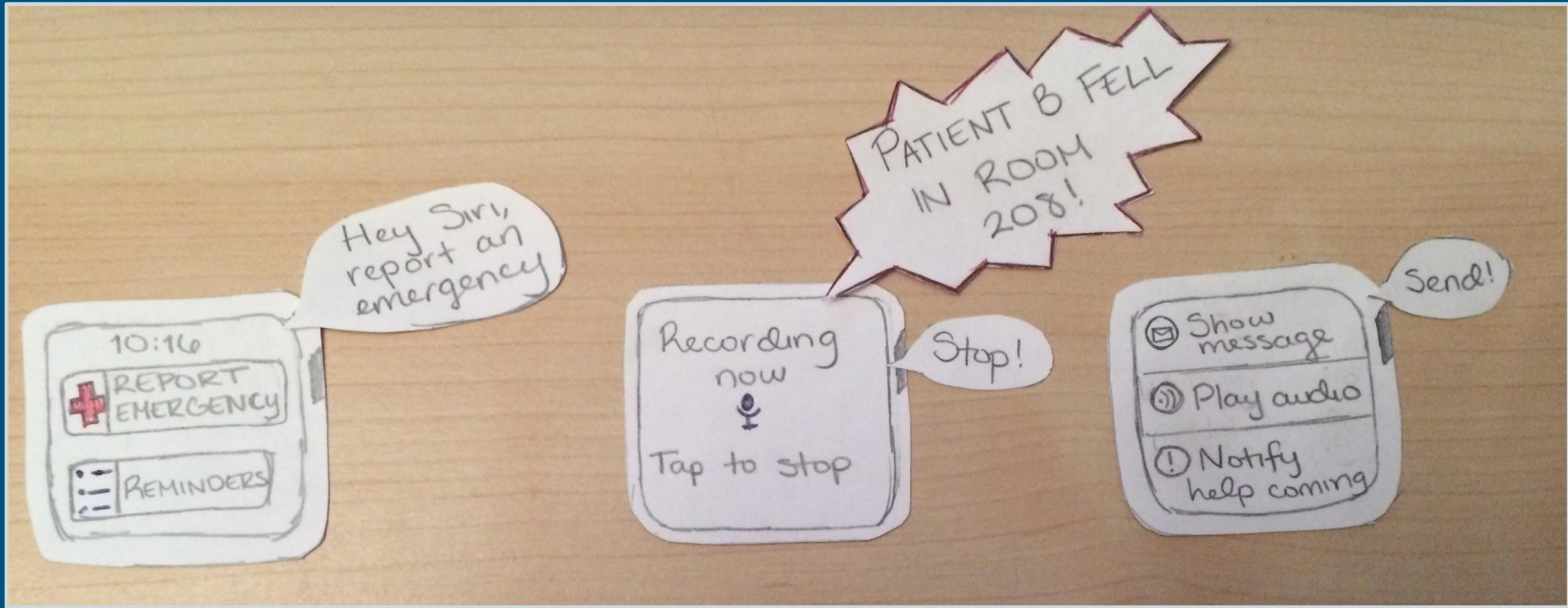


Confirm or cancel reminder

Heuristic Evaluation Issues

- Voice activation inconsistencies
- Notify nurse after emergency
- Flexibility for notification times

Fix for Voice Activation Inconsistency

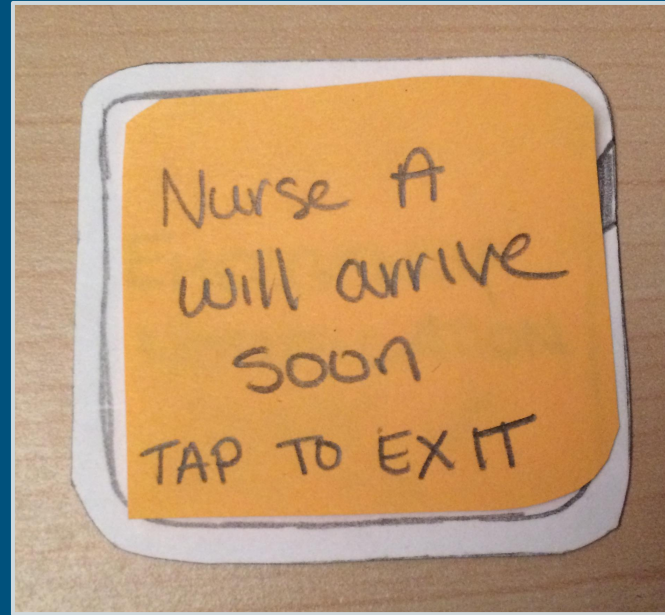


More voice activation steps available

Fix for Notify Nurse after Emergency

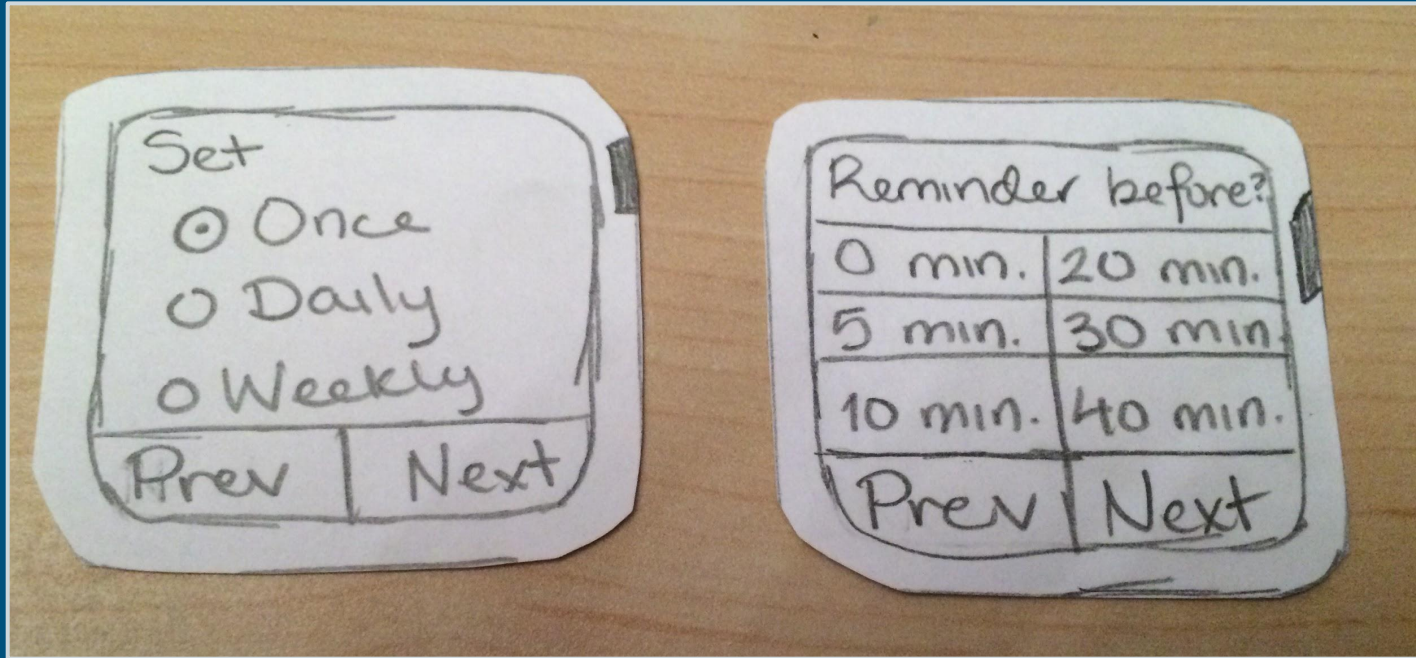


Screen with button to notify nurse



Notification of help

Fix for Flexibility for Notification Times

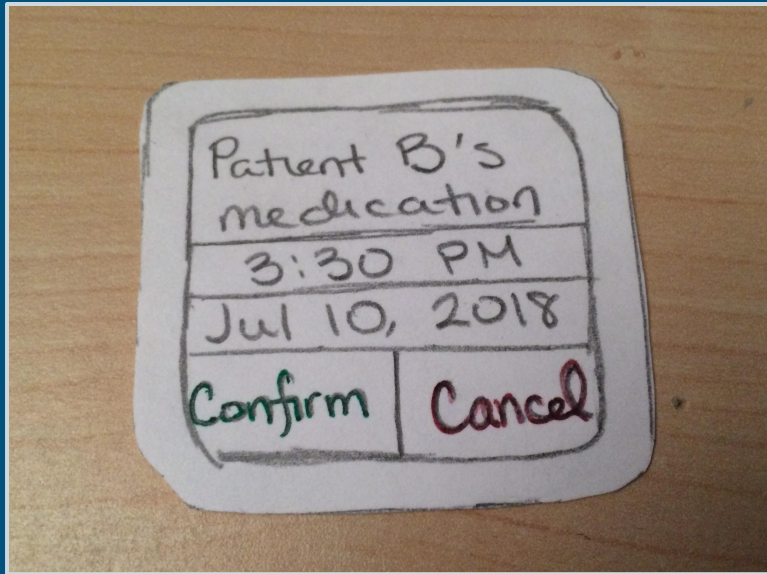


More options for setting a reminder

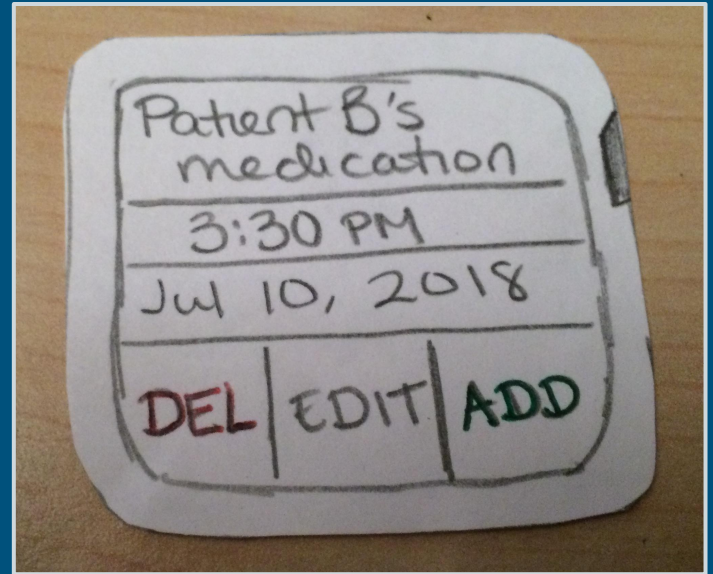
Usability Test Issues

- Edit recording
- More options for reminders
- Mark task as complete

Fix for Editing Recording

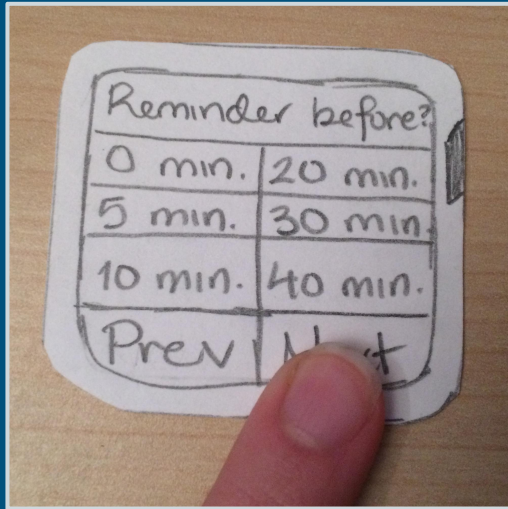


Old screen allowing confirmation or canceling

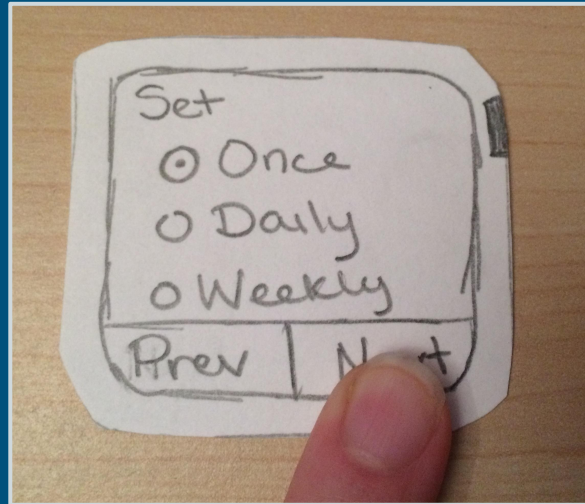


New screen allowing editing and deleting

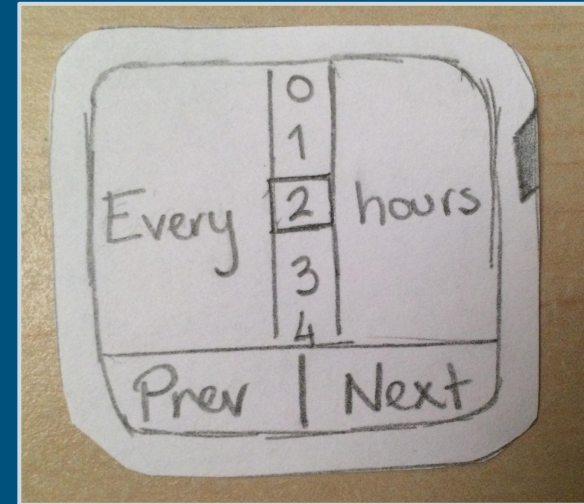
Fix for More Options for Reminders



Option 1 for reminder times

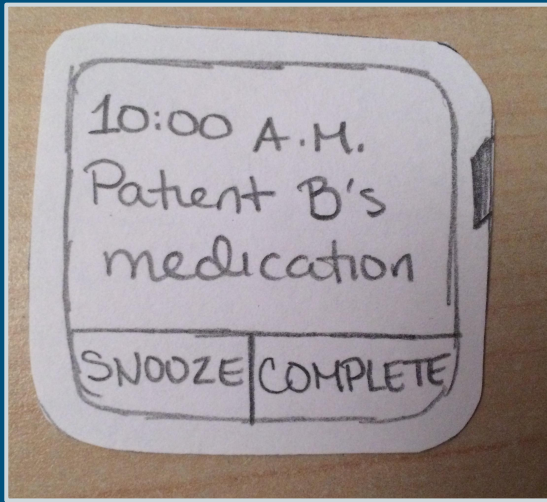


Option 2 for reminder times

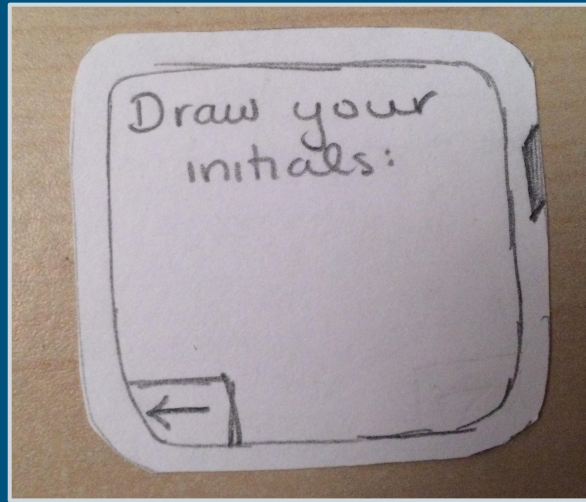


Option 3 for reminder times

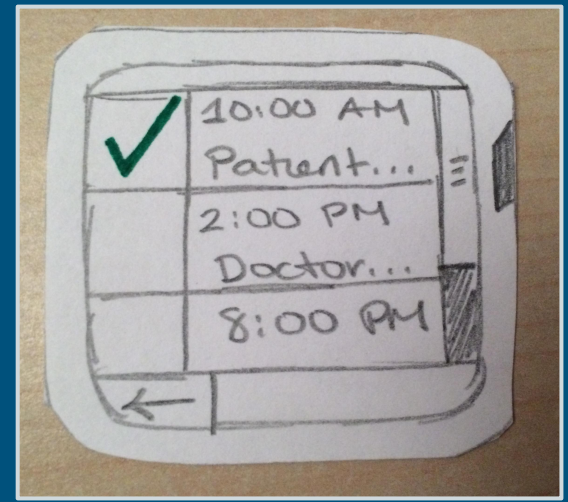
Fix for Marking Task as Complete



Reminder of task



Screen prompt for initials

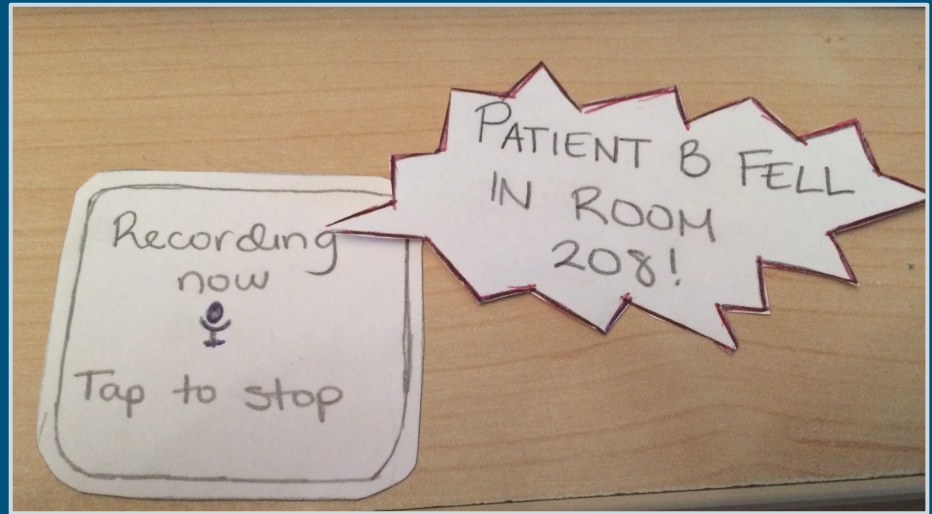


Reminder marked as completed

Final Paper Prototype: report + send emergency notification

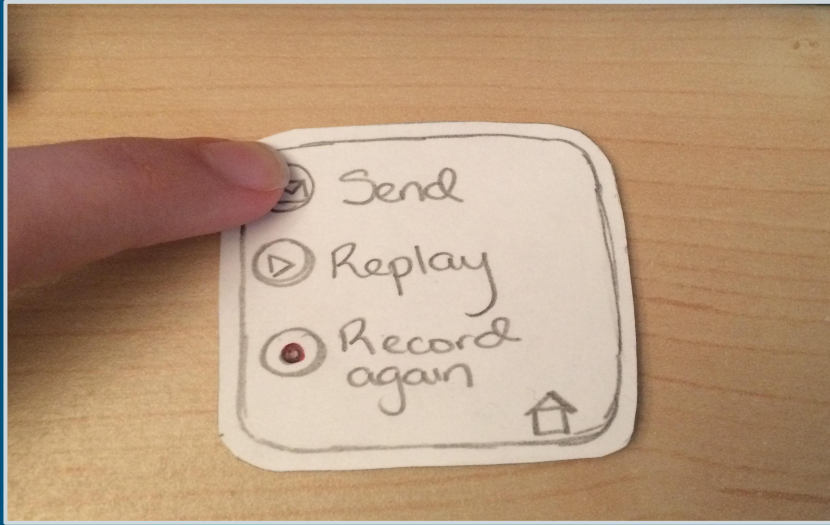


Home screen



Recording title of emergency

Final Paper Prototype: report + send emergency notification



Options for emergency message



Confirmation screen

Final Paper Prototype: report + send emergency notification



Emergency notification

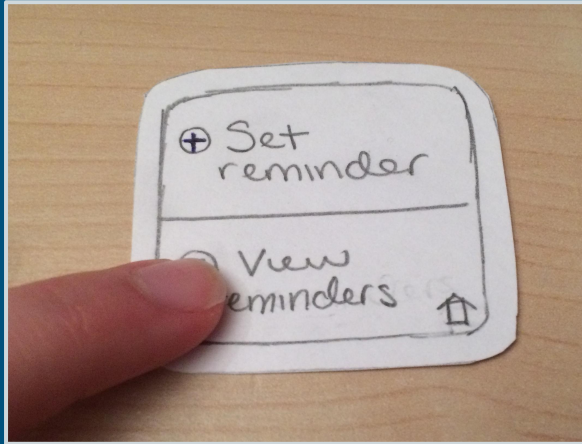


Message text

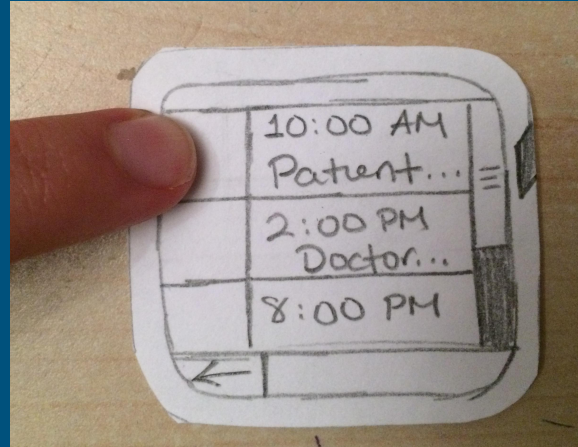


Option to notify nurse

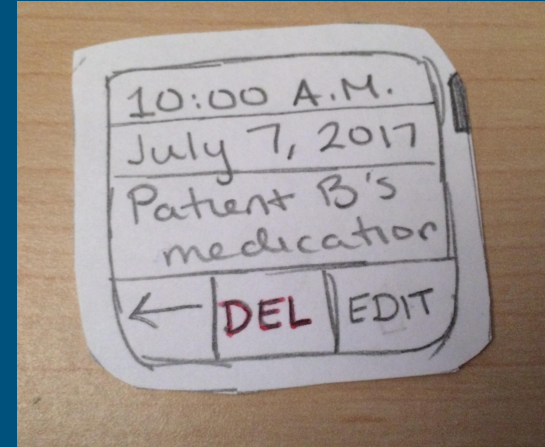
Final Paper Prototype: reminders for time sensitive tasks



Reminders home screen

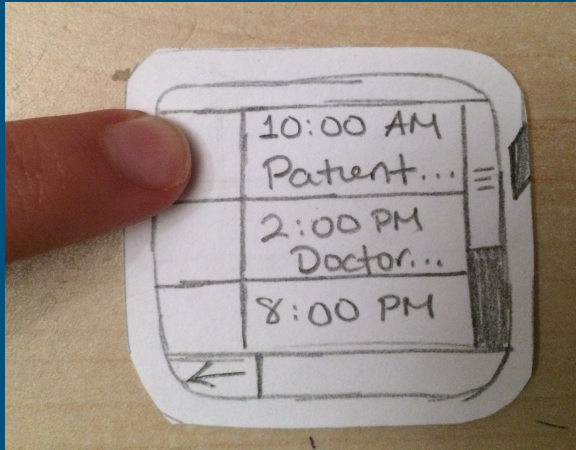


Reminder list

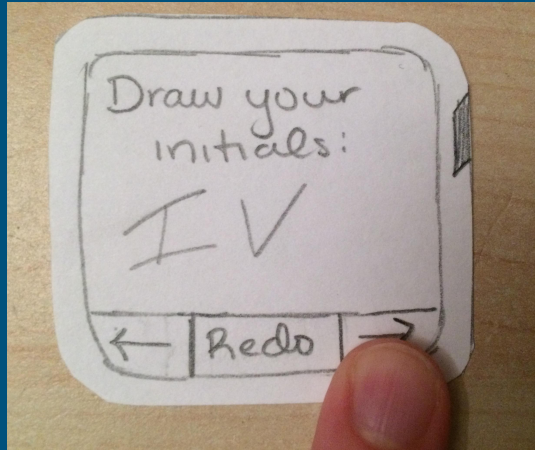


Viewing reminder in detail

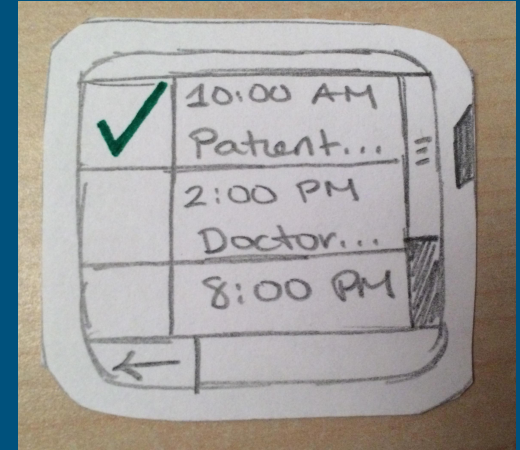
Final Paper Prototype: reminders for time sensitive tasks



Marking a reminder as complete

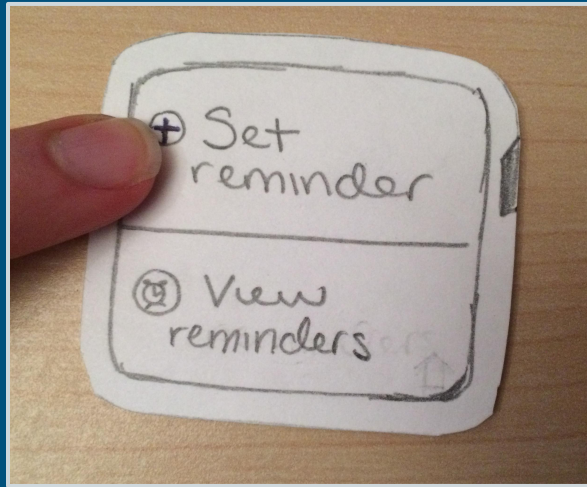


Drawing initials

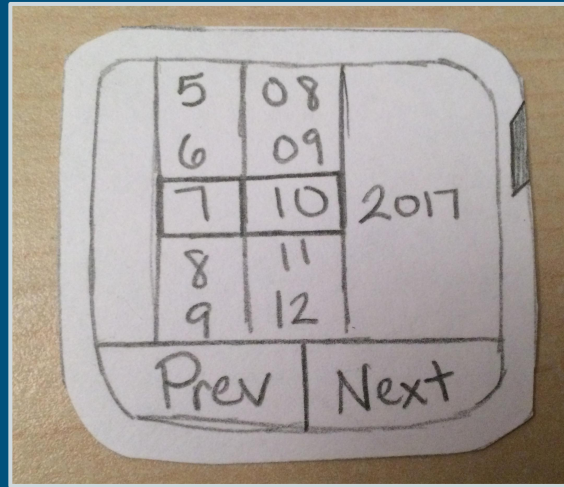


Reminder marked as complete

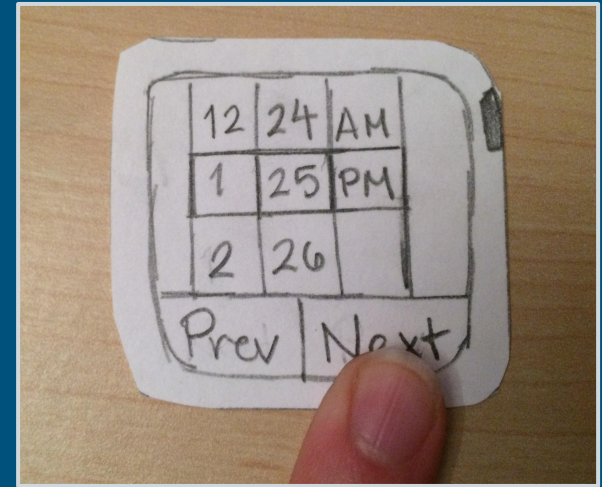
Final Paper Prototype: reminders for time sensitive tasks



Reminders home screen



Selecting date

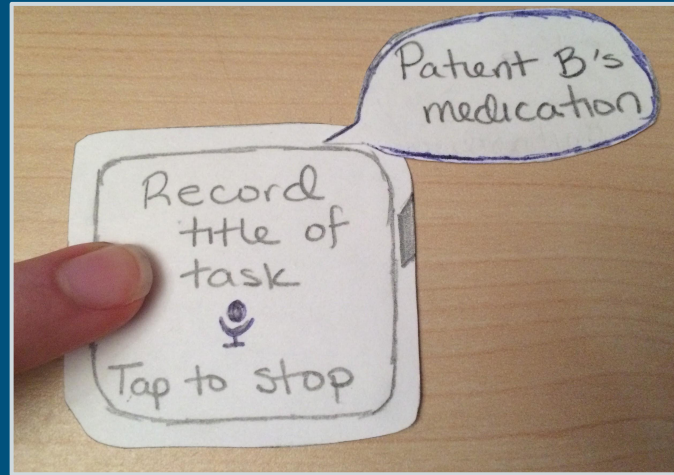


Selecting time

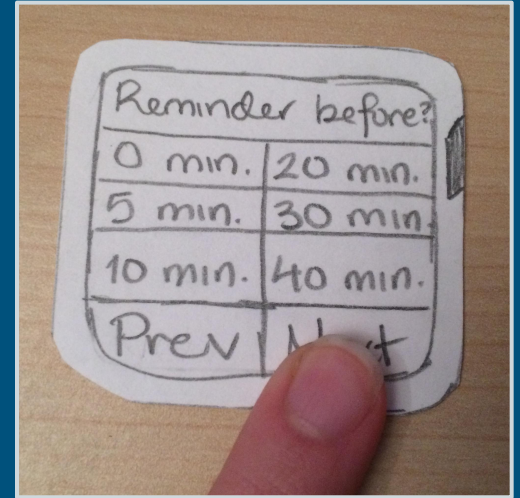
Final Paper Prototype: reminders for time sensitive tasks



Tap to record task

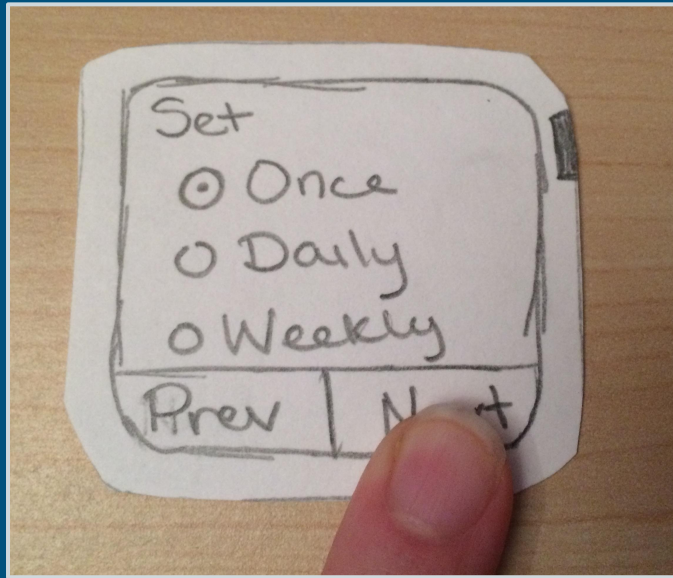


Tap to stop recording task

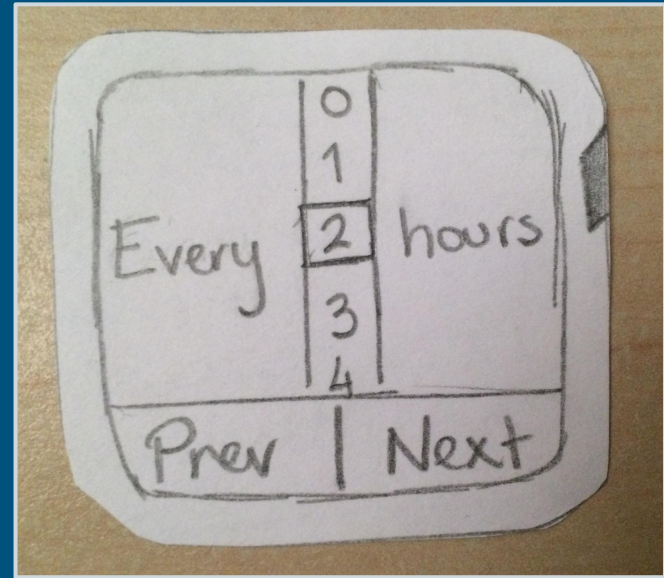


Select initial reminder time

Final Paper Prototype: reminders for time sensitive tasks

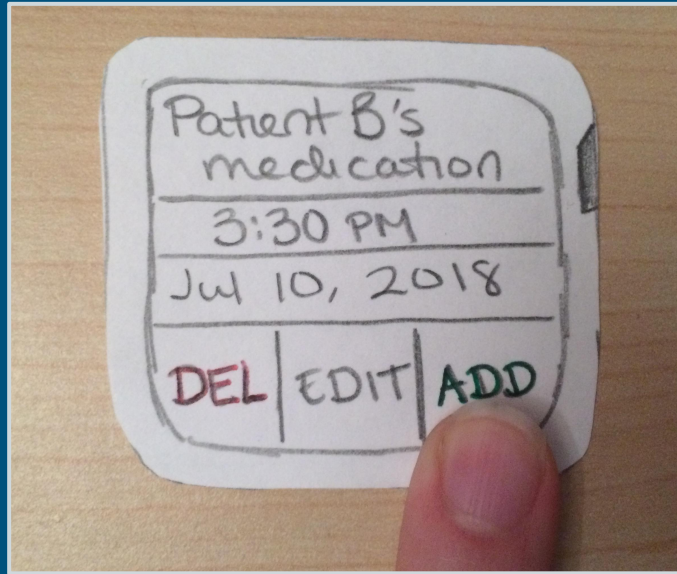


Select reminder
occurrence



Select reminder repetition

Final Paper Prototype: reminders for time sensitive tasks

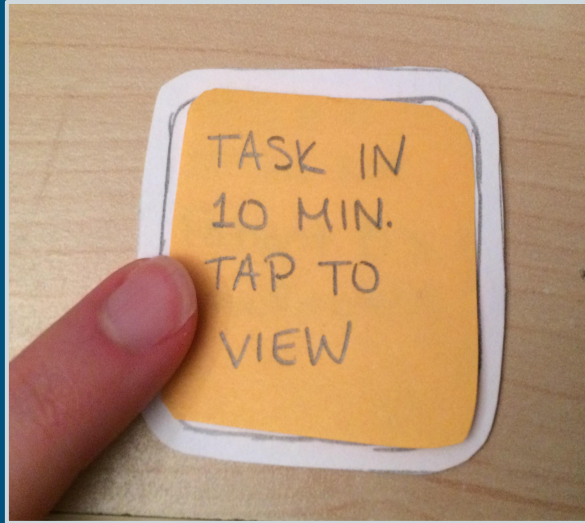


Select reminder occurrence

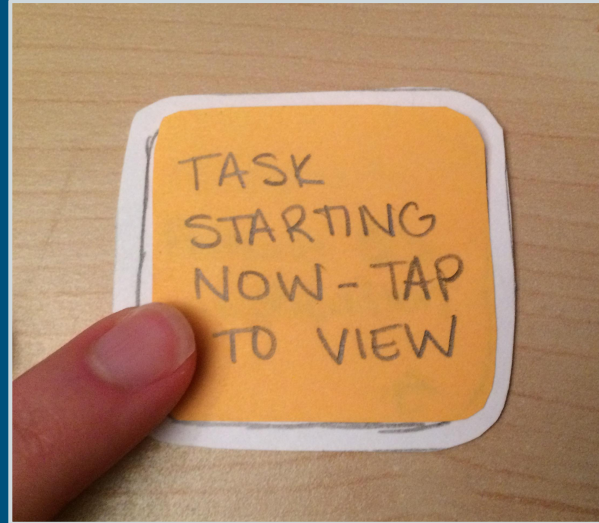


Reminder confirmation screen

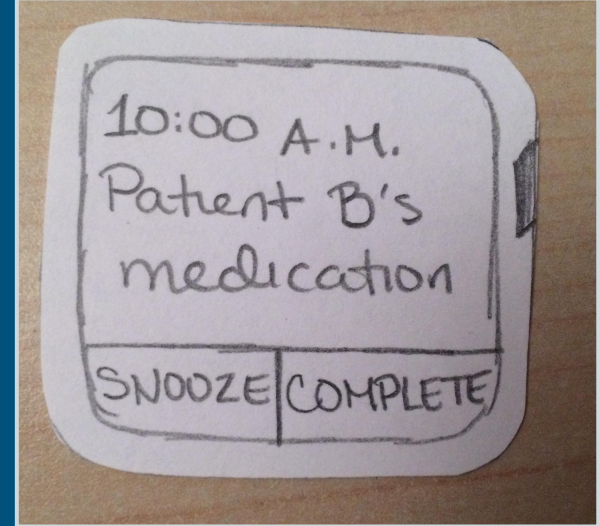
Final Paper Prototype: reminders for time sensitive tasks



Initial task reminder

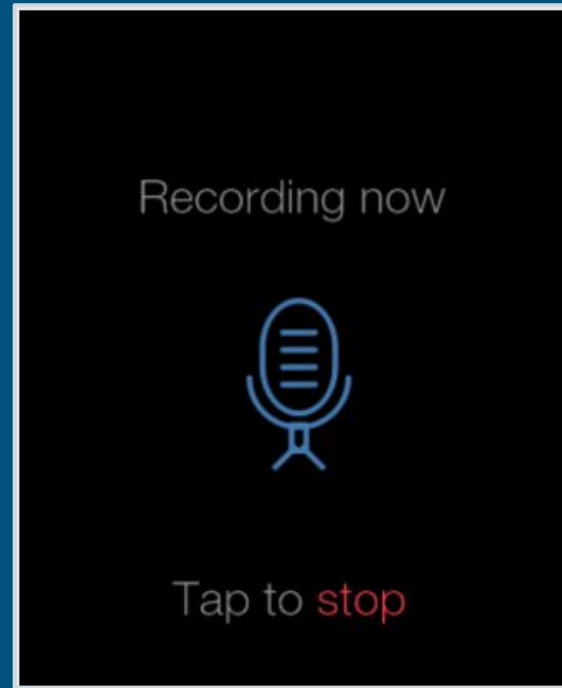
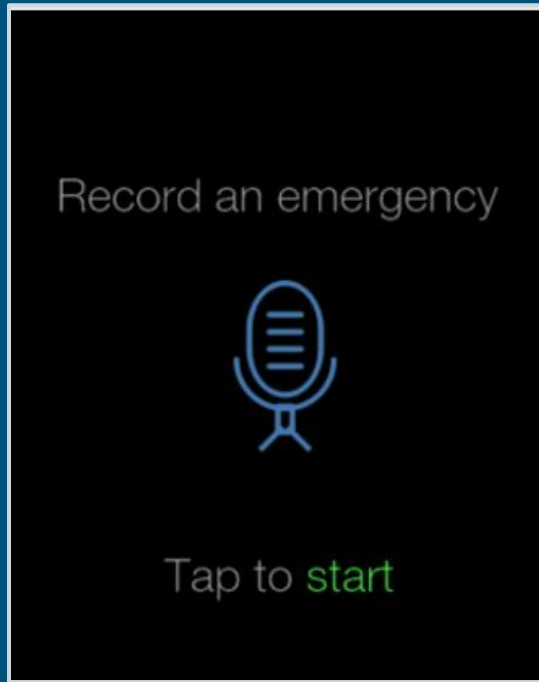


Final task reminder



View task reminder

Digital Mockup: report/send emergency



Digital Mockup: report/send emergency

Emergency:

Resident B fell in
room 208



Send



**Record
again**

Emergency
notification
sent



Nurse A will
arrive soon

Tap to exit

Digital Mockup: report/send emergency

Emergency
reported

Tap to show



**View
message**

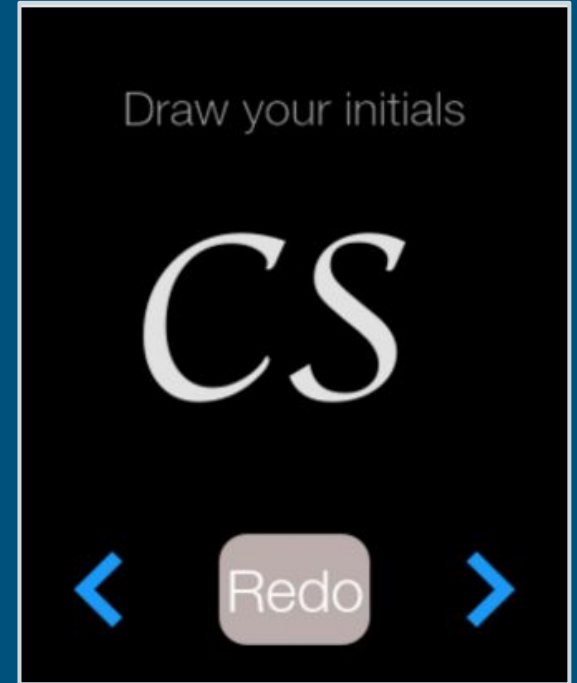
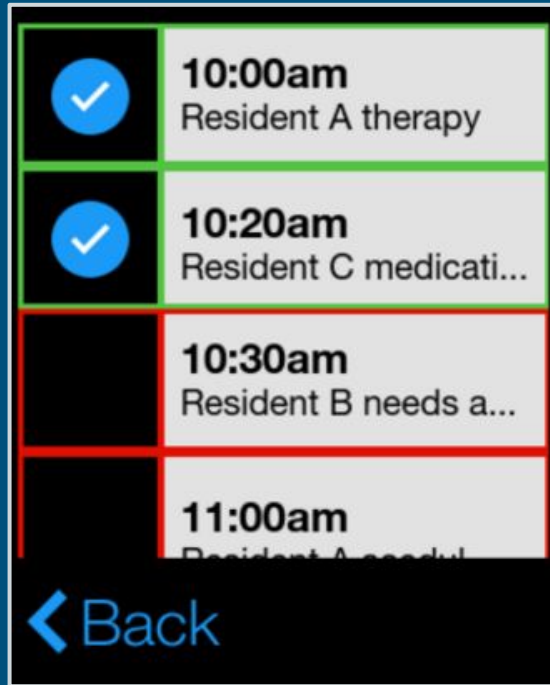
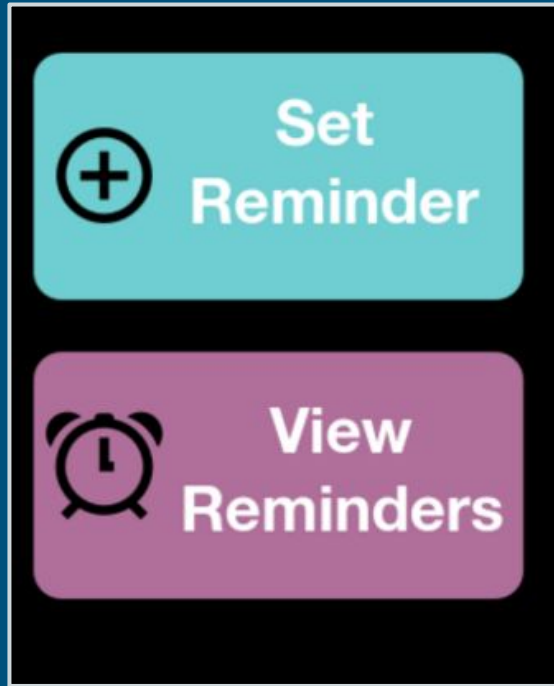


**Notify
nurse**

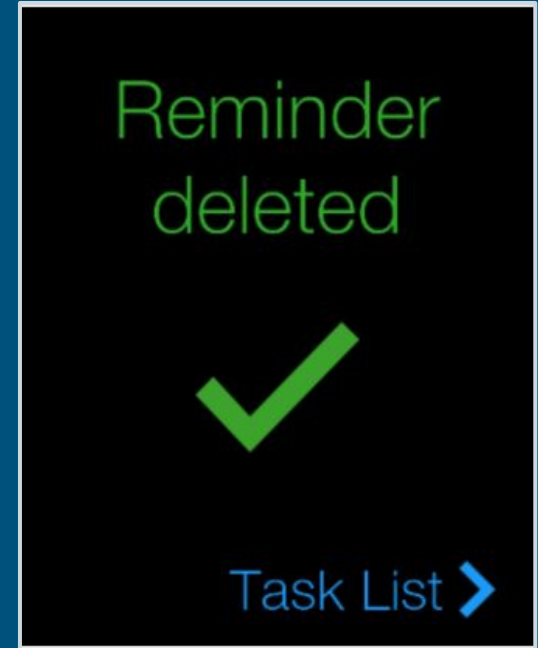
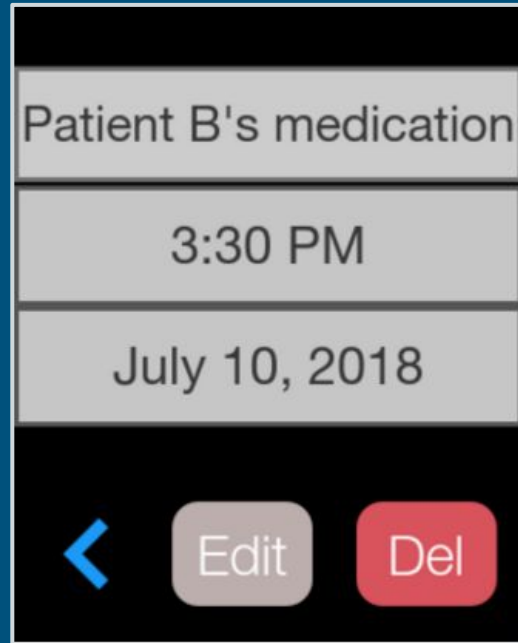
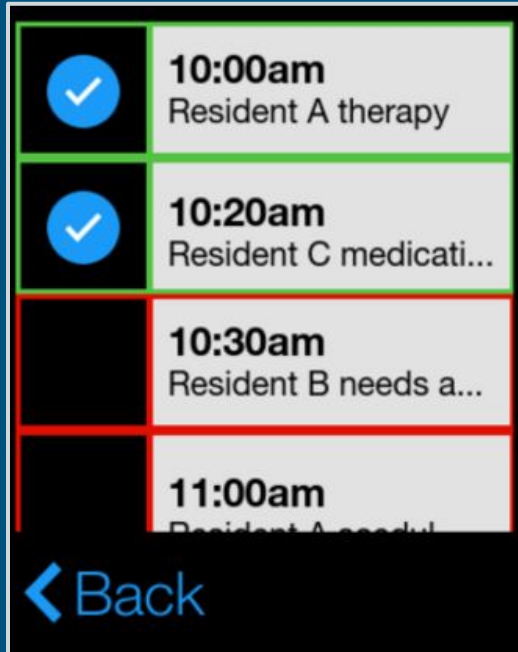
Patient B fell in
room 208!



Digital Mockup: time sensitive reminders



Digital Mockup: time sensitive reminders



Digital Mockup: time sensitive reminders



**Set
Reminder**



**View
Reminders**

Describe your task
(Title, Date, Time)



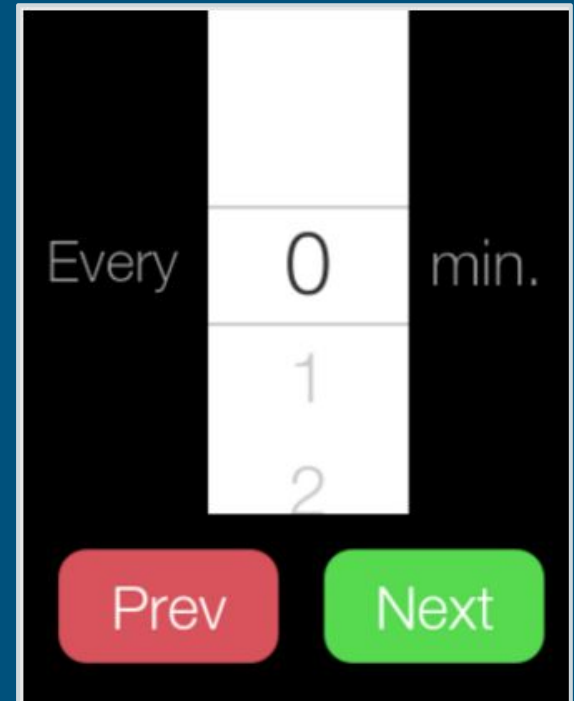
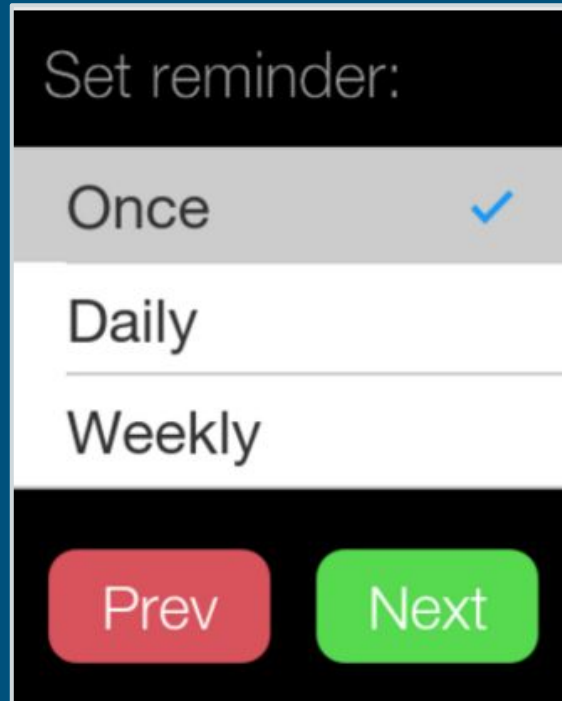
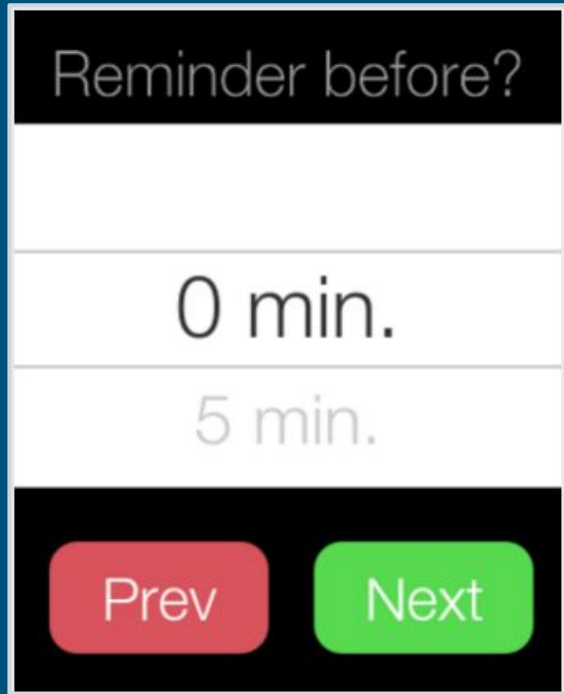
Tap to **start**

Describe your task
(Title, Date, Time)

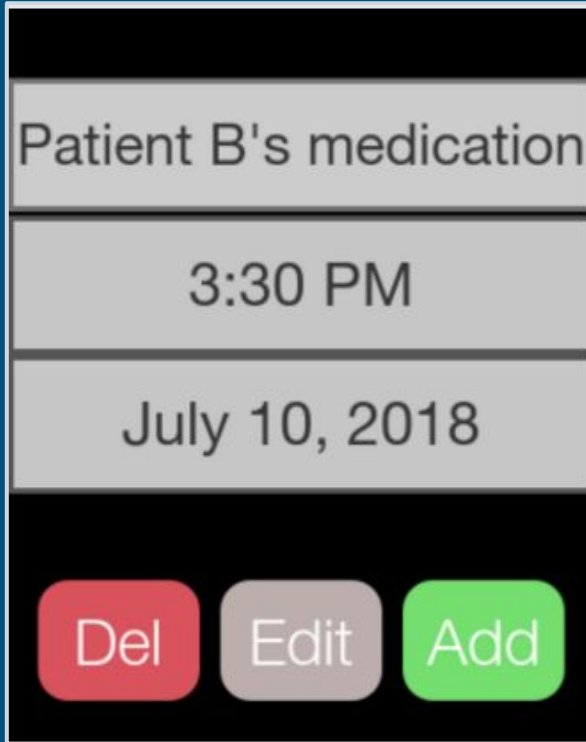


Tap to **stop**

Digital Mockup: time sensitive reminders



Digital Mockup: time sensitive reminders



Digital Mockup: time sensitive reminders

Task in 10
minutes

Tap to view

Task starting
now

Tap to view

10:00 A.M

Patient B's
medication

Snooze

Complete

Summary

- First prototype often lacks functionality and UI
- Users often see what designers initially miss
- Different users discover different issues
- Design is an iterative process