

## Assignment 2e: Task Review

Team members: Atharva Naik, Emily Zhang, Hang Bui, Sam Wolfson

### Easy: Dressing for the Weather

An existing task that people do is dressing themselves for the weather. They want to be able to maintain their comfort in a variety of temperatures and environmental conditions outside. To achieve this, most people check the weather through the weather app on their phone. Then, they use past knowledge and memories of how specific temperatures (e.g. “50 degrees F”) and other weather conditions (e.g. “mostly cloudy with a chance of rain”) might feel like and pick their outfits based on intuition. In picking an outfit, a person might start with the thickest layer, say a jacket, and take into consideration how much they need to wear underneath. Last, they would try it on in the mirror and evaluate how well the outfit does in regulating their body heat.

### Medium: Cleaning out the Closet

Jen cleans out her closet once a year in order to declutter and make more space. She first goes through every single item that’s hung up because they are the most accessible. She examines each piece and tries to recall the last time she has worn it. Then, she takes into consideration the following factors: Is it still on trend? What kind of outfits can she style this piece with? How is the quality? If Jen has decided that she does not want to keep the item, she throws it in a pile behind her. As the pile grows by the end of her examination, Jen folds the discarded item and put it in a bag. The bag is stored in her garage until she finds time to donate them. As a result of this task, Jen has successfully created more space in her closet.

### Laundry-Related Tasks

#### Medium: Separating laundry by color

Depending on the cloth, brand, and washing machine settings, bright colored clothes when washed for the first few times tend to give away color and can stain clothes with whites and other light shades. John tries to sort clothes out into different loads to be washed separately. Sometimes he attempts to go through his dirty laundry piece by piece and separate them by color, but he can’t always tell whether certain items need to be separated from others. Oftentimes he just gives up trying to sort the clothing because the process is so cumbersome, and seems to just result in wasted water and money.

#### Medium: Deciding how many loads are necessary

Sometimes John goes too long without doing laundry, or has to wash sheets in addition to his other clothes. When this happens he needs to decide if he should do more than one load of laundry. He could just cram everything in the washer and hope for the best, but if he tries to overfill it, it might not clean as well. Plus, the dryer will take much longer, and his fitted sheets tend to get wrapped up with the other clothes and prevent them from drying out at all. On the

other hand, doing two loads of laundry is twice as expensive and adds at least an hour to the task.

#### Hard: Deciding when to wash and dry your laundry in a shared apartment complex

Seymour lives in an apartment building with one shared washer and dryer per floor. To do laundry, he first needs to walk across the hall to the machines to check if the washer is free. He needs to decide whether to bring his laundry with him when he checks. If he doesn't bring it, someone might start using the machine while he goes to retrieve it. If the washer is free but the dryer is not, he needs to think about how long he'd have to wait between the washer finishing and the dryer finishing with the other person's clothing, also taking into account that the person using the dryer might not immediately come get their clothing. He also must consider how much free time he has before he needs to leave for school or work, because he doesn't want to leave his clothing sitting wet in the washer for too long. Once his clothes are washed, he needs to periodically check on the dryer to see whether it's free yet.

#### Difficult: Finding Matching Socks

Rachel finds it very difficult to find her matching socks after the first time wearing them and washing them. For every laundry, she puts her socks and clothing together in the washer. After the cycle is complete, she mixes her and her boyfriend's clothing together and puts them into the dryer. She is often the one who does laundry, and then her boyfriend takes the clothing from the dryer and folds them. This is the stage when multiple socks become missing in the laundry. Everytime she loses a sock to the washing machine or the dryer, she has to go and buy a new pair of socks. Our design would ensure that her socks are separated from other clothing in such a way that they do not become entangled or go missing.

#### **Contribution Statement**