Title: Let’s Do This
CS147 Assignment 7 (Low-fi Prototype) Report

1. Title, each team member’s name & role
Title: Let’s Do This

2. Introduction and Mission Statement
Introduction:
People who are motivated accomplish great things. Yet, being motivated can be hard, especially for long term goals. Reminders are not very effective: they are very easy to ignore, can simply be snoozed away, and most importantly, they are not motivating. Let’s Do This (LDT) uses friendly competition and cooperation to motivate users to work towards their goals. In LDT, friends who share a common goal form a pact. Within a pact, friends encourage each other, schedule meetups, and compare progress.

The purpose of this experiment is to get user feedback on our prototype. We need to know what features are confusing or what features are missing in the lo-fi prototype so we can correct design flaws before we put more resources into a higher-fidelity prototype.

Mission Statement: Motivating friends to achieve shared goals.

3. Prototype
We mainly used POP for prototyping (Figure 3.1), because we wanted our prototype navigation to be as realistic as possible so that users get a feel of the real user experience even with a lo-fi design — POP allowed us to put our lo-fi design on a phone. POP is well suited for our app because our app’s interface uses simple tapping, rather than complex user input such as keyboard input, which can be difficult to implement using POP. Furthermore, our app uses various gestures like tap, swipe right, and swipe left, all of which are supported by POP.

In addition to POP, we also used paper (placed on top of the phone) as we iterated on our prototype. For example, for our second task, giving “good jobs” to friends, we placed colored paper strips on top of the actual button (Figure 3.2) to indicate that the user had used his “good job” on the update. The user can swipe off the paper strip off the screen to reclaim the “good job” (Figure 3.4). In our third task, scheduling, we used paper strips to indicate a pop up notification (Figure 3.3) or selection of an option when the “filter” button was pressed.

The key parts of functionality are the Home Screen (contains many navigation buttons), the Calendar (for scheduling), the News Feed (view updates from friends), and the Pacts page (view progress within a pact). Users navigate between these screens using touch input on a smartphone.
Figure 3.1: Using POP (Homescreen shown)

Figure 3.2. A ‘good job’ colored paper strip indicates that the good job is given
Figure 3.3. Pop-up notifications are imitated by using paper strip.

Figure 3.4. Swiping the paper strip off the screen indicates reclaiming the good job.
4. Method

1. Participants: Demographics, how recruited/compensated

Participant 1: 40 year old male who works as a translator. He uses an ipad, a mac, and an iphone and keeps himself updated with the recent apps in the store. He was tech-savvy and was an ideal user to test our design and get constructive feedback.

Participant 2: 67 year old male who is an entrepreneur and designs apps for start-ups. He calls himself ‘the startup samurai’. He wasn’t very familiar with social networking, which we thought would give us a different perspective when using our app. Since he designs apps, this makes him an ideal candidate for useful UI design feedback.
Participant 3: 28 year old female who is a software engineer at CISCO. We wanted to get an idea of what a younger person thought of our app and how it could be applicable to their life.

2. Environment
   We chose to user-test our application at the Starbucks on California Ave because it is a casual place. We want our users to be able to use our app wherever. We sat down with our participants with our set-up, which consisted of paper (to record notes) and a smartphone with our POP prototype. Participants that were selected received no monetary compensation.

3. Tasks
   1. **Simple task**: “You have made a pact with your friend to train for the Marathon that is one month away. You want to check how far you have come in this pact and how well you are following up on this pact.”
      The user opens his home page. We expect him to check his pacts, where the marathon pact can be found. Once he navigates to the Pact page, the progress is visible in the form of compliments received, good jobs received and updates.
2. **Moderate task**: “You are waiting for your friend to show up and you are bored. So, you decide to check what your friends are up to and how they are doing with their pacts. Also, you decide to give away some ‘good jobs’ that you have.” The user starts out from his home page. We expect him to check his newsfeed and view updates from his friends. We added an element of surprise in this task: the user is allowed only a specific number of good jobs every day. Once he runs out of the number of good jobs, he can choose to take away the “good job” that he had placed and give it to another post. We wanted to observe the user’s reaction to this strategy of having limited number of “good jobs”.

When the user decides to give a “good job”, the app will show a popup that he reached the limit of good jobs for today and that he can choose to swipe back the good jobs that he had used up for someone else and reuse them, if he wants. We expect the user to go to the newsfeed and then react to the popups that will be displayed when he tries to give good jobs.

3. **Complex task**: “You are low on confidence on your Marathon training. You decide to run along with a friend. So, you want to schedule a jog with a friend, according to your friend’s schedule.”

We expected the user to schedule through the calendar on his home page. Once he accesses the calendar, he can press on one of the dates which will lead him to a screen to filter according to the pact and friends. Once he presses ‘done’ on the screen, he will be navigated to another screen with the available possible timing to schedule.

4. **Procedure**

Divya was the greeter and the computer, while Eric was the notetaker and transcriber. We practiced with Juan and Sami several times before testing on the actual users. We first explained the purpose of the application and testing to the users, so that they can give efficient feedback to us. Then, we got their signatures on the consent form. We did a small demo (see appendix for demo script) of navigating to and through a friend’s profile, to familiarize the user with the interface. We ensured that this demo did not overlap with any of the tasks that the user is asked to perform. We then, gave the tasks to the user one-by-one and observed them carefully while they performed the tasks and took notes.

5. **Test Measures**

We measured both qualitatively and quantitatively. We observed how easy the user felt to use the interface and also how enjoyable the experience is for them. We also took a note of quantitative measures such as the number of errors and the time that the users took to complete the task. We also took a note of their reactions as they encountered things like pop-up notifications and gesture-based interfaces.

5. **Results**

**General feedback** :
Generally, users were confused about the difference between “achievements” and “progress”. When we asked them to check progress, the Achievements button on the homepage caught their attention and they immediately went into the Achievements screen. Then, they noticed the badges in Achievements - they liked the idea of badges, but they wanted to know how they could acquire them. In our second task, users figured out that swiping right would send a “good job”, but they didn’t know that swiping left would take away a “good job”. In our third task, users correctly went to Calendar to schedule, but some couldn’t figure out that tapping on the dates would take them to the scheduling page. We incorrectly assumed that our users would understand how to use our calendar, because popular scheduling apps like iCal and Google Calendar also use the same interface.

**Unique feedback**:
**Participant 1** really liked how he could only use a certain fixed number of “good jobs”. However, he expressed that while scheduling, he would like to have some ordering in the filtering options, which would make it easier for him to filter according to the pact and by the friend.

**Participant 2** liked that the app uses positive reinforcement to motivate users. He also liked that unlike Facebook, our app is focused on having a small number of close motivational friends. He pointed out that the home button needs to be on the left side as that’s where his eyes gravitate.

**Participant 3** felt that our homepage felt dead because there is no dynamic, updating content. She did not particularly like the big update button in the middle of the homescreen. We were thrilled to hear from her that she would definitely use the app because she believes that it will get her out of her lazy routine.

**Quantitative results**:

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</table>

*Table 5.1. Quantitative results*

**6. Discussion**
We learnt a great deal from our user testing results and the feedback that we received from our users. Sometimes, users were confused with the naming of screens - like “Achievements”
and “Progress”. We realized that we need to be more clear. For our medium-fi prototype, we are considering merging those two screens into one. We decided to add an app tour, so that users know where functionality is before they use the app. It’s important for us that all kinds of people are able to use our app with ease and we believe that a tour would clarify things even if the user is not familiar with mobile apps. Participant 3’s comment that our home page needs to be more dynamic made us consider integrating newsfeed with the home page. Updates would be displayed in horizontal strips of information that can be swiped away to see new updates.

Users did not understand certain gestures for certain actions like reclaiming a “good job” or tapping on the calendar’s date to schedule. We thought we should make it more clear by including messages like “Tap on the date to schedule” on the screen. To clarify undoing sending a “good job” on a friend’s update, there should be a small text notification below the update that says “Swipe left to undo”. We realized that the people usually look from left to right when looking for interface buttons (at least in the US). We were very glad that our user pointed this out to us, and we decided to move the home icon to the left of the screen. Other usability annoyances included a lack of filter options when scheduling events with friends, not having a list of possible badges on the Achievements page, not having the steps required to obtain the next badge, and the lack of the ability to schedule events in the Friends page. One thing that we couldn’t test was users using the app unobserved. We think that the participants were being too nice to us; they pretended that the prototype was easier to use than it actually was.

7. Appendix
   1. Consent Forms
Figure 7.1.1. Consent form - Participant 1
Figure 7.1.2. Consent Form - Participant 2
2. Raw data
Figure 7.2.1. Raw notes - Participant 1
Figure 7.2.2. Raw notes - Participant 2
Figure 7.2.3. Raw notes - Participant 2
3. **Critical incidents**:

Participant 1:
- Viewing progress - confusion on where to find it. There are two possible places: the Achievements page and the Pacts page. (3)
- Scheduling - confusion on how to select friends (2)
- Encouraging friends - very intuitive to go to News Feed (0)

Participant 2:
- Viewing progress - says Achievements would be first place to look (3)
- Difficulty locating home button - should go on left side (2)
- Scheduling - obtuse filter screen. Says it’s the most confusing part of the app. (3)
- Encouraging friends - very quickly found the News Feed (0)

Participant 3:
- View progress - says it’s unclear how badges are awarded (2)
- Scheduling - First instinct is go to calendar. But, another way could be going to the friend’s profile page and schedule there. (2)
- General - Homepage is too boring because it never changes. (2)
4. **Demo script:**
   I am going to demonstrate a part of the application now. 
   *Opens the home page.*
   This is the home page that you get to, once you login into the app.
   This is a touch screen, as you may already know, so if you want to click on a button, you tap on it. So, let’s see how you can check out one of your friends’ profiles.
   *Taps on the friends icon.*
   So, I want to see Divya’s profile.
   *Taps on the ‘Divya’ icon.*
   Oh! this is interesting. Let me see what compliments her friends dropped for her.
   *Taps on the ‘compliments’ icon.*
   Ah! She has a lot of compliments!
   *Let me go back to my home page now.*
   Taps on the home symbol on the right side corner of the screen.
   *Places a pop-up notification paper strip on the screen.*
   Oh, look, I got a notification saying there’s a new update from Divya!
   *Swipes the notification strip off the screen.*
   Looks like she is working on her pact! Awesome :)

