User Persona

Missy Tippens

Role: Caregiver

AGE: 55

LOCATION: Lawrenceville, GA

EXPERIENCE: 2 – 3 Years

EMPLOYER: Self-Employed Author

SPOUSE: Husband, Terry (Married 31 Years)

CHILDREN: 3 (One in College, Two Adult)

"I want to help my parents stay as healthy and comfortable as possible, while also keeping my sanity and maintaining a happy, healthy relationship with my husband and our children."

Quick Take & Background

Missy has recently moved her aging parents into an assisted living facility about twenty minutes from her own home. She knows that the staff at the facility check in on her parents regularly and ensure that their basic care needs are met, but she still worries about their overall levels of comfort and happiness. This particular assisted living facility does not offer medication management services, and the responsibility of ensuring that Missy's parents take their medications at the appropriate times still rests on her shoulders. Both of her parents suffer from varying degrees of dementia, with symptoms including disorientation, forgetfulness, and temporal confusion. They are therefore incapable of remembering on their own which medicines they are supposed to take, and when they are supposed to take them. Missy works from home and has a flexible daily schedule that allows her to visit her parents at the assisted living facility whenever necessary, but still cannot reasonably fit multiple visits per day to assist them with taking their medications into her routine.

To solve this problem, Missy has purchased a MedMinder device for her parents' room at the assisted living facility. She took care of the initial setup and programming process for the device, and now at the beginning of each week, she pays them a visit and fills the appropriate day and time slots on the device with the appropriate medications for both of her parents. They are accustomed to taking their medications from the machine when it alerts them to do so. On the rare occasions that they miss an alert from the machine and in turn miss a dose of medication, the machine sends a text message to Missy's phone, and she is able to get in touch with them over the phone to remind them directly to take the appropriate medications. In general, the system is working well for both Missy and her parents. Missy currently visits her parents at the facility roughly twice per week, primarily to give them company and see for herself exactly how well they are doing.

A Day In The Life

1. Wakes up and feeds the family pets: 1 geriatric cat and 1 geriatric dog.
2. Eats breakfast and has coffee.
3. Works on writing and blogging on the computer.
4. Calls parents after their breakfast to find out what they ate and asks if they actually took their medications.
    a. They sometimes remove the correct pills from the MedMinder device at the correct time, but forget to actually take the pills.

5. Takes call from a nurse at the assisted living facility and provides them with a copy of one of her parents' newly filled prescriptions.

6. Pays one of her parents' medical bills online.

7. Works more on writing on the computer.

8. Travels to the assisted living facility to take her parents out to lunch. Discovers an untaken pill beside the MedMinder device.
    a. Asks her parents about the pill. Her father says he did not need his laxative, so he did not take it. She struggles to identify the untaken pill as a laxative, and worries about whether she should skip the dose of whatever the medication is, or have him take it anyway and risk doubling up on a dose.
    b. Unsure of what to do, she calls her parents' doctor for guidance.

9. Takes parents out to lunch. Upon returning, washes their dishes, cleans their bathroom, and checks their supplies.

10. Runs errands to replenish her parents' groceries and daily living supplies.

11. Returns home.

12. Works more on writing and blogging on the computer. Checks email.

13. Cooks dinner and eats with husband when he returns home from work.

14. Watches TV with husband or reads to wind down before bedtime.

Key Weekly Goals

- Visit her parents at least 3 days. Call to check in at least once per day.
- Write 1000 words at least 5 days.
- Check her parents' mail and pay their bills.
- Pay bill to assisted living facility and get reimbursed.
- Keep track of all her parents' finances. (Checks received, bank statements, etc.)
- Shop for groceries for her and her husband, as well as for her parents.
- Spend time with her husband on Fridays and Saturdays having dinner, going to movies, attending plays, etc. (He works on Sundays)
- Pick up her parents for church on Sunday and sing in the choir.
- Maintain communication with nurses and physical therapists associated with her parents.
- Attend writers group meetings.
- Email closest writer friends for laughs and support.

- Communicate with her children through text messages, phone calls, group messages, and SnapChats.

Interactions Developed for Testing

Interaction Types

I have designed a medium fidelity prototype of the MedMinder application to test:

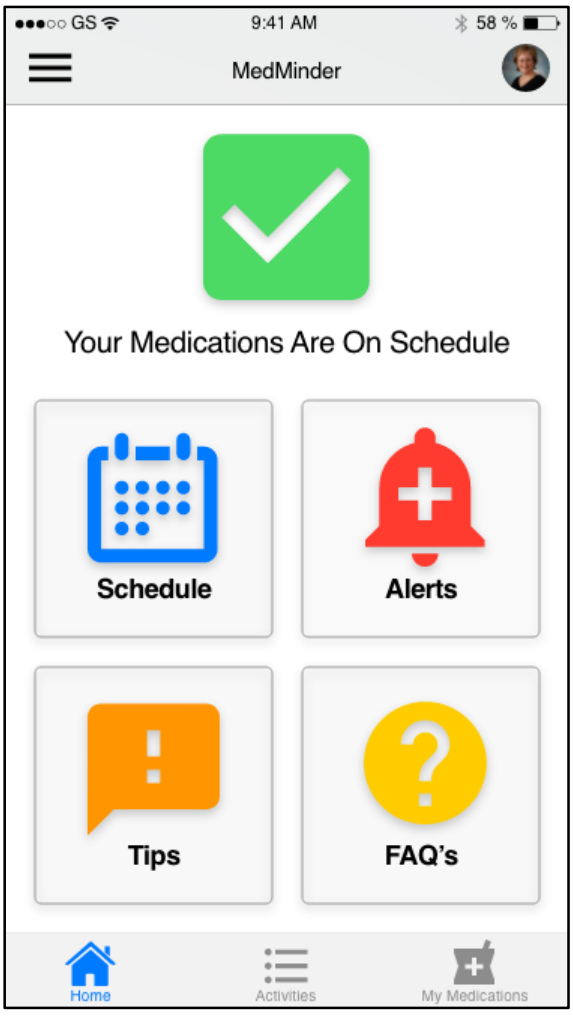
1. The overall flow of the application from the *Home* page to the *Alerts*, *Activities*, *My Medications*, and *Physician's Desk Reference* pages for a user who is accessing the application to identify pills and determine an appropriate course of action following their discovery of untaken medications belonging to those for whom they care lying in the vicinity of the MedMinder device.

2. The specific interactions of a user with the informational and instructional content on the *My Medications* and *Physician's Desk Reference* pages, particularly their scrolling through the content on these pages and their accessing of deeper layers of content within these pages via drop down menus.

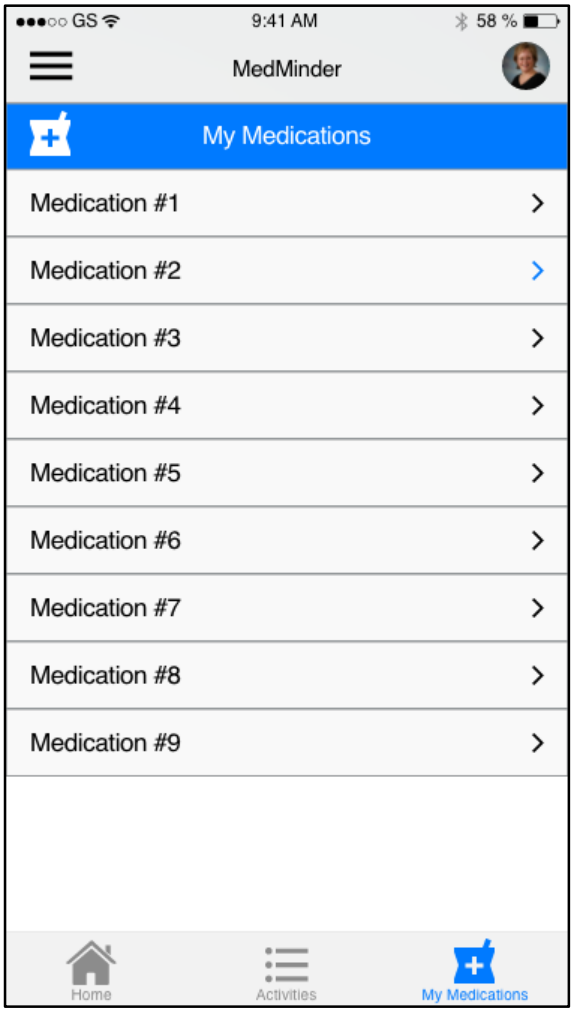
Medium Fidelity Prototype

Adobe XD Screenshots

1. Home Page

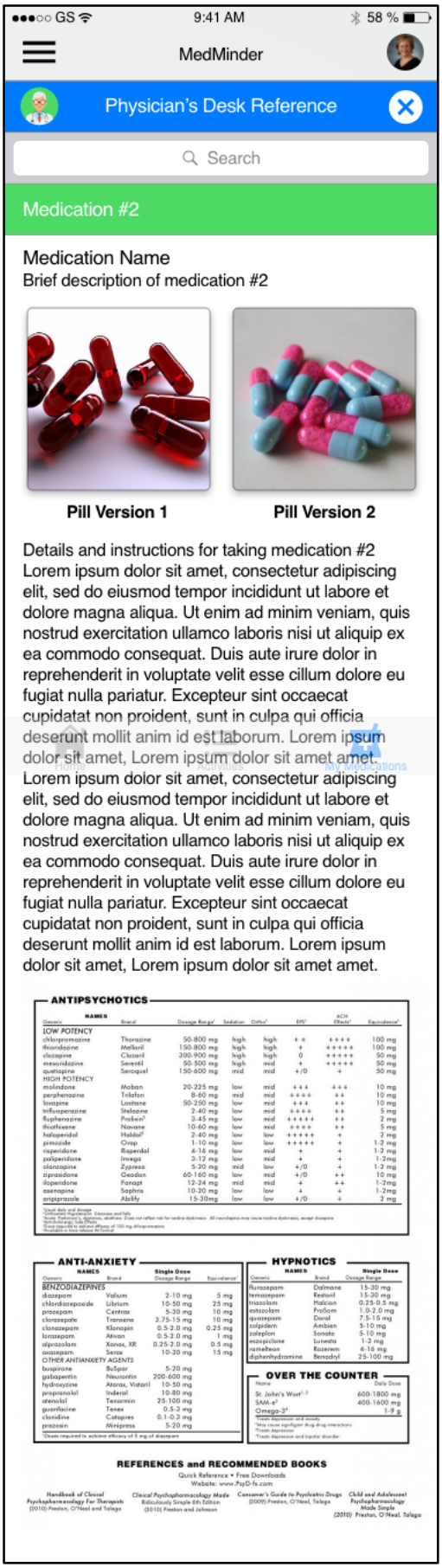


2. My Meds Page Collapsed

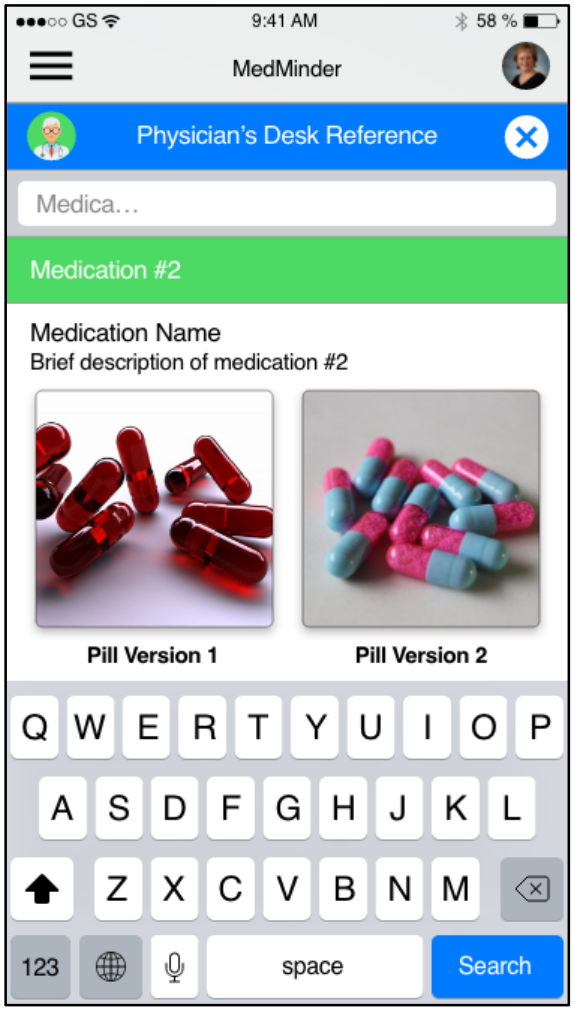


3. My Meds Page Expanded

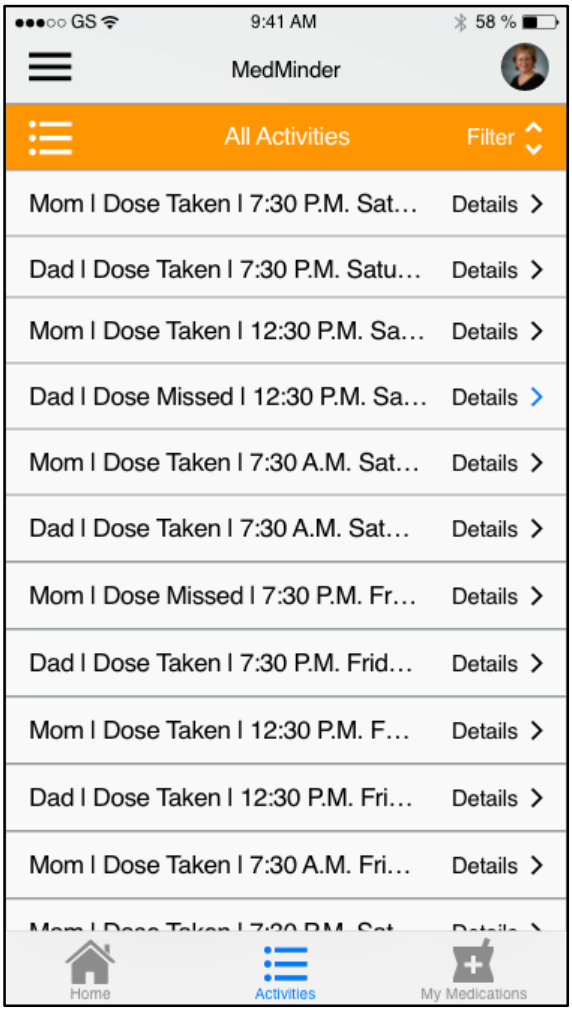
4. Physician's Desk Reference Page Scroll



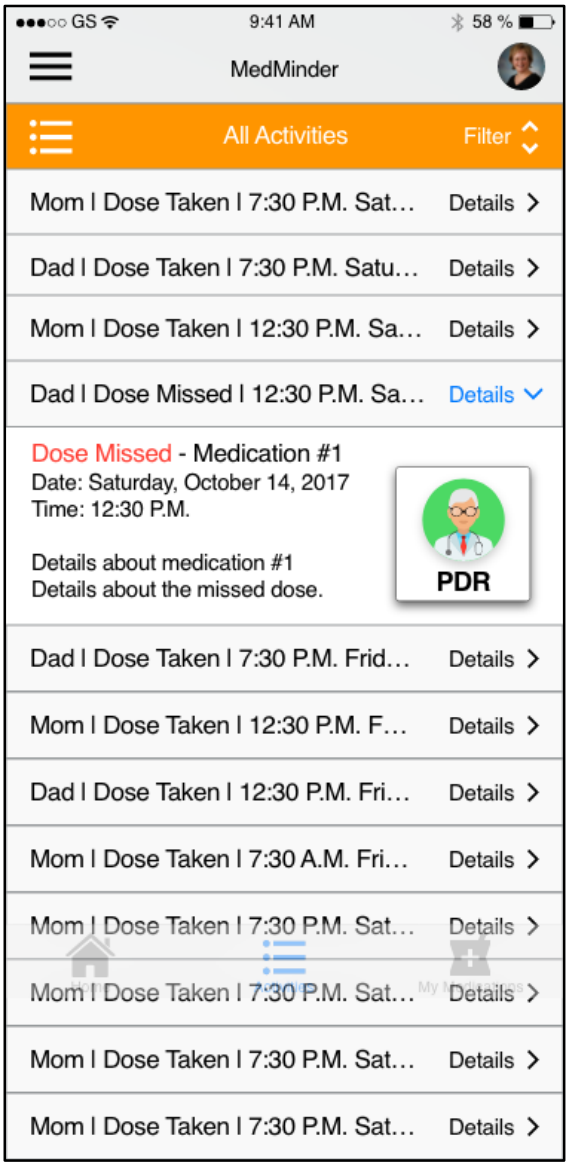
5. Physician's Desk Reference Page Search



6. Activities Page Collapsed



7. Activities Page Expanded



8. Alerts Page

User Feedback

Testing the Prototype

User 1 – Missy Tippens

Missy fits the user persona exactly, as the persona developed for this assignment is actually based on her in real life. She is the primary family caregiver for my grandparents, who she moved into an assisted living facility in March 2017. While minor components of the user persona do not exactly reflect her actual activities as a caregiver, (for example, she does not use a MedMinder device in real life because the assisted living facility provides medical management services) the persona is generally an accurate reflection of her personal characteristics, goals, and daily activities.

Interview

- General Feedback
    - Accessed the *Alerts* page to determine if her mom had missed any doses of the pill she found on the table.
    - Determined that her mom had not missed that pill previously, and so failing to take the pill was probably accidental and not a result of her consistently avoiding the pill.
    - Overall medication search button on the bottom toolbar would be helpful.
    - Likes the opening screen relaying whether all medications are on schedule or not. Reduces stress to see the green checkmark.

- Testing the interactions with the page-to-page flow when attempting to identify pills and determine a course of action when untaken pills are discovered.
    - Naturally tapped *My Medications* page first to start the process of identifying a pill. (Ideal Behavior)
    - Described her process of moving through as looking to find a photo of the pills with identification attached as quickly as possible. So, an improvement would be to surface photos of pills more quickly through this interaction sequence, perhaps before the user accesses the *Physician's Desk Reference*.

- Testing the interactions with the content on the *My Medications* and *Physician's Desk Reference* pages.
    - PDR button on the *My Medications* page is a bit confusing. She mistook the button for a standard photo in the *My Medications* description section.
    - Design should clearly demonstrate to the user that they can access more detailed and different information about any medication by tapping the PDR button. It currently appears that all necessary information should be available in the *My Medications* description section.

User 2 – Terry Tippens

Terry does not fit the user persona as closely as Missy does, as the persona is not based on him. He is not the primary caregiver of any elderly individuals, he works full-time during the week as the Senior Pastor of a large church, and his daily activities are not directly impacted by any caregiver responsibilities. Still, he is a relevant test user, as he regularly assists Missy with her caregiver responsibilities, and has his daily schedule indirectly affected by hers. His personal characteristics and goals are also not dramatically different from Missy's in any ways relevant to his status as a test user. Also, he is much less familiar than Missy with mobile application technology, so will offer a helpful perspective in terms of ease of use and accessibility.

Interview

- General Feedback

    - Has to guess at what to do initially. Says he would first tap Tips or FAQ's.
    - Taps *Activities* and not sure what to do from there. Does note missed doses based on reading the information in the activities section.

- Testing the interactions with the page-to-page flow when attempting to identify pills and determine a course of action when untaken pills are discovered.
    - Got stuck on the *My Medications* description section. Did not know to tap the *Physician's Desk Reference* for more information.
    - Accesses the *Physician's Desk Reference* via the PDR button on the *Activities* page.
    - The PDR abbreviation for the *Physician's Desk Reference* on the button in the *My Medications* description section is not clear enough for someone who might not know what PDR stands for.
    - PDR button should be more clearly identifiable as a tappable item that guides the user to tap it.

- Testing the interactions with the content on the *My Medications* and *Physician's Desk Reference* pages.
    - Decides that he would be able to determine whether or not the untaken pill is what he thinks it is based on the information presented, especially the photos.
    - Requests that more photos of more pills be available so he can easily see photos of many pills at once to be able to identify any untaken pills quickly by their physical appearance.
    - Does not immediately think to search for information about other medications while on *Physician's Desk* Reference page.