## DESIGN RESEARCH CHECK-IN

INJURY TRACKING FOR AMATEUR ATHLETES || SECTION AC

## BACKGROUND

We conducted our first design research interview in the Husky Union Building (HUB) at UW. We took paper notes in addition to audio recording the entire interview. We effectively established rapport and obtained the information we needed based on the participant's experiences. Our participant, Kaitlyn, is an athlete who is a senior Electrical Engineering major at UW. She's been doing multiple sports since she was young, including the main focus of our study, running. Recently, she has focused on training and competing in half-marathons at a rate of around one per year, though the frequency of her activity varies from running several times a week to going weeks without running.

## FINDINGS

Because of the sports that she's played, Kaitlyn has had multiple injuries. In terms of seeking further medical care, we learned that she prefers to see a doctor only when it's seriously painful or feels very different from what she's experienced in the past – her history of exercise and activity and discussions with her teammates have given her confidence in knowing what pains are not "normal" and need more attention. For example, she's had shin splints several times that come and go, generally due to higher activity levels. Although they did give her pain, it wasn't severe enough for her to seek treatment. Instead, she would do exercises she learned from cross country practices and online resources. In contrast, during her senior year in high school, she tore her ACL during a basketball game. In the morning when she woke up, it was so painful that she could barely get up the stairs and couldn't bear weight on that leg. Because this was out of the ordinary, she decided to see a doctor.

We also learned that Kaitlyn prefers quick, simple ways of tracking stats related to her workouts. Because she is a busy senior, she doesn't have time to manually journal and track stats, preferring instead to use her smartwatch (a Garmin Forerunner) to track them automatically. This also aligns with her preference not to carry a smartphone while running because it is too heavy. She hasn't previously used apps to track injuries, but would prefer one with pictures and diagrams, rather than handwriting or typing notes.

This interview leads us to believe that some participants, such as students, may prefer simple methods of tracking that are easy to fit into a busy schedule - including things like automatic tracking, wearables, and image-based apps. Similarly, they may not have time or may not wish to seek medical treatment unless necessary, instead preferring to rely on personal experience. These preferences will be important considerations as we begin to design our solution.

## MOVING FORWARD

This first interview taught us about one workout and tracking preference, as well as the process involved when deciding whether to seek further medical treatment. However, we still need more information about the physical therapy process. Because of this, we still hope to interview an athlete who's been through a longer PT process, as well as a physical therapist. It will also be interesting to see if our future participants share those preferences, or prefer other options, such as favoring manual tracking over automatic.

Through our first athlete interview, we realized that there were a few areas of knowledge we didn't address fully in our interview questions. Some of these were topics that came up anyway in our conversation, such as what device the athlete prefers to use while running (Kaitlyn uses her Garmin watch), or the input methods that would be easiest (for Kaitlyn, diagrams rather than descriptive journaling). However, there were also some topics we should have touched on more fully, such as how someone might feel about the privacy issues related to tracking injury data. Understanding where our script fell short will help us adjust and gather more complete data from future participants.