

Project 7 Document

Evaluation

Authors Name/s:

Alex Silva (Leader)

Claudia Mini (Designer)

Eddie Fox (Writer)

Vijay Kumar (User Communicator)

I. GOALS

For our empirical analysis, we wanted to observe an actual user interact with our prototype. With the information derived from this session, we would be able to use with the aim of extracting insights that could be used to further refine and develop our app. With our heuristic analysis, we aimed to use heuristic guidelines to identify possible usability problems and areas of possible improvement before advancing to a prototype at a higher stage of fidelity.

II. USER AND TASKS

In our Empirical Evaluation we documented Whitney Kumar, a 34 year old, average gym-goer.. We had her complete a think-aloud, self-guided tour of our low-fidelity prototype.

Heuristic analysis by definition does not involve users, but we had 3 members of our group place themselves in the position of a typical user. We wanted to compare the evaluations of three users made independently because additional people analyzing increases the amount of discovered usability problems. We went into our analysis with three tasks. Firstly, use the app to find a buddy. Then, message the buddy. Finally, use the calendar function of the app to schedule something with them.

III. TECHNIQUES

By screen capturing the movement of Whitney's mouse and the audio of her commentary, we collected raw data that led to several predispositions being confirmed and new insights being drawn.

Originally, we planned to use Nielsen's 10 original heuristic principles to guide our evaluation and analysis. After reading the textbook material of the week, we decided that Nielsen's principles, while full of merit, could be passed up in lieu of an updated adaptation that would be more suited to the newer medium of mobile applications. We therefore decided to use Budd's heuristic principles in our evaluation of our prototype.

Each principle has various sub bullet points, but here are the overarching principles:

- Design for User expectations

- Clarity
- Minimize unnecessary complexity and cognitive load
- Efficiency and task completion
- Provide users with context
- Consistency and standards
- Prevent errors
- Help users notice, understand and recover from errors
- Promote a pleasurable and positive user experience

IV. MATERIALS USED

A. Empirical

The tools used to conduct the empirical portion of our analysis were a low-fidelity prototype created in myBalsamiq (see Appendix), Quicktime's screen capture video recording device, and Quicktime's audio recording device.

B. Analytical

For our analytical evaluation we used the the low fidelity prototype, created in balsamiq (see appendix).

V. DATA COLLECTION

A. Empirical

We directed Whitney, our user, to complete two tasks using the Buddify low-fidelity prototype. No guidance on how to complete the tasks were given. She was tasked to use her own guidance to learn how to "Approve/Like a new Buddy" and "Message a friend."

We gladly found the think-aloud, self-guided tour to be very beneficial, as it verified the intuitive nature of the design, and highlighted some misunderstandings in certain functions of the site.

B. Analytical

Here, we will be providing a composite analysis of each section of Budd's Heuristics.

Design for User expectations:

- o For the most part, the interface meets user expectations.
- o Anyone who has used an app before should be able to learn about Buddify in less than five minutes.
- o There may be confusion in the home page, which might need additional clarification and work due to being formatted in an unexpected way.
- o The user may find it useful to connect this application to their Facebook, but this feature is only seen as an option on the start page.
- o Nothing explains the “reward” the user will get out of connecting to Facebook.

Clarity:

- o All of our present icons are meaningful, and each label has a clear functionality behind it.
- o We also filtered out technical language, and made the rest all very clear and straightforward to understand.
- o The home page does not have supporting explanations right now. What does main gym area mean? It seems like it might be categories to find a buddy in, so what would the main category be?
- o Calendar says add events, but does that add to the personal calendar of a user, or schedule an event similar to the ones in the event menu, that other friends can see?
- o When going to the sub menu “Events” the page seems as though you are scheduling an event, the name of the menu is misleading in the sense that it makes the user believe this will display a list of events rather than help them schedule one.

Minimize unnecessary complexity and cognitive load:

- o Cognitive load is reduced when planning an event with a buddy the names of buddies you have liked are shown in a drop down. This avoids the user having to use their memory of the buddy’s name.
- o Most features of the app can be accessed in several steps, but the homepage still has some clutter that could be worked on.
- o The most complicated functions—messaging and calendaring—take a few more steps, though not too many.

Efficiency and task completion:

- o We’ve placed accessible links on every page of the app. At any time, a user can access the home, message, and menu functions of the app.

- o There should be options to remove scheduled calendar events, friends, and messages. The current implementation of the app does not have a way to add events.

- o Here are advanced features provided such as the check box that adds a buddy meetup to your phone’s calendar.

- o Task completion is not clear. After a user picks a buddy, there is nothing showing where that buddy is now being stored or if their information was saved, or even what the next step would be in order to go work out with this person. The options are available but this puts a large cognitive load on the user as well as decreases efficiency of the application.

Provide users with context:

- o Our name and purpose is clear by our name: Buddify—which means, roughly, “the act of making a buddy”. A reasonable user will not download our app thinking it has something to do with things other than buddies or social interaction.
- o We need to do a better job of leaving a breadcrumb trail, which could alleviate the clear lack of progression and task completion. Even though everything can be accessed from the menu, various functions could do with being more upfront and integrated into various other elements of the interface, perhaps through contextual links.

Consistency and standards:

- o The app maintains consistency both to typical mobile app conventions and to itself on every page, with the icons on the top and the menu being in the same order on each page.
- o The system does not always behave in a predictable way. When you like a buddy a check mark appears on top of the profile but afterwards there is nothing to indicate what the next step would be or what exactly “liking” that buddy did.

Prevent errors:

- o Most areas in which the user has to fill out information is filled in with a drop down menu option. This helps prevent any user error when filling in preferences or gym profile information.
- o In events, when you click RSVP, you are instantly signed up for the event. There should be a confirmation asking the user if they really want to RSVP.
- o Users should need to confirm their rating of a buddy before it goes through as soon as it is clicked.
- o Input validation in the starting page could be useful. For example checking for username already existing, checking that age is a number, etc.

Help users notice, understand and recover from errors:

- o There should be error messages for when things go wrong or unexpectedly.
- o Users should be able to delete calendar events and unconfirm participation from events that they have RSVP'd for.
- o Perhaps users should be able to edit their rating for recent buddies.
- o Currently, if a user accidentally "likes" a buddy's profile, but now wants to correct this mistake, there is no way in which the user can undo this action.

Promote a pleasurable and positive user experience:

- o Not the most aesthetically pleasing, but this is probably due to it being a low fidelity prototype.
- o The interface should create some easily attainable goals, the rewards of which are clear.
- o Something that could help a lot with this is more comprehensive documentation on the app. Perhaps not necessarily the details of the interface which they have seen repeated in other mobile apps, but the inner workings that would be hard to tell otherwise. For example, on the implementation, such as when can a user be messaged.
- o The systems concept is to reward the user with a gradual evolution of the application visually in response to their usage and progression, but this is not shown in the current prototype of the system. A reward system is not clear nor is there progression being shown.

VI. ADHERENCE TO ORIGINAL TASK

We found that for the most part, our original plan was adequate.

For empirical analysis, we adhered to the original plan in every regard. The same was true for heuristic analysis except for changing the set of heuristic principles used to guide or evaluation. As explained earlier in the methods used, we decided to for-go Nielsen's principles for that of Budd's. Budd's principles are an adaption of Nielsen's that is well suited for web and mobile applications. We also appreciated its stronger emphasis on the information and content of our app then Nielsen's analysis would have.

VII. RESULTS

A. Empirical

Whitney found the app to be easily navigable, rating the ease of use a 2 out of 10, 10 being the most difficult. Initially, as Whitney was part of our primary interview process, she assumed the app would not compel her to attempt to find a work out buddy, as it lacked an inherent trust value she seeks in anyone she would choose to work out with. However, after navigating the site, finding a common individual with an attractive profile, Whitney quickly changed her initial opinions and concluded that she would trust an individual she hadn't previously known

based on the trust building aspects of the application.

Whitney stated that the app seemed very "fun" and shed would be thrilled to use it if available. It could potentially fill a void in her search for a workout partner nearby.

For new insights, Whitney highlighted a redundancy in our main menu bar. Currently, we include a "Menu" button and a "Home" icon in the top bar of the application. When asked to head back to the "home" or first page of the site, Whitney felt unsure which button to click, the "Menu" or "Home" button.

Also, when navigating through the message pages on the app, Whitney found it to be very vague in what the page intended to do. With this information, we can develop a much more intuitive pages for the messaging aspects of the application.

To conclude, our empirical evaluation lent insights on how to correct vague areas within the design and more importantly, circumnavigate a user's feelings of trust. With information gathered from this empirical evaluation, we will make changes to designs throughout the site with an emphasis on how they communicate purpose and function. We will also attempt to nourish the aspects of the design that caused Whitney to find the design very easily navigable. We believe that by curating these positive aspects of the site's navigation, we can effectively realize a highly-functional, usable, and more importantly "fun" application to use.

B. Analytical

Overall, our prototype did a lot of things right. Despite this, there is room for improvement, and every category had at least some issues with design. The biggest problem with our application was the lack of context and clarify. For example, there was no reward for user for connecting to Facebook. We can clarify this by showing connection with friends. We need to change events, finding buddy, and the home page to increase the flexibility. For example, we currently do not tell users that they need they and their buddy need to mutually like each other in order to send messages. The home app in particular has numerous sections such as "sports", "cardio", and "group exercise", but there is a somewhat vague section in the middle called "Main Workout Area." This is actually a technical gym term, but not everyone using the app will be a regular gymgoer and catch on to the metaphor. Some of the users the app targets, for example, are people who want to workout, but would not otherwise be motivated to go o the gym without the support of a buddy. There needs to be a greater distinction between the calendar and events, especially because the current phrase for adding things to

the calendar is “add events.” We also want to add contextual help throughout the app, and add more breadcrumb trails to clarify where a user is. We are thinking of adding a “Take a Tour” button, activated when the user creates an account that goes over the basic features of the app. It will be available in the settings so the user can take another tour at any time.

Our analysis made us think of the stratification between free and paid users for our app. At first we considered limiting sent messages to buddies, but realized this would impair a critical functionality of the app. What if a free users’ messages were to run out while they were in the middle of conversation with someone? Instead of imposing artificial limits, we decided that free users would have access to base functionalities, while additional functionalities would be available to Buddify+ (paying) users. We would thus need to add an interface to explain the differences between free and paid users, similar to many apps with free version.

More work is needed on the feel and shape on the app. The aesthetics, color, sizing, and position of elements should be worked in order to provide a satisfying and pleasurable user experience. These aesthetic changes will be integrated into the higher fidelity prototype. Overall, the app needs more features that allow the user to delete and edit various elements, such as buddies, friends, and events.

VIII. APPENDIX

A. Heuristic Evaluations

Alex’s:

<https://drive.google.com/file/d/0ByJRznvu8P9IR29fX3F5RlhJZTA/view?usp=sharing>

Eddie’s:

<https://drive.google.com/file/d/0ByJRznvu8P9IN1VBU3VPeTg2VWs/view?usp=sharing>

Claudia’s:

<https://drive.google.com/file/d/0ByJRznvu8P9IMjUzQXRiY3E5eVE/view?usp=sharing>

B. Empirical Evaluation

Transcript:

<https://drive.google.com/file/d/0ByJRznvu8P9IeldwdE1VSjIKc1k/view?usp=sharing>

Video Recording:

<https://drive.google.com/file/d/0B5NjJSWD1kp2WkF0ZmRIN3IRdmM/view?usp=sharing>

Low Fidelity Prototype Used:

<https://drive.google.com/file/d/0ByJRznvu8P9IOXVjT1Q1VTRrSW8/view?usp=sharing>