Problem Overview

Adolescence and growing up is hard enough for teenagers, but sexual identity crises can push troubled teens to the edge, and in severe cases, suicide. We are proposing an application called Alliance, designed to bridge the gap between troubled teens on a struggling search for help with volunteers and trained professionals. Suicide hot-lines exist, but have proven to mostly help those who actively searching for or are open to receiving help. The issue lies in those who are closer to giving up than looking for a helping hand. Our application is aimed to build a secure, welcoming, and comfortable environment that LGBTQ teenagers in danger of committing suicide can instantly turn to with no fears or inhibitions of being judged or shameful. Our interface, comprised of a mobile and personal computer interfaces, is pointed at a creating a smooth connection between volunteers, or Allis, and teens seeking help instantly. Alliance allows those who are just beginning to struggle with depression caused by, to easily reach out and express their thoughts and feelings with trained volunteers, curtailing the problem before it becomes too severe.

Refined Tasks

We decided to go in a different direction from our previously defined tasks in the last assignment, and turned our attention more to the Alli’s interface, as they are more feature-rich than the interface used by troubled teens.

In the first task, the Alli should be able to be notified on their phone when a Alliance user sends them a chat, and be able to respond instantaneously. While Allies may use mobile applications to supplement their desktop consoles for mobile counseling, the Alliance user is not expected to
download and find an application to use the service. Users will see the link for the website when searching “suicide” on Google, even within mobile phone browsers, eliminating the need to download an application.

Our second, medium level task, deals with a combination of having the Alli use a web interface as well as a seamless mobile device application. This task highlights the features available for the volunteer to use when at a computer, as well as how mobile applications can supplement their counseling availability while away from a computer. The Alli can continue a chat initiated on their mobile device on their personal computer. The interface includes a FAQ type section, allowing a quick reference of the volunteer rules, a guide to handling emergency situations, etc.

Our last task, the most difficult, would involve the back end work of keeping teens in contact with their “favorite” Allis. Teens will be able to save Allis that they have spoken to, adding them to a “favorite Alli” contact list. Allis receive personal pings on their mobile devices if a teen is trying to contact with them. If the Alli is not in a position to dedicate his/her attention to a user’s need at the moment, they can silence notifications by going offline, deferring the teens to other Allis. When not silenced, the Alli would receive a notification on their smart phone, with the one touch commands of chatting, deferring, or sending an away message. If a teen is trying to reach a saved Alli in a desperate situation, they have the ability of marking their chat as “urgent,” in which case the Alli would get a notification (alarm and pop up) no matter if their phone is silenced or not. If the teenager is deferred to another Alli, despite requesting a favorite, Alli’s can send notifications to each other, notifying that a user is trying to contact them, bypassing Alli current notification settings.

**Refined Sketch Interfaces**

![Figure 1. Easy Task Interface](image-url)
Figure 2. Possible Medium Task Interface (Desktop)

Figure 3. Possible Medium Task Interface (Mobile)
As previously mentioned, our tasks have been completely re-imagined; the changes needed to support the added functionality lead to a significant redesign of all of our interfaces. Above, we have mostly examples of interfaces the same basic functions but laid out differently. Figures 1 and 2 were quite skimp, but showed the different options that Allis have versus a simple chat and bookmark option of the user. These detailed the easy task. Figure 3, detailing the medium task, was designed for the web interface, allowing us to have a larger space to play around with, which sparked our creativity. The last sketch, Figure 4, depicts a simple notification icon that is clean and simple, allowing the options of opening an urgent chat from a favorited user or deferring it.
As our tasks evolved, so did our interfaces. The interface we decided on was Figure 3, the web-based Alli control panel and chat screen. We incorporated chat log features, that allow Alli’s to keep track of conversations with unique users, and note-taking space that allows Alli’s to record significant information about specific users. There is also a gesture-activated sidebar, which displays more features and extends from the right of the screen into the main interface. The slide-out menu features a volunteer handbook of situation handling tips, as well as a directory of all Allis in the event that a user wants to be transferred to a different Alli. All information related to the user, and information specific to an Alli’s account, such as user and chat history, are synced automatically between interfaces. A danger rating is algorithmically computed, informing the Alli of perceived user desperation; it takes into account sign-in frequency, and phrase analysis.

In case of emergency, if favorited Alli does not answer or defers the chat, the user will be redirected to another Alli. In the event of dangerous cases and interaction in which the Alli believes the user is in imminent danger, there is an easily accessible emergency button on the Alli’s end that sends the user an automated message asking them to allow them to speak to them over the phone. The voice chat option can be used at any time, urgent situation or not. Similarly, in serious cases, the IP will be used to locate the user and further initiatives will be taken to prevent the user from inducing harm on themselves.
K is fast asleep. His mother walks in and tells him to get out of bed; he’s missed school multiple times that week. K barely awakes and mumbles that he will, with no motivation to actually go to school that day. The past couple of weeks have been rough for him, and his only escape has been his room, the Internet, and sleep. His room is dark and dreary, cluttered with clothing everywhere and a disheveled desk. He awakes hours later to a cluttered mind and the persistent thought of suicide arises once again. He makes sure his mother is gone for the day, and sneaks to the kitchen to steal a drink from locked liquor cabinet that he’s learned to pry open. Going back to his safe haven, he looks at himself in the mirror, can’t stand the sight of himself. His inner turmoil over his sexuality and bullying from kids in school is driving him insane. He barely contains himself, and retreats to his computer. He’s had thoughts of suicide
before, but thinks today may be the day. He hesitates, but searches “suicide” online. After looking at the main results, he focuses in on the first result, “Alliance.”

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An Alli gets a ping on his phone on the metrobus, opens his smartphone application. It’s a new chat from a new Alliance user. He’s with a friend, and explains to her that he is an Alli with Alliance, an initiative to provide chat and suicide prevention services to troubled LGBTQ. He starts chatting with the individual.

The Alli gets off the bus, walking with the friend, and goes to a local coffee shop. His friend is asking questions about Alliance and how to become an Alli while the Alli is responding to the person pinging him. The Alli sits down with his friend, and switches from the mobile-based app to the online interface. All the while the friend is interested, and asks how to sign up. Pull out his own laptop and goes on the website and applies to be an Alli.

The Alli refers to virtual handbook on right hand side of screen for some guidance. They continue to talk to teen until they feel content, and their current problem and worries are solved. The user bookmarks the Alli.

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Cut to montage of K continuing to use Alliance over a period of time, feeling better each time and continually on a regular but less serious basis.
K is back in school, and is bullied that day. Terrible thoughts rush back to him, and he runs to the bathroom in tears and decides to talk to his trusted Alli. The Alli is offline, but he marks his chat as urgent, not knowing what to do or who else to talk to. The Alli would receive the urgent notification on his phone with a special alert sound, and opens it up to console K. The situation is handled, and K has the confidence to go back to class and deal with the bullying.

**Lo-fi Prototype**

Our prototypes were created using free software called Prototyper. This software allows you to use wireframing elements as well as images, to create links between “screens.” We naturally tweaked our original sketches during the prototyping stage, coming across some problems, like tracking unregistered users using their mobile phones and their computers since their IP address would not match up. We figured that users would be encouraged at different points to sign up in a non-threatening way. Using Prototyper, we created both the web interface that we sketched previously, and created an additional mobile interface, including mobile notifications.