Safe Steps

USE SCENARIOS

We designed one problem scenario and two user scenarios to provide a description on how our persona Jonathan Carter interacts with our idea Safe Steps to achieve two specific goals.

Problem Scenario

Jonathan was visiting a physiotherapy centre for getting therapy after his accident because of which he suffered a back injury. During his visit he was talking to one of physiotherapist and was telling her about his fears of such accidents happening again in the future. After listening to his fears the physiotherapist told him about "Safe Step" which he can wear like any normal slippers but it can also help him prevent such accidents in the future. Jonathan liked the idea and he bought safe steps and started using them.

Use Scenario 1

After he started using Safe Steps, once Jonathan came back from work changed his clothes. Also removed his shoes and wore Safe Steps. It was a normal evening for Jonathan and he went downstairs to watch the Footy game on his television. After watching the footy game, Jonathan was headed towards his room upstairs. As he neared the staircase, Safe Steps detected an anomaly in his walking pattern. As soon as Safe Step slippers detected this anomaly in his walking pattern, the Safe Steps wearable he was wearing notified him by giving haptic and visual feedback about this anomaly. It advised Jonathan to not use the staircase ahead and be cautious while walking and if possible then sits down for some time. After getting this notification Jonathan realized that he indeed was having trouble walking, so he sat down on the sofa. When Slippers sensed him sitting, it told Jonathan to do certain exercises for his feet which he can do while sitting that will relax his feet muscles. These exercises were told to him in form of visual animation on the wearable digital screen. After this first experience of using safe step Jonathan felt more secure as he felt like having a safety net protecting him against accidental falls and he started trusting technology more (see Figure 2).
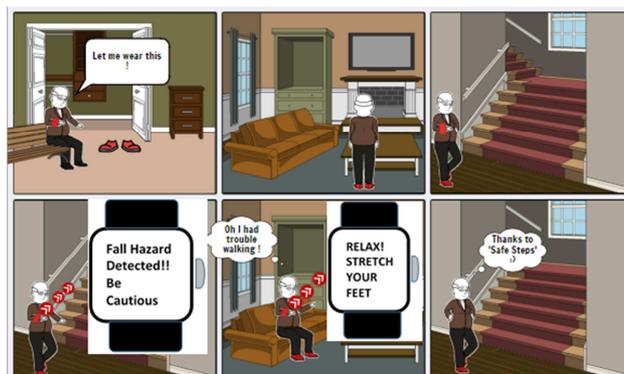

Figure 2. Use Scenario 1

Use Scenario 2

One day Jonathan woke up in middle of the night and was not feeling sleepy so he decided to watch TV for some time, so he stood up and started moving towards living room. As he was familiar with his house, so he didn't bother to turn on the light. He walked 3-4 steps and realized he needed to use bathroom. As soon as he reached near the door of the bathroom he received a visual and sound feedback from Safe Steps slippers that the floor is wet ahead please be cautious. Hearing this Jonathan immediately switched on the lights and cautiously entered the bathroom. Here as Jonathan was not wearing the Safe Step wearable then also the Safe Steps helped him in preventing a fall, this made him feel more secure and enhanced his trust in Safe Steps (see Figure 3).

Figure 3. Use Scenario 2