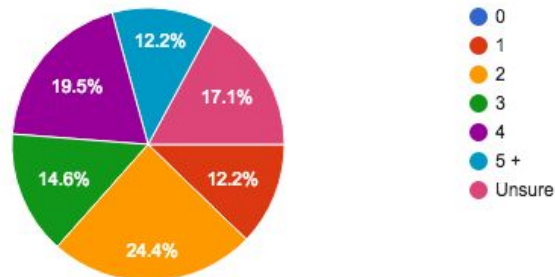


## Design Research Summary

- The first design research we conducted was a survey to gather data on various dogs and information about them. While these statistics were initially intended to be gathered at the humane society, they notified us that all the information they had was on their website, so we felt we were better off creating a survey and asking a wider variety of people.
  - Type of research: Survey  
([https://docs.google.com/forms/d/e/1FAIpQLSefe3Yr0NnhEn6bZOJvXQcX8bim6MMhlu3U5nQ3taDga7Do6Q/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSefe3Yr0NnhEn6bZOJvXQcX8bim6MMhlu3U5nQ3taDga7Do6Q/viewform?usp=sf_link))
  - Researcher: Oliver Larsson
  - Respondents: Facebook, sent to friends
  - Data collected: As of Sunday, 10/28, we had 41 responses but with a *very* good variety of breeds and sizes. This variance is more important to our design research than getting 1,000 responses from *only* golden retriever owners. While the data below isn't the full extent of the survey, it's what I see as the most important of the collection.

## About how many miles should your dog be moving per day?

41 responses



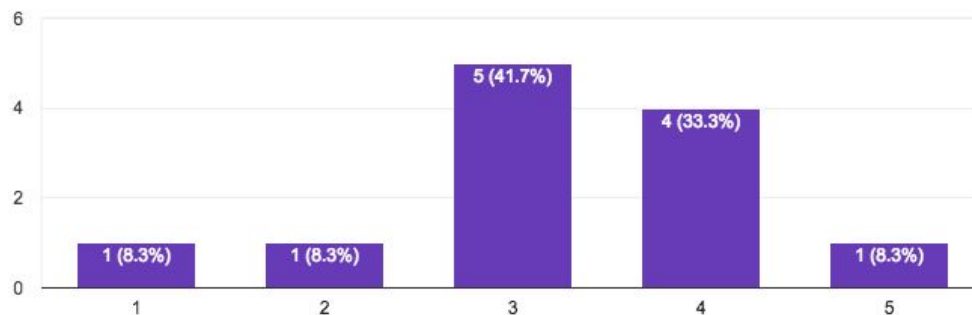
- Findings:
  - As I said above, we're happy to have gotten a wide variety of breeds in the responses from this first survey. Of the total responses, we got 37 different breeds with about a 50/50 split on male/female. This is really important in our design, since we need to consider dogs of all breeds and sizes when fitting devices.
  - Another important point from this research is that most of the responses we received were from owners of young dogs. Although the graph isn't pictured above, over 50% of the dogs we got data from are under 4 years old. Since these responses are from friends, it's likely that they could also be the ones to take on testing of our product. This would be important to us because younger dogs tend to move more and would lead to better data for us.
  - A third finding is related to the last two pie charts above. These questions were designed to see how active dog owners are in helping their dogs out with their fitness, e.g. walking, jogging, running, etc. What's obvious in the results is that owners are not taking their dog's fitness into their own hands. This is resembled by the fact that the portions of "How much should your dog move?" are not close to the portions of "How much do

you make sure your dog moves?” Notably, the red slice in the second graph (1 mile) accounts for 39% of the total, while the previous question shows that only 12% of dogs should be walking only 1 mile a day.

- The second design research we conducted was another survey, but this time aimed towards usability and fitness rather than information on the dogs such as breed and movement. The questions for this survey drew information to get an idea of how users felt an app could improve the current fitness of their dogs and whether they would be willing to use a mobile app and device to achieve the fitness goals for their dogs.
  - Type of research: Survey  
([https://docs.google.com/forms/d/e/1FAIpQLSepYYnhLZ5ygKtY3vEl8JbeqFJCRYHwCwlo\\_aXgzPTmreLI5Q/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSepYYnhLZ5ygKtY3vEl8JbeqFJCRYHwCwlo_aXgzPTmreLI5Q/viewform?usp=sf_link))
  - Researcher: Oliver Larsson
  - Respondents: Facebook, sent to friends
  - Data collected: Similar to the first survey, we're focused on the variety of responses rather than the quantity. As of Sunday, 10/28, we had 12 responses.

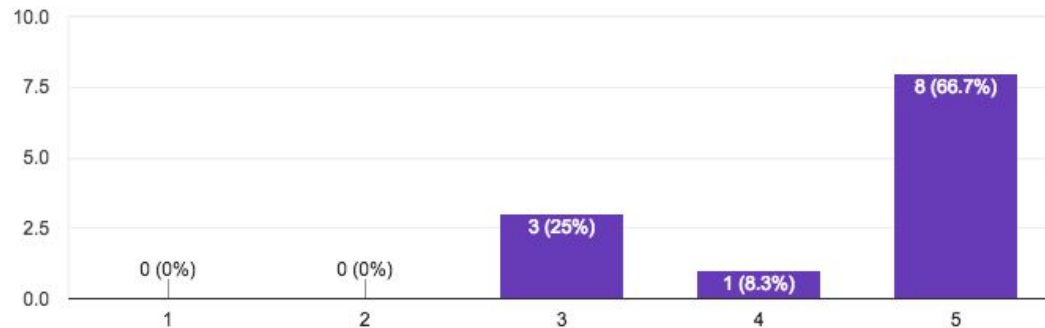
**Do you agree or disagree with the following statement: A mobile app for keeping track of my dog's health would be useful.**

12 responses



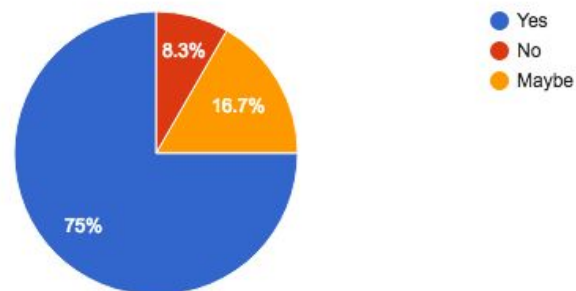
Do you agree or disagree with the following statement: I feel my dog is physically fit.

12 responses



Would you be willing to attach a small device to your dog's collar to track steps?

12 responses



- Findings:
  - Although the general consensus we received in this survey is that people feel their dogs are in good shape, they still mostly agreed that there is room for improvement. These are both promising statistics since we know the people who took the survey for the most part. This helps us because it shows that possible testing subjects are relatively active already, but could still show us improvements in their fitness while testing.
  - The last chart above shows a question regarding attaching a small device to a dog's collar to track their steps. As you can see, the majority of responses were yes, with the second most votes coming in for maybe. Together these make a 90%+ positive reaction to the idea of fixing a device to their dog's collar. This is definitely a positive reaction for the purpose of this product seeing as a device like this would be integral to successful tracking.

- A final finding not pictured in the graphs was that people responded overwhelmingly in favor of mobile applications versus web applications. Two questions were posed in this survey regarding the topic to ensure that the user base would be catered to. As would be expected, everyone felt mobile apps were more convenient and most were in favor of the idea of using one to track their dog's fitness.
- The third design research we conducted was 1-on-1 and group interviews. The reason why these interviews are important is because we kept the surveys close-ended so we could gather objective data on dogs and usability of our design, which meant that we needed some open-ended input from respondents on *how* they currently deal with their dogs' fitness and what they would like to see in a product like this.
  - Type of research: Interview
  - Researcher: Oliver Larsson
  - Respondents: 1-on-1 and group interviews with friends (11 conducted, seven in person and four over text)
  - Data collected:
    - Quotes:
      - "Not just steps, but similar to the Apple Watch where it tracks 'Stand', 'Walk', 'Move', and the time spent during the day doing each."
      - "If I went on the app and [my dog] didn't complete a daily goal I set for her, I would want more context and some encouragement on how to achieve the goal."
      - "Reminders to eat and take [my dog] on a walk would be the most helpful features."
    - Summed up trends in each question:
      - How do you feel about your dog's fitness?
        - Pretty good
      - How do you keep track of your dog's fitness?
        - Generally do not keep track aside from weight
      - What features of an app would make it easier for you to keep track of this?
        - Ability to log stats, walking distance, weight, etc.
      - What's most important to you when thinking about your dog's well being?
        - Weight, happiness, head pats
      - What are two aspects of your dog's daily routine that you think could be improved?
        - Responses included: Walking distance, walking consistency, feeding schedule, amount of treats, high paced activities (like fetch)

- Findings:
  - The most important finding for these interviews came from recommendations on the interviewees' behalfs. One recommendation in particular was helpful, where a couple of friends of mine suggested that the device on the collar of the dog not only be fixed to track steps, but also to track stillness and sitting vs standing. These suggestions came from the fact that the Apple Watch not only tracks steps, but also tracks sitting time, standing time, active steps, and much more.
  - Another finding in the interviews was that was brought up was that some felt that not only logging food is important, but reminders are too. Although it didn't seem like a totally consistent issue across all interviewees, some said that a reminder to feed dogs on busy days can be especially helpful in not breaking a strict feeding routine. This was also noted in the final question of the interview, where multiple people said that a solid routine (e.g. eat at 7:30am and 7:30pm) is really important to a dog's health.
  - A final one from these interviews is the emphasis for a simple application. Several responses noted that it's less important to them to have loads of features and more important to have the facts laid out simply.

## Group Reflection

- Date: n/a
- Time: n/a
- Location: n/a
- Members: Oliver Larsson
- Do your findings agree? Disagree?

Fortunately, the findings all mesh together very well and provide backing to what was initially expected. In the first survey, we saw responses that gave us a huge variety of insight into what 'forms' dogs come in, given breed, size, sex, lifestyle, and so on. These responses help in putting the user base into context not only in human form, but remembering what the actual fitness tracker has to adapt to in different dogs. This is a vital aspect of the project and something that has to be remembered throughout in order to create a product that works for all dogs and dog owners. The second survey added to the first and again agreed with our predictions that most people do their best to maintain the health of their dogs, but they still feel that there is enough room for improvement to use a product such as what we're drawing up. This gives us confidence in moving forward with the idea because coupled with the first survey, this second helps us visualize how a user base would take this product. Finally, the interviews, *again*, agreed with our initial predictions. These interviews were so important to the overall goal of gaining insight into how dog owners would use the product because they allowed for and encouraged open-ended questions that the survey didn't, so we got specific responses on how to cater the app to the dog owners in way that will be effective.

- What decisions can you make based on this data?

Mentioned above, the three research collections work together very well to provide us with an idea of what the users want in a product like this. Since we now have the three most important insights into the user base: dog types, owner preferences, and user preferences, we can combine these insights to create a device and application that effectively helps the users. Specifically, decisions we can make moving forward include where the tracking device can be held (collar), what the application will be (mobile app), and what features the app should contain (mentioned in sections above).

- Were some data collection methods more useful or less useful than others?

Going into the data collection, I expected the surveys to provide very little and the interviews to provide a lot. After conducting both surveys and all the interviews, I realized that no single method would be effective without the other. This is especially true with the first and second surveys because they needed to be separate in order to stay focused on the topics at hand. If we tried to fit the topic of dog information into the survey on owner preferences, the focus would be lost and we might have seen less honest results. As for the interview, it was super important in gaining open-ended feedback and building on the objective responses gathered in the two surveys.

- Do we need more data collection in the coming weeks?

More data collection isn't necessary, but it might be nice to get some more information on what users would like to see in the application. This data would be useful mostly from a UI standpoint, where we need information on what an effective layout or data presentation would look like. This might be done by creating multiple mock-ups and presenting them to a user in an interview-like setting.

## Appendices

- The surveys can be viewed here:
  - [https://docs.google.com/forms/d/e/1FAIpQLSefe3Yr0NnhEn6bZOJvXQcX8bim6MMhlu3U5nQ3taDga7Do6Q/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSefe3Yr0NnhEn6bZOJvXQcX8bim6MMhlu3U5nQ3taDga7Do6Q/viewform?usp=sf_link)
  - [https://docs.google.com/forms/d/e/1FAIpQLSepYYnhLZ5ygKtY3vEI8JbeqFJCRYHwCwlo\\_aXgzPTmreLI5Q/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSepYYnhLZ5ygKtY3vEI8JbeqFJCRYHwCwlo_aXgzPTmreLI5Q/viewform?usp=sf_link)
- These are the interview questions:
  - How do you feel about your dog's fitness?
  - How do you keep track of your dog's fitness?
  - What features of an app would make it easier for you to keep track of this?
  - What's most important to you when thinking about your dog's well being?
  - What are two aspects of your dog's daily routine that you think could be improved?