Project 9 Document

Final Prototype

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I. BRIEF SUMMARY OF USERS AND PROBLEMS SOLVED

Our app Buddify seeks to streamline the process of finding buddies to workout with. This is a process that is currently difficult to accomplish. Buddify rectifies this by targeting both people who are frequent gym-goers and people who may not currently work out, but would with the support of a buddy.

II. DESIGN JUSTIFICATIONS

A. Design Principles

Overall, we justify our design decisions based on four factors. Design principles, heuristic analysis, empirical analysis, and feedback from other students.

a. Visibility

We made all the major, important features of the app clearly visible on most accessible pages. For example, the message button is intuitive and easy-to-understand, and clicking it takes one to the message page. Likewise, the menu lends visibility to most of the rest of the features of the app. These features are: calendar, events, find a buddy, settings, view buddies, and subscribe to Buddify+. On every page, we strived to make each feature straightforward by reducing and removing any unnecessary functions. This has led to an increase in visibility to the other features on each page.

b. Feedback

In a way, mybalsamiq prototypes, as well as the interactive PDFs that can be derived from them, are well suited to providing feedback. Whenever a link is clicked, the user is taken to a different page of the prototype within seconds. This gives the users quick feedback that their actions in clicking a link were successful.

In the sections of our app that deal with looking at prospective buddies, confirming or denying a person will be met with feedback in the form of a large green checkmark or large red X, respectively, over the image of the person. We've also provided feedback in the events section. When RSVPing for events, clicking yes, on the yes / no prompt that confirms RSVP creates a white textbox saying that the RSVP has been confirmed.

c. Constraints

We provided constraints to the user through giving them limited options within the menu and while filling out profile information. The profile information asked for specific information that would be of interest to a potential Buddy, rather than providing a free form text field for a description alone. Another constraint we provide within our application is the use of rating a Buddy. We give the user an approval button and denial button. The constraint in this situation is the fact that we are only providing the user with two options to rate this potential Buddy. By providing constraints we limit the number of ways a user can carry out a task making the process more straightforward to the user.

d. Consistency

Consistency played a major role in the design of the Buddify application. By using the same color themes throughout, the app has valuable continuity, offering a more appealing experience. Each page utilized a templated header that caused navigation through the app and its different pages to feel effortless. Icons for messaging, menu search, and individual profile information stayed constant, allowing for optimized memorability for new users. Help options designed into the app were found in the same location on each available page as well.

e. Affordance

The main functions in Buddify that adopted the effective use of Affordance would be our messaging features. Since messaging between buddies will be paramount in the use of the application, we found it very necessary to make the messaging functions and actions to be represented with icons of the highest level of affordance. The messaging icon, seen as a "Chat bubble," is today's primary image associated with messaging. Therefore, we used the 'Chat Bubble' to represent most actions within the messaging functions of the

site.

The second area where affordance was utilized was in the calendaring and events portion of the site. Using a prominent + sign for a new event communicates to the user that this button is how you can add a new event to your calendar. The Calendar image to show the different events is another aspect of affordance. Rather than listing out events according to their date, we use the calendar image to present scheduled events to the user. Although this use may be a very obvious choice, we feel the best design decisions are the ones that mostly go unnoticed, i.e. a visual calendar opposed to a calendar list.

B.   Design Justifications based on Heuristic analysis and Empirical analysis
After gaining some insights from our research, and keeping design principles in mind, we made a low fidelity prototype of our app that we applied heuristic and empirical analysis to.

a.   Heuristic Analysis
For our heuristic analysis, we had three members of our team independently evaluate the low fidelity prototype and compare notes.

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:

1.   Design for User expectations
2.   Clarity
3.   Minimize unnecessary complexity and cognitive load
4.   Efficiency and task completion
5.   Provide users with context
6.   Consistency and standards
7.   Prevent errors
8.   Help users notice, understand and recover from errors
9.   Promote a pleasurable and positive user experience

As a result of our heuristic analysis, we gained several insights that shaped the design of our prototype from that point forward.

The biggest problem our application had was the lack of

context and clarify. For example, there was no reward for user for connecting to Facebook. We added a connect to facebook option on various pages, such as the profile setup, and settings page. We decided to change events, finding buddy, and the home page to increase the amount of information they provided to address clarification and context problems. The most prominent form we use to accomplish in our app is tooltips, that can be popped up and dismissed through various question mark help buttons. One example of an area where this is particularly useful was clarifying the otherwise somewhat vague option in the gym page, the "Main Workout Area", which is a technical gym term some users may not understand. We also added a greater distinction between the calendar and events by linking the two sections together, in order to increase the clarity. Previously, the calendar would include a link to add events, but there was no events page. We created such a page that holds all events that one is currently RSVP'd for, attending, and recommended events in the local area. The calendar shows current events that one is attending. Because of this linkage, the event page can be seen more as an overview of all actual and possible events in ones' life, while the calendar is a visual overview of confirmed events, much like how one would not write something in a planner until it was actually scheduled. Out of the need for clarity and context, we also added a tutorial video when the user opens the app for the first time.

Our heuristic analysis also made us thinking of the stratification between free and paid users for our app. We did not want to create artificial limitations that would impair critical functionalities of the app. Instead, we decided that free uses would have access to base functionalities, while additional functionalities would be available to Buddify+ (paying) users. We created a Buddify+ page that can also be accessed through the menu on any page that clearly explains all the differences between a hypothetical free and paid version, including no ads, and being able to store an unlimited number of messages.

b.   Empirical Analysis
In our Empirical Evaluation we documented Whitney Kumar, a 34-year-old, average gym-goer, and had her complete a think-aloud, self-guided tour of our low-fidelity prototype. We collected raw data in the form of screen capturing mouse movement on the screen and audio of her commentary. Using the prototype, Whitney was given two tasks to complete, with no guidance: "Approve / Like a new buddy" and "Message a friend."
The empirical analysis completed during this project shed much light on the usability of our app. Whitney pointed out critical issues in the messaging portion of the site,

event/calendaring areas, and the menu. For example, there was a redundancy between having both a home and menu button, which could lead to confusion. Taking her feedback, we made the messaging pages within the app much more intuitive and robust, adding search features, and more clear messaging navigation. In addition, we bolstered the function and design of the events/calendars pages. Being that scheduling events was the function that most excited our user, we felt that further concentrating the events page around an optimally intuitive design would be very beneficial for a successful user experience. We also eliminated the home button and changed the home icon of our menu into a more typical menu icon, in order to not confuse people.

In combination with heuristic analysis, the collective concerns for clarity, and other empirical insights from caused us to create more tutorials and tooltips within the app. These additions would assist new users in quickly adapting to the slight learning curve of a new application like Buddify.

C. Design justifications based on Feedback from Piazza & List of Changes

We have decided to tackle both of these document requirements within the same section. Our reasoning for this is that any design justifications based on feedback would be recent, later in time than justifications based on heuristic and empirical analysis. The list of changes is essentially a list of actions we took, so stating what is essentially the justifications for these actions in the same section seems efficient.

1.   We added a new find a buddy page, as users were confused when delving further into the application. Although all functionality of the app could be experienced with one user profile, the addition of a second user profile caused for more understanding of site flow, and provided a more accurate representation of the user's mental model.

2.   We added a video image on the home page, with a link to a description of what information the video will present. A common critique amongst our peers was that the purpose of the app was not apparent upon entering the application. Therefore, we thought it best to include a short video presentation of the "coolest new app to hit the fitness world…" The video would give a brief and easy-to-follow introduction to the buddify app. Users can opt to watch the video or skip past the video if they are already acquainted with the purpose of the app.

3.   Provided a link in the menu called "My Buddies" to access approved buddies easier. This was to address feedback that people did not have an easy way to access their friends list. Previously, they would have to click the message button and go back.

4.   Added an upgrade button in the menu in order to further advertise Buddify+. This was to address concerns that information concerning the premium paid version, Buddify+, was buried within the application, and only found by randomly stumbling into it.

5.   Added more description on what to do next after an approved buddy check-mark appears. Piazza comments indicated that the app provided insufficient feedback after approving a buddy. A continue button was provided in the response screen in order to indicate to the user what the next step in the process would be. This becomes more obvious in combination with the addition of My Buddies to the menu.

6.   A link was added from the loading screen to the welcome and video page. Previously, there was no link to the next page.

7.   We implemented a student suggestion to add a category to the check boxes that says if a user would definitely go, would most likely go, etc. This would allow event host to be able to gauge the probability that their buddy or buddies would be able to attend.

8.   Added to the loading screen: "Welcome to Buddify, the premiere, award-winning, workout app designed to pair you up with workout buddies. Let's get started..." This was to address feedback that some people did not initially understand the purpose and intend of cues being presented to them, and thus could not understand what to do, because they did not understand the purpose of the app.

9.   Added numerous tooltips throughout the app in the form of question mark buttons that could pop up and dismiss informative text by clicking the buttons. The gym page was given a tooltip that explained about the various areas. The profile setup page was given two tooltips, one discussing areas of gym interest, and the other talking about fitness levels. Tooltips were also added to the buddy page on trust rating and gym frequency. Tooltips would have been better at following the principle of feedback if we could have implemented them to trigger   upon hovering over the question marks, and dismiss after not hovering any more, but there were limitations to what we could achieve in mybalsamiq. This was a continuation of the tooltip changes we made in response to previous empirical and heuristic analysis. In this case, we wanted to address feedback that the rewards and benefits of several areas could be explored better.

III.   CLICKABLE PDF PROTOTYPE

Link: https://drive.google.com/file/d/0B5NjJSWD1kp2QTFOOEpSdUlMTmM/view?usp=sharing

IV.   STORYBOARD

Link:
https://drive.google.com/file/d/0ByJRznvu8P9ITlRvZjV3N2Z
CN1E/view?usp=sharing