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Assignment 1 – Low Fidelity Prototype
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Scenario

Missy has recently moved her aging parents into an assisted living facility about twenty minutes from her own home. Previously, they had lived over seven hours away from her, and she had spent a great deal of time worrying about whether they were remembering to eat, bathe, take their medications at the appropriate times, and in general sufficiently care for themselves. Her mind is now much more at ease, as she knows that the staff at the facility check in on her parents regularly, and ensure that their basic care needs are met.

However, 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 now 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. On one of these visits, she performs her standard routine of refilling the MedMinder device with the upcoming week's medications. Suddenly she notices a small collection of pills on the table next to the device. She quickly realizes that they are medications that her parents should have taken at an unknown time earlier in the week. She reflects on the previous few days, checks her text messages, and confirms that she received no notifications of missed doses from the MedMinder device. This confirms that her parents successfully removed the appropriate pills from the device at the appropriate times, but failed to actually take them, and then forgot they had not taken them.

Missy is unsure of what to do next. She cannot identify many of the pills lying on the table by their appearance alone, and fears that asking her parents to take any of them off-schedule or in an incorrect combination in an attempt to account for missed doses could have detrimental or even dangerous effects on their health. She begins a frantic Google search to identify the pills one by one based on their appearance and markings, and begins the painstaking process of piecing together the puzzle of when they should have been taken by referencing the pharmacist's instructions on the bottles in which they came. Eventually, she successfully identifies all of the stray pills and determines which are safe for her parents to catch up on and which are not.

Missy feels helpless and uninformed. She worries that when this situation inevitably arises again, she will incorrectly identify and/or administer one of her parents' medications. The process of researching stray pills one-by-one is exhausting. All of this headache is caused by a simple error: Her ailing parents removing their pills from the MedMinder device but failing to actually take them on schedule.

View the interface prototype that I designed for this scenario here:

https://gt-sid.mybalsamiq.com/projects/fall2017-nicktippens/grid

The mockups include explanatory annotations on the features that will reduce Missy's stress in the scenario next time it occurs.