When generating overview sketches for part 4-1, we had to consider what aspects of the Data Collection screen were most important for satisfying our initial requirements. All the sketches have similarities, such as having the live reading be the focus of the screen (FR #2). However, they emphasized some different points, and we had to choose which design seemed most intuitive to use. For example, we considered if a settings button allowing the user to turn feedback sounds on/off (NFR #4) was necessary on this screen, or if it was better suited for the main menu. As for the elaborating sketches, they were mainly based on our functional requirements (FR #1 Collection Prompt; FR #4 Data Log). Deciding how the reading screen should be connected to other parts of the app was helpful for planning user navigation.

When storyboarding, we again focused on improving usability of the app. Along with playing a sound when the user presses the "get reading" button (NFR #4), we added visual cues to indicate a successful recording. In this case, we changed the colour of the button and placed a checkmark symbol on the Data Log. So, the storyboarding process was helpful for generating more visual feedback to the user. This step was also useful for estimating how convenient it is to perform a key task in our interface (recording a value to the log).

The most helpful prototyping technique for adjusting our requirements was the Wizard of Oz video. Allowing Dr. Donev to directly interact with our paper prototype resulted in a great amount of feedback. We realized the discrepancies between our current design and what our client considered important. For example, we emphasized a constant, live stream of data (FR #2), but Dr. Donev explained that we should only begin displaying data after pressing the record button. Rather than averaging readings (FR #3), the application should function more like a counter over some time interval. He also introduced other requirements that we had not thought about before, like having the user indicate if they are indoors or outdoors when taking measurements. By discussing requirements and revising them with our client, we gained a much clearer image of how our application should work.