



# Milestone 1

## **Team Members:**

Amy Giuntini

Brianna King

Chris Whitmire

Gina Colombo

Wesley Wittekiend

## **Intro:**

My Goal Garden is a concept that we came up with to help users achieve their goals. This potential application would ask users to enter a goal, which would be represented by a plant. Over time, as the user is successful in working towards their goal, the plant will grow and will eventually become a full grown plant once the goal is achieved. Once the plant is full grown, it will be placed into a garden where all the users' full grown goal plants will be.

To help us bring all our ideas together, we conducted surveys and did research on how people feel/ act on their goals. This application would not only be beneficial to users in achieving goals, but the user could also use this in order to break bad habits. This application relates to health because it would be considered a lifestyle application. While some goals may not be directly health related, the overall outcome would be a healthier, happier person because they are achieving their goals.

## **Surveys:**

When we first began coming up with ideas, we had a very basic idea of what we wanted to do. However, in order to make our idea more specific, we needed to obtain information based on what people wanted and preferred based off of our basic idea. We created a google survey to ask people questions based on their current successes and failures in setting goals or breaking bad habits. These are the questions that we felt necessary to ask people who took our survey:

1. Do you have any goals?
2. How old are you?
3. Do you work full-time/part-time?
4. Are you in school full-time/part-time?
5. Do you have trouble breaking bad habits or forming good ones?
6. What category would you place your main goals? (health,mental, school/work)
7. Do you think a fun application would help you reach your goals?
8. How persistent are you when attempting to reach your goals?
9. Do you have techniques you use for forming habits?
10. Do you already use an application to help you reach your goals/break bad habits?
11. How often would you want to be reminded of your goals?
12. Does school/work often interfere with your priority of your goals?

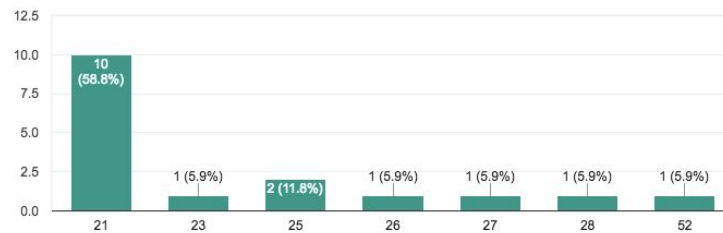
13. How long does it usually take you to form a new habit successfully?

14. What technology platform do you most often use? (Phone application, computer application, web app, etc.)

We ended up sharing the survey with people from our lives since we decided we wanted to target people around the age of students. These are the charts representing the people who were surveyed:

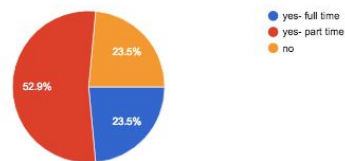
How old are you?

17 responses



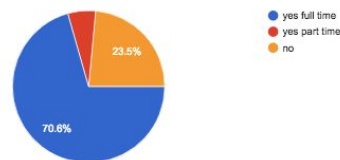
Do you work full-time/part-time?

17 responses



Are you in school full-time/part-time?

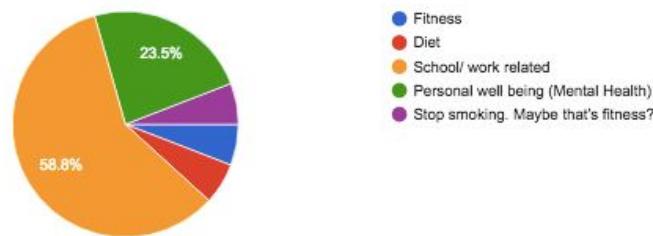
17 responses



From the survey, it was pretty clear that most people have goals and do struggle with reaching their goals and/or break bad habits. 100% of people said that they had some type of goal that they wanted to achieve. However, the categories were pretty spread out when they were asked to put their main goal into one category.

### What category would you put your top priority goals into

17 responses



82% of people said that they had trouble achieving their goals or breaking bad habits, which was a large majority of people who would potentially benefit from some type of application that would help solve their issues with achieving their goals. In fact, 76.4% of people said that they would find some type of application useful in helping their goals and helping them stay on track. The only app that people who took this survey reported using was an apple activity app/ health tracker, which really is not an app that helped people keep working towards a goal/ breaking a habit directly. People's persistency, time to form a new habit, and preferred notification amounts differed pretty dramatically, so it would be helpful to allow each individual user a chance to choose how they want to be notified to help them with their goals. 82.3% of people said that work/school gets in the way of helping them reach their goals, which is something that we can potentially take into account and help make that less of a problem for people trying to achieve their goals. People's preferred technology platform was split 50/50 between their phones and their computers, so either option would be beneficial to users.

## Target Users and Personas

The target users are people who want motivation to reach a goal or form new habits.

This can include people who want:

- To get more fit.
- To improve their diet.
- To improve their mental health.
- Achieve a work/school related goal.
- To improve their time management.

People who fall into these categories and who would use an application such as this can come from all types of demographic backgrounds. They can be from any geographic location and can be of any age or socioeconomic background as long as they are able to use a computer application or mobile device.

However, young children are often focused on performance goals, and their habits are strongly formed by adults in their lives, such as parents and teachers. As children grow older, they become less interested in performance goals and incrementally more interested in learning goals (Kinlaw). While their lives are strongly structured by family, school, and activities, habits to meet these goals can be formed in these environments.

After high school and when living apart from their families, people start to have more personal responsibility. This is when motivation or help reaching a goal may be welcomed, and technology can be a valuable platform for this. Younger adults are more comfortable with technology and more likely to view technology as a useful tool (Van Volkom). Research has found that technology is used more by people with younger ages and who are more educated (Mitzner). In particular, millennials have reported more Internet and technology use than people of Generation X (Marston). People from the ages of 20-35 have integrated technology more into their everyday life than older generations.

Therefore, many children would probably have little interest in setting personal goals and finding motivation to reach them. Older adults may be hesitant to use technology to help them form new habits. The people who would most likely be interested in such an application are young adults with busy schedules. The target users would be college students and working young adults from age 18 to about 35.

**Persona A:**

Jen is an 18-year-old freshman in college who lives on campus with two roommates. She has loved her college experience so far and has met many new friends. Jen recently joined an intramural volleyball team and a few other organizations on campus. Her activities keep her busy, and she spends most of her free time with her friends. She tries to keep up with her school work and study for at least an hour every day. She wants to work in the medical field eventually, so she plans to major in biology and has always done well in school.

However, two weeks ago, Jen received a D on a paper. She was disappointed but told herself she would manage her time better and dedicate more time to her studies. She stuck to her new schedule for a few days, but ultimately fell back into her old habits. Today Jen learned that she received a C on her most recent test. She's decided that she needs to be held accountable for her time management and needs to find daily motivation for this goal.

**Persona B:**

Eric is a 21-year old in his 3<sup>rd</sup> year of college. He lives in an apartment off-campus and commutes to class. He has a full course schedule and is on track to graduate a

semester early with his degree in accounting. He also works part-time in the kitchen at a local pizza shop and is actively looking for a part-time internship. Eric does not have much free time but he likes to go out with his friends on the weekends and spends time with his girlfriend a few days a week.

Between work, school, and his social life, Eric has found that he has not had the time to cook food or eat healthy meals. He finds he usually eats pizza at work and brings home pizza to eat later. He has gained some weight in the last few months and wants to start eating healthier. Having a reminder at meal times to make healthier choices and some extrinsic motivation to plan meals in advance will help Eric to form healthy eating habits.

### **Persona C:**

Carly is 27 years old and graduated last year with an MBA. She has a great new job at a firm that she loves. She lives alone in a small one-bedroom apartment and is planning to buy a house next year. She lives close to her parents and goes to their home for dinner once a week. She usually goes out with friends on weekends, but on weeknights she often stays in and reads or watches TV shows. Carly wants to have a more active lifestyle, and she knows she has the time for it, but she just does not stay motivated. Having daily reminders to work out or get active and being accountable for getting involved in activities will help Carly to form new habits and ultimately reach her goal.

## **Overview of Solution and Why it's Needed:**

Studies show that over 60% of New Year's resolutions created are not kept by the 6th month mark (Norcross & Vangarelli, 1998, p. 127). Additionally, only 19% of resolutions are kept after two years. Many of these resolutions (around 56 % to be exact) are associated with living a healthier lifestyle, both mentally and physically. However, oftentimes working adults and students alike get caught up in the daily routines they have practiced most of their lives. Therefore, people often struggle with setting new goals. Because of this, they need something more than just themselves to take care of - like a garden!

Rule 2 from the book *12 Rules for Life*: "Treat Yourself Like Someone You Are Responsible for Helping". People have a tendency to put more effort into caring for others than themselves. For example, statistically, people are better at filling prescriptions for their pets than for themselves. By giving a person a flower to care for, which represents a goal they are trying to achieve, we believe that will make them more likely to accomplish that goal. The flower growing is a good visual aid for building a healthy habit that will be motivational for the user and help them track where they are in the process (Peterson).

Studies show that many people simply don't have any systematic way of achieving their goals (Woolley & Fishbach, 2017, p. 151). Therefore, their goals often diminish as they focus on other aspects of their lives that are more structured, such as school, work, or hobbies they have practiced all their lives. When it comes to creating a new goal, especially one that can be easily forgotten or is a drastic change to the life they are accustomed to, they need to have an external party that is effected. The "My Goal Garden" application will enable users of any background to set personal health-related goals, such as consuming less calories each week or practicing daily meditation, while also giving users a living thing to care for. As they progress in their own goals daily, weekly, or even monthly, they will become more responsible and accountable as they have more and more plants to care for. The application will give users a fun and creative way to experience rewards and repurcisions based on their progress, while also allowing them to grow individually in their goals.

## **Task Analysis:**

With around 44% of people setting New Year's resolutions, not to mention the many goals people set throughout the year, it's clear that many people set goals (Marist). Of the people who set New Year's Resolutions only 40% of people are still actively pursuing that goal after 6 months, and only 19% are pursuing it after 2 years (Fig 1.). It's clear that people have a hard time keeping goals. However, based on the number of review on apps (Strides/Habitca Download) at least two thousand people have used applications to help keep goals they have made for themselves. Two popular apps for helping people reach their goals is Strides: A Habit Tracking App (Strides Download) and Habitca (Habitca Download). Lets breakdown the different tasks users engage in while using these apps.

## Success Rate of Keeping New Year's Resolutions

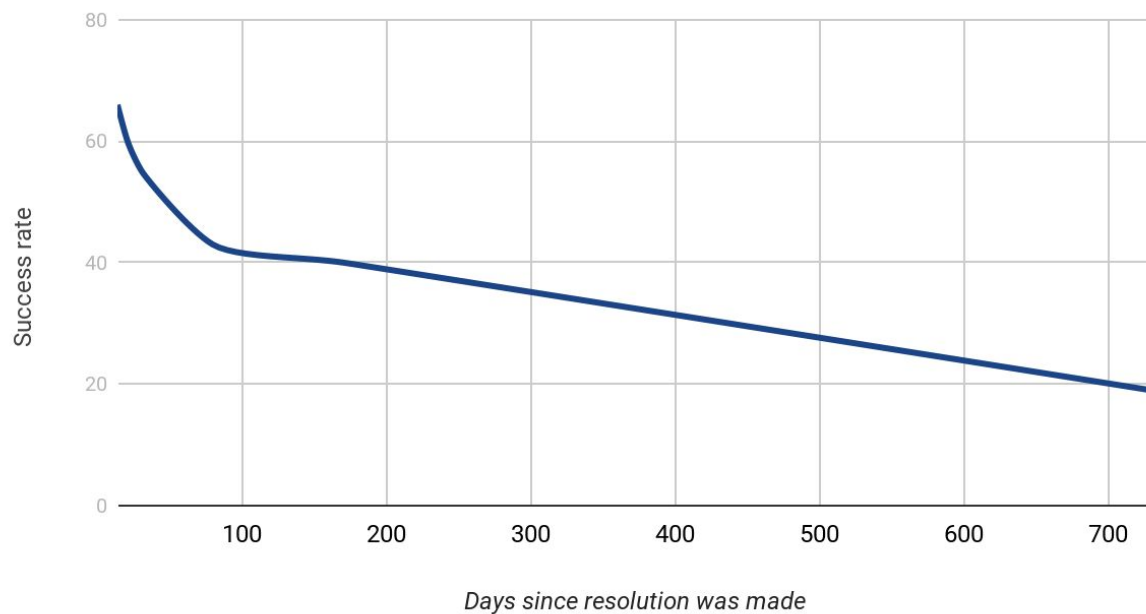


Fig 1: A visual representation of the success rate of people trying to keep the goals they for their New Year's resolutions (Norcross and Vangarelli)

### Alternative Solutions:

#### **Strides**

Strides is an app for IOS and android, and it allows users to enter goals into the app. The app will then track when progress is made on that goal and will send reminders to the user about fulfilling their goal.

Task Analysis:

1. Click '+' to add a task to track. These 'tasks' will be different goals the user would like to fulfill.





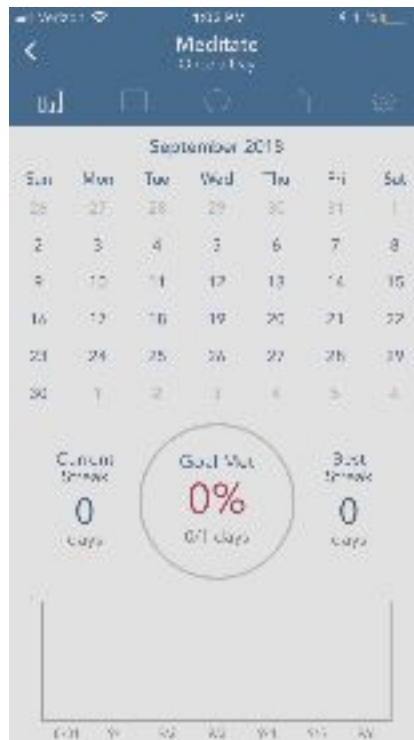
2. Pick your goal from a template. These templates will pre fill your settings to make it easier and more convenient to make new goals in the app. The template choices are: exercise, weight, drink water, get up early, read, budget, meditate, save money, sleep, journal, floss, debt free.



3. Enter the name of the goal, how much you want to do this and how often (it can be n times a day, week, or month, where n can be any number), the date the user wants to start working towards their goal, which days of the week will they need to fulfill that goal, and when to remind the user. You can also set a goal for a streak (Ex: I want to have 10 weeks where I exercise 3 times a week).



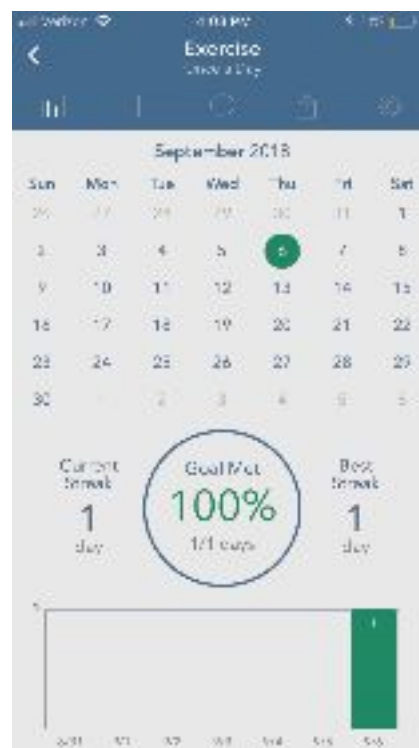
4. Once tasks are set, you can click on each task. When this is done, this shows a calendar and which days you did this task. It also shows you the current streak, the best streak, and the percentage of the goal that is completed.



5. On the screen where you are looking at your tasks, you click on the circle to the left of the task to say that you did it once today.



6. You can also select a task and see a calendar and the percentage of the goal that was met



7. The app will also send notifications to your phone throughout the day to remind you to contribute to your different goals.

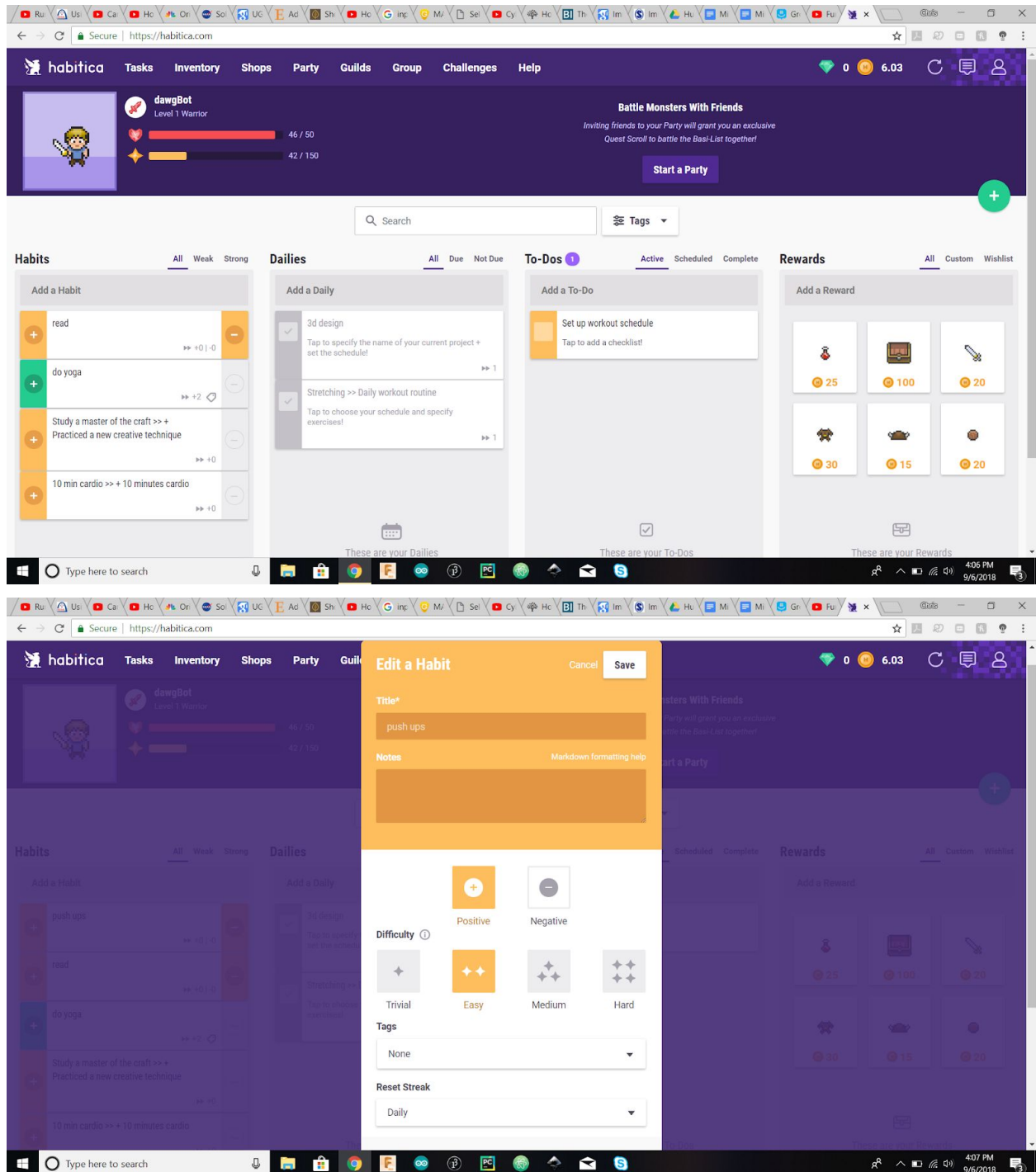
## **Habitca**

Habitca is an app and also browser based. The app working in the browser can be linked to the mobile app. The idea behind Habitca to make an app similar to an RPG video game, but gaining experience and gold is dependent on the person fulfilling goals in the real world. The hope is that since many people are motivated to develop a character in a RPG world, they will feel just as motivated developing themselves in the real world when it provides similar rewards as a RPG would.

### **Task Analysis:**

1. The user starts off by designing their character. This involves choosing their character's size, skin tone, clothes, and accessories.
2. The user then chooses which goal they want to pursue from a list of categories: exercise, creativity, work, diet, self-care, etc.
3. The user then decides to make a "habit", "scheduled goals", or a "to do list"/
  - a. For a habit, click 'add a habit', type in the name of the habit, list it as a positive habit or negative habit, select the difficulty of the habit (easy, medium, or hard), and say how frequent this habit should happen (daily, weekly, monthly). Then if you do that habit, click either the plus (if its positive), or the the minus (if its negative). You will then be rewarded with gold and exp if its good, or you'll lose health if it is a negative habit.
  - b. Scheduled goals or "Dailies" require that certain actions be done according to a schedule. The tasks are the same as they are for habits, but you also say how often you should do it (once a week, twice a week, once a day, etc.)
  - c. The todo list has the same tasks as the habit, but the user must also put in the date a certain task should be finished by. If that task is completed by that date, you get exp and gold.
4. For every successful step in pursuing a goal, the user receives experience points and gold. If they fail in doing the requirements of one of their goal, they lose health. If a player's health goes to zero, their character loses a level and one piece of random equipment. As players level up, they become stronger and have more health
5. With their gold, the users can buy items such as swords, staffs, armor, and pets.
6. The user an join a party and go on quests. These quest involve "fighting" a boss, or getting items. Depending on your gear, you will do damage to the boss every once a certain interval of time. You do more damage if you do your tasks and you get damaged more if you don't do your tasks. If you lose your health, you lose equipment and resources.

7. To equip gear, users click “inventory”, then click “equipment” and they select where the item would go (main hand, head, etc.).



From looking at the results of the user survey, papers on how people struggle to keep New Year's Resolutions, and by analyzing apps designed to assist people from

achieving their goals, we have developed a general tasks analysis of what users will do with our solution. Note that as we begin developing different design alternatives, iterating on our design, and begin getting user feedback, we may change our tasks. Here is the general task analysis of our solution:

1. Make account in desktop or mobile application
2. Choose to add a goal
3. Name the goal and change setting regarding that goal (once a week, daily, type of goal, etc.)
4. Get assigned a plant associated with the goal
5. Fulfill goal requirements, leading to the care of their plant
6. Add plant to “goal garden”
7. Continue to add goals and plants for your goal garden.

## **Conclusion (What we’ve learned)**

While we were able to find applications that helped with achieving goals, we were not able to find anything that tries to incorporate this in a very simple and fun way. We believe that by making users attempt to grow a “goal garden” they will be more likely to try and achieve their goals. As we researched, we found that it is true that people tend to care more for other things rather than themselves. So, by having a plant represent their goals, we think that users will be more motivated to reach their goal in order to take care of the plant. Our surveys helped us get to know more about what users would want in terms of achieving their goals. We will need to keep a few points in mind when figuring out how to put our goal garden together:

- How can we make this as motivating as possible for the user
- How can we make the app less time consuming for users so it does not get in the way of work/school
- Related, how can we make users consistently use the app
- Make the settings personalizable to go with the differing opinions on persistency, time to form a new habit, and preferred notification amounts
- Decide on a platform since it was split 50/50 between phones and computers we can make a decision of either one.

If we are successful in the creation of My Goal Garden, we believe many people will benefit and be much more successful in achieving their goals, but also have fun doing so. The portion where users will have a chance to care for their own plant will make our application stand out to the other goal achieving applications. From our research, we also believe this will actually help our users to achieve their goals. In order

to be successful we just need to make sure our application appeals to our target users and that it will not be too time consuming for their busy lives.

## Evidence

Kinlaw, C. R. and B. Kurtz-Costes. "Children's theories of intelligence: Beliefs, goals, and motivation in the elementary years." *Journal of General Psychology* 134, no. 10: 295-311. 2007.

Marist College Institute for Public Opinion (2014). Marist Poll [Retrieved from [Marist Poll 2014](#)]

Marston, Hannah R., Michael Kroll, Dennis Fink, Helios de Rosario, and Yves J. Gschwind. "Technology use, adoption and behavior in older adults: Results from the iStoppFalls project." *Educational Gerontology* 42, no. 6: 371-387. Professional Development Collection, 2016.

Norcross, J. C., Mrykalo, M. S., & Blagys, M. D. (2002). Auld lang Syne: Success predictors, change processes, and self-reported outcomes of New Year's resolvers and nonresolvers. *Journal of Clinical Psychology*, 58(4), 397-405.

Norcross, J. C., & Vangarelli, D. J. (1988). The resolution solution: Longitudinal examination of New Year's change attempts. *Journal of Substance Abuse*, 1(2), 127-134.

Peterson, Jordan B, Norman Doidge, and Sciver E. Van. 12 Rules for Life: An Antidote to Chaos. , 2018. Print.

Tracy L. Mitzner, Julie B. Boron, Cara Bailey Fausset, Anne E. Adams, Neil Charness, Sara J. Czaja, Katinka Dijkstra, Arthur D. Fisk, Wendy A. Rogers, and Joseph Sharit. "Older adults talk technology: Technology usage and attitudes", *Computers in Human Behavior* 26, no. 6:1710-1721, 2010.

Van Volkom, Michele, Janice C. Stapley, and Johnna Malter. "Use and Perception of Technology: Sex and Generational Differences in a Community Sample." *Educational Gerontology* 39, no. 10: 729-740. Education Research Complete, 2013.

Woolley, K., & Fishbach, A. (2017). Immediate rewards predict adherence to long-term goals. *Personality and Social Psychology Bulletin*, 43(2), 151-162.

Strides download:

<https://itunes.apple.com/us/app/strides-habit-tracker/id672401817?mt=8>

Habitca Dowload:

<https://itunes.apple.com/us/app/habitica-gamified-taskmanager/id994882113?mt=8>