Design Point of View – Smart Door Handle

The purpose of the smart door handle we designed is to help people remember the small day to day tasks in their life. These tasks are mostly chores that are relatively simple to take care of (i.e. taking out the trash, buying more milk, etc), but they are likely to be forgotten as the user’s mental bandwidth is mostly dedicated to larger, more significant tasks such as exams and interviews. Additionally, despite these small tasks being relatively easy to complete, they can have disproportionately negative results if they are not tended to – for example, trash that is not taken out may have to wait until the next trash pickup, leaving the apartment with a foul odor for days, or milk not replenished can throw off a user’s morning routine and potentially the rest of their day.

For the design of the device itself, we wanted to remind the user at a point where they are about to take action on their day, namely as they leave the apartment. Reaching them here and reminding them of their small tasks should significantly improve their capacity to remember. We chose to have our device be triggered by touching the doorknob as it is the clearest signal that one is about to leave (and is therefore in the best state to receive the reminder) – other ideas, such as detecting motion or distance in front of the door, could result in the user being annoyed by reminders while they are simply walking around the apartment. The device also interacts with a web app to store and manage the user’s to-do list. We envision a user making a note to themselves the night before in the web app, and then as they leave for the day our device pulls this note from the web app and reminds the user of the related task.