DP4, Team 10
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# **Design Review #1**

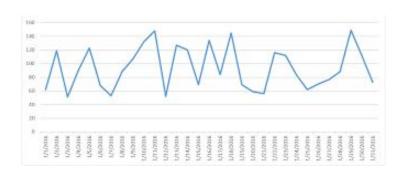
## **Sample Email**

## Summary of this month:

In the first week, the average pain was 4 out of 5. Overall, the average pain for the month was rated 3.78 out of 5.

Notable occurrences of the first week include excessive walking on Monday and Thursday. This caused pain in both hips.

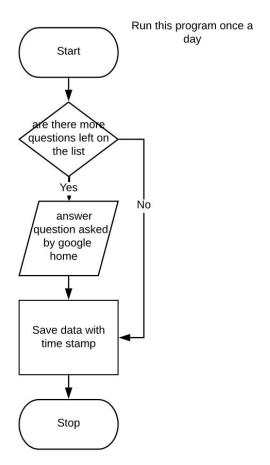
#### Graph:

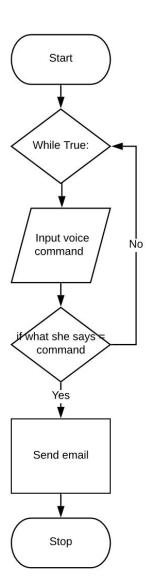


### Questions that she will be asked by Google Assistant:

- Rate pain from 1 to 5
  - Where is majority of pain (only specific answers accepted such as hands, arms, legs, knees)
- Rate joint swelling 1 to 5
- Rate your activity level from 1 to 5
  - What activities did you do today and for how long (only specific answers accepted such as walking, dancing, typing, etc)
- Rate joint redness 1 to 5
- Doctor specific (ex. If doctor is concerned about sodium consumption, ask amount of sodium consumed)

## Flowchart:





#### **Prepared Questions:**

- 1) What do you think are the strong points of this design?
- 2) What are some weaknesses in our design and how could we improve them?
- 3) How many times a day should Ms. Liu be asked to input data?
- 4) When should data be inputted (ex. morning, night, etc)?

#### **Feedback from Mentors:**

- Google home would only assess pain at home need to consider that it would not be able to monitor her activity during the day
  - At the end of the day when we ask her, need to think about timing and the possibility that there is a cyclical occurrence to the day
  - Need to ask how she felt during very specific points of the day, instead of looking at the day as a whole
- Need to figure out if she has a google assistant or Amazon Alexa already we could code and design the actions around that already owned device
- Pain is very hard to understand, it is subjective
- Important questions to ask:
  - What were you doing when you had pain?
  - What made the pain go away? Did you take any medications to help?
  - Assess specific symptoms
  - Always ask where the pain specifically is in your body
  - How long did the pain last?
- Need to think about how we will transfer the voice response to the data point
  - Voice recognition software
  - What if she gives the response that is not one of the voice recognized responses? We would need to code for exceptions

#### **Results of Feedback:**

- Ask at beginning and end of day (when she sets alarm for) scheduled, and whenever needed otherwise
  - Ask about specific times of day (8AM to noon, etc.)
  - Ask to say exactly which area pain comes from
  - Ask how long it lasted
  - Questions will be different
- Give option to enter non-key words and record them in case of new symptoms
- Changed scale from out of 10 to out of 5
- Make morning, afternoon, and evening routines
- She gets to choose how many pain points she wants to enter

## Morning Questions (assuming pain):

- Where (questions are answered for each area she mentions)
  - Swelling 1 to 5, or not applicable
  - Redness 1 to 5, or not applicable
  - Pain 1 to 5

## **Evening Questions:**

- Activities (questions are answered for each activity listed)
  - Time (common ways will be pre determined)
  - Intensity level 1 to 5
- Where (questions are answered for each area mentioned)
  - Swelling 1 to 5, or not applicable
  - Redness 1 to 5, or not applicable
  - Pain 1 to 5