# CSCI 4800
# Fall 2018

**(Team Athena)**

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**Milestone 1**
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# Overview

Mental health issues have been an increasingly prevailing phenomenon. Instead of the traditional way of a person looking for a psychiatrist, there can be a new form of media to help connect not only the potential patients with the psychiatrists, but connect with other individuals. This would allow a community of users to interact and relate to each other, along with finding professional help.

# The Problem

There is people all over the world who live with mental illness. Some of these people do not want to get outside, meet people, discuss their issues, etc. The way for some of these group of people to get better or treated is to do exactly what they can't. There needs to be a way for people of mental illness to easily access what they need and also feel comfortable in doing so.

There is also another group of people who want to learn more about mental illness to better understand it in the world. This could be friends, coworkers, family, etc, who just want to be able to know in some sense what another person is going through. To do this they can't really go ask the person with the illness in some cases and they need to be able to easily access all the information in one place.

# Users and Stakeholders

## Stakeholder Analysis Map

| Latent | Promoters |
|---|---|
| Hosting Provider | Patients |
| | Professionals |
| **Apathetic** | **Defenders** |
| Bank | Maintenance |
| Neighbor businesses | Technician |
| | Advertiser |

## Users
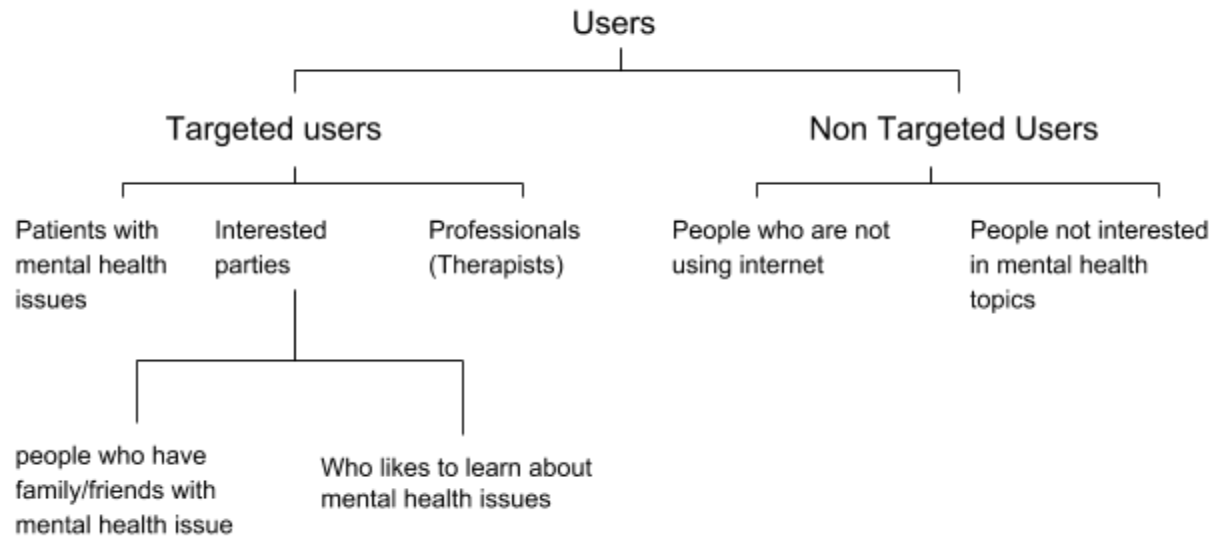


## Targeted Users

i.    Patients with mental health issues

    Patients are the main users of this website. In the need of seeking help or settle their confusion,  this is system allows them to post their own questions, search relevant topic to see if someone has the similar doubt, Share their experiences and answer other user's questions as well. Also they can find professionals and get help from the professionals through our website without visiting physically.

ii.    Interested parties.

    This parties can be divided into two sub categories: people who have family or  friends with mental health issues, and completely outsiders — who personally do not have any mental issues and same as people close to them, but are curious about this topic.

    For people who have intimate people with mental issues, they might wanna find resource to help them get out of the dilemma. This website can be a great easy-to-use online recourse for them to

iii.    Professionals (Therapists)

    Taking professionals into considerations, we are putting them on a crucial position. Professionals can create accounts, post information and answer questions on the website. Those professionals would have a certification authority besides their usernames.

i.    People who are not using internet

The website is an online system which depends on the internet , thus people who are not using internet (prefer traditional medias) would be not considered as our targeted users.

ii.   People not interested in social media

The form of the website is posting questions and answers based on the basis of social media-each user has to register an account in order to access all the functions. Therefore, people who are not interested in social media would not be considered in targeted users.

iii.  People not interested in mental health topics

On the base of social media, the theme of the website is mental health topics. If people are not interested in this topic at all, this website would not be appealing and helpful for them.

# Requirement Elicitation

## Personas

## John Smith

**Background**
- 86, Male
- Lives with the unmarried daughter.
- Suffers from depression, insomnia, anger and dementia.

**Motivations**
- Tasty foods.
- Loves to read newspapers.

**Frustrations**
- Noises.
- Lack of sleep
- Internet
- Medicine.
- When his daughter nags.

**Goals**
- To live without problems.
- Live without medicine

**Technology**

IT and Internet

Software

Social network

**Bio**

Mr. Smith is an 86 years old male who lives with his unmarried daughter. He hates new technologies. He doesn't that have much friends. And he says his neighbours are really noisy.

## Taylor Smith

**Background**
- 43, Female.
- Unmarried.
- Lives with her father.
- Works at a cafe.
- Has a cat.

**Motivations**
- Listening to songs.
- Chatting with friends.
- Loves her cat.

**Frustrations**
- Father's confusing behaviour.
- Angry customers

**Goals**
- To get married and have children.
- To live a happy life.

**Technology**

IT and Internet

Software

Social network

**Bio**

Tayler smith is the unmarried daughter of John Smith. She is 43 years old. She loves music and children. she works in a cafe as a cashier. She has a small car and she drives to the cafe everyday except sundays. She goes to the church every sunday. She loves his father but his behaviour confuses her a lot.

# Olivia Tyson

### Background

- 35, Female.
- Marketing manager.
- Lives in an apartment.
- Married, 1 child.
- Travels a lot.
- Very busy.

### Motivations

- New marketing concepts.
- Her child.
- Coffee.

### Frustrations

- Not being able to find training materials.
- Tiredness.

### Goals

- Learn about other projects in the company.
- Learn new management concepts.

### Technology

IT and Internet

Software

Social network

### Bio

Olivia is a successful marketing manager. She is a fast learner. She has been with her current company for 1 year and has already participated in 10 conferences in different countries. She travels a lot. She is a very enthusiastic, friendly person and she is keen to learn new things. She sleeps only 3 hours a day.

# Questionnaire

## Mental health Survey

We are conducting research for a website we are hoping to create. This site is design for the idea that people can access all the information they need to while being in a safe environment. This is a completely anonymous form and will only be used inside the scope of this class.

* Required

1. **When you are facing a problem or issue, which way to you prefer to ask for help? ***
   *Mark only one oval.*

   ◯ Look/ask online

   ◯ In person

2. **When posting online, what do you prefer to be recognized as? ***
   *Mark only one oval.*

   ◯ Anonymous

   ◯ Your first name

   ◯ A made up name

   ◯ I don't post online

3. **What do you expect from a private social media site? ***
   *Mark only one oval.*

   ◯ Confidentiality

   ◯ Ability to connect with others

   ◯ Have an admin on standby

   ◯ Private messaging

   ◯ Other: _____

4. **Do you have any mental health issues? ***
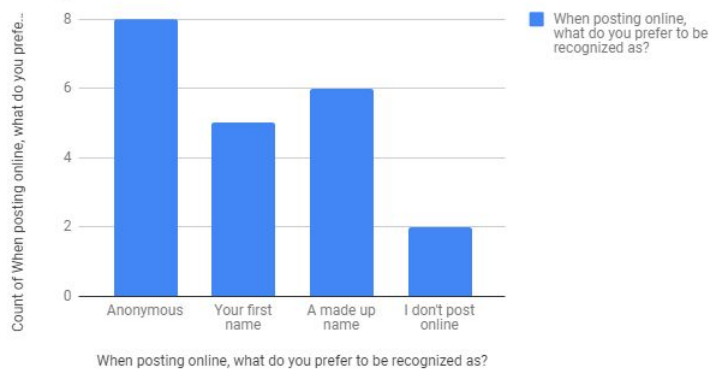   *Mark only one oval.*

   ◯ Yes

   ◯ No

5. **Have you ever wanted to know information on mental health and were not able to find it all in one area? ***
   *Mark only one oval.*

   ◯ Yes

   ◯ No

7

Count of When posting online, what do you prefer to be recognized as?



What do you expect from a private social media site?

21 responses

- Confidentiality
- Ability to connect with others
- Have an admin on standby
- Private messaging
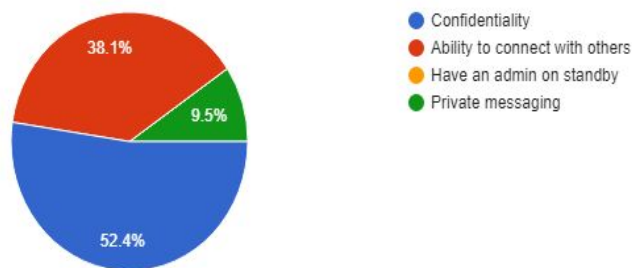
We found out that most of the users would like to be anonymous when posting online. This also supports are finding that what people want most in our private website is confidentiality.



When you are facing a problem or issue, which way to you prefer to ask for help?

21 responses

- Look/ask online
- In person

This chart shows us that over half of our users want to ask for help online.

## Do you have any mental health issues?

21 responses
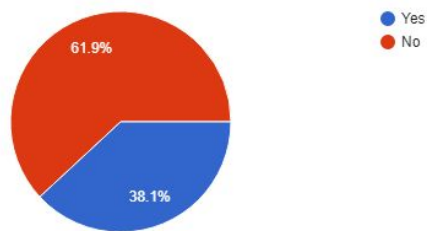


According to this chart, majority of people have specified that they do not have mental health issues. We can categorize people who voted for not having mental issues in to 3 sections:

1. People who do not have any mental health issues
2. People who are not aware of their issues
3. People who do not like to specify they have issues.

By this chart we identified that it is really necessary to make people aware of the mental health issues and also we identified protecting the anonymity is very crucial.

## Have you ever wanted to know information on mental health and were not able to find it all in one area?
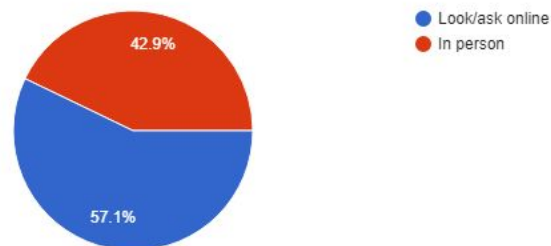
21 responses
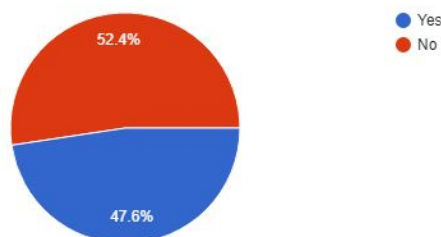


This chart helps us to find that there actually is other programs out there, but at a higher cost. This also shows us that we can develop this into our safe environment so everyone can find all their resources in one area.

# Existing Solutions

## Talkspace
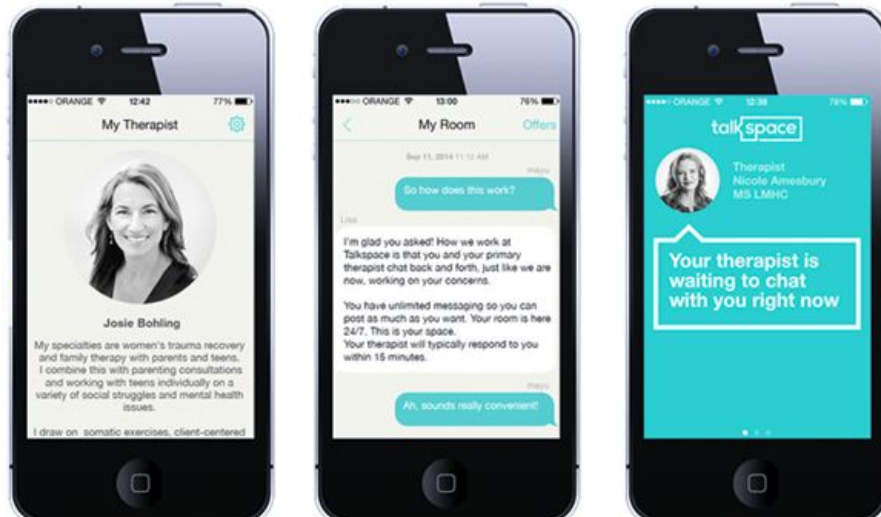
Talkspace allows the users to chat with a matching therapist to identify their therapy needs. Once the user found out the therapists they need, they have to choose a payment plan. Payment plans start at $49/wk. Once the matching therapist is found the user will be working with the same licensed therapist every time. The users can message their primary therapist and the therapists respond 1-2 times per day.

**Strengths**

● Users can find matching therapists according to their needs.

● Users can chat with the therapists without visiting the therapist physically.

**Weaknesses**

● The cost is high. Even the user's need is very small, he/she would end up paying minimum $49/wk.

● Users cannot seek an immediate help through this since therapists respond 1-2 times per day.

- Users have to pay for one therapists and work with the same therapists every time. So if the user is seeking help for 2 or more mental health issues, they have to pay for several therapists.

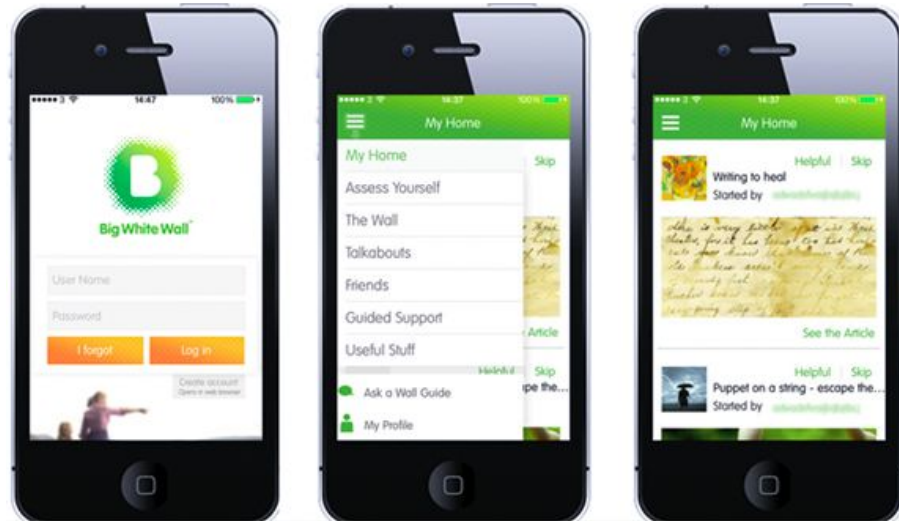- If the user is not seeking for help but wants to learn about mental healthiness, there is no option to do that other than selecting a particular mental health therapists.

## Big White Wall



https://www.bigwhitewall.com/v2/Home.aspx#.VUE43iFVhBc

Big White Wall is a community of members, who support, help each other and share what's troubling them in a safe and anonymous environment.

**Strengths**

- Users can log in to the system and connect with others at anytime.

- User can use an anonymous username that allows them to hide their identity.

- Users can enroll in "Guided Support" courses with others to learn how to manage mental health related issues such as depression ,anxiety ,weight-management ,stopping smoking etc.

- Based on interests of the user the system offers the user suggestions to help him/her feel better.

- Provides several self-Improvement Tools to improve the mental health.

- Provides assessments to help people understand more about themselves.

**Weaknesses**

- Free for certain people in the UK but for others it costs £25 per month (approximately $36.60).

- Though this allows people to connect with each other, it doesn't provide an option for the users to connect with the professionals.

- This system does not provide a way for the users who seek help to find out which therapists they should contact.

## Code Blue



Android/IOS application.

Code Blue is an app to help the people struggling with depression. Users can add several contacts as a support group to their app. When the users in need for a help they can alert the support group with a few taps. The app also shares the user's location with the support group.

**Strengths**

- People in need can alert a group of supporters at once.

- People in need   can share their location with the support group in a minimum amount of time.

**Weaknesses**

- If the members of the support group were not available, the system does not inform the user back. So there can be situations like the user is in an emergency situation and the user thinks he/she already informed someone but the people in the support group haven't

received the alert (Due to non availability of the people , Due to technical failure etc.)

- In an emergency situation it can be hard for the user to go through a process like switch on the phone -> open the app -> select the support group and alert the support group. It'll be more convenient if the app provides an easy way to reach the support group easily. As an example if a user can give a single voice command to execute the above mentioned process it'll be more convenient.

## Breakthrough
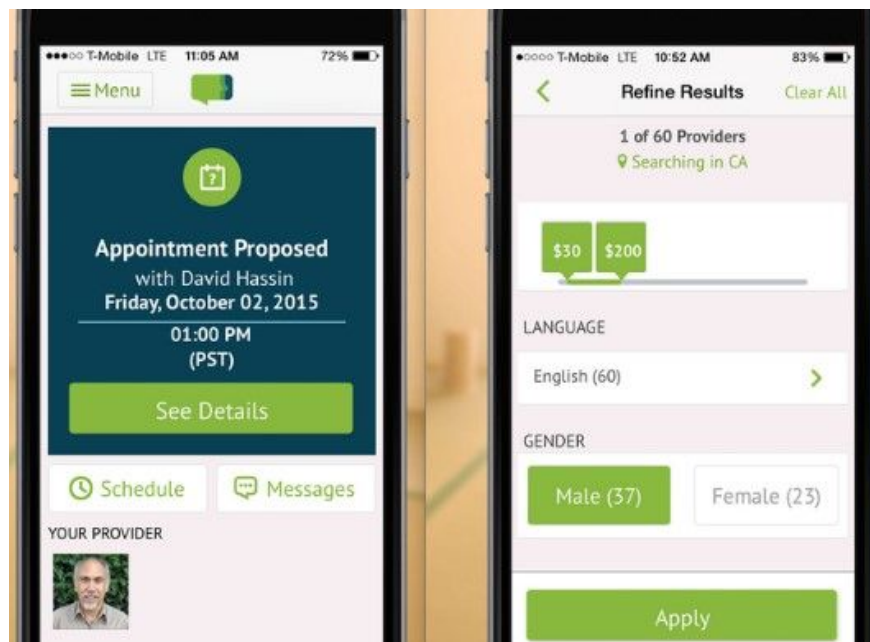


Android/IOS application

This app allows users to find a therapist or psychiatrist based on variables such as location, provider type, and specialty. Once the user found a therapist , he/she can send a message to the therapists to see if they meet their needs and book an appointment through the platform's online calendar. Cost varies by therapist, but users can view the pricing information while browsing. Allows the user and therapist connect for an online session.

**Strengths**

- Helps people to find therapists according to their needs.

- Helps the users to schedule an appointments.

- Users can connect with the therapists online without visiting physically.

**Weaknesses**

- User does not have a way to get an advice without paying. Even the user's need is small, he/she has to consult a therapist in a regular manner.

- The system doesn't help the user to find a matching therapist. The user has to do it by themselves.

## iPrevail
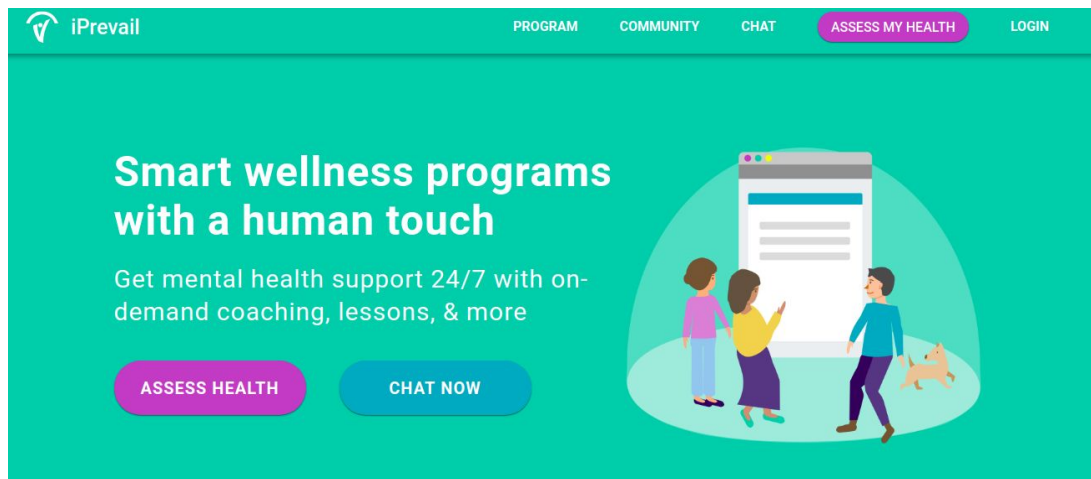
iPrevail service connects users with "Trained Peer Specialists" for online counseling. The peers may or may not be professional mental healthcare providers, but they do have experience in the field of counseling over the web. This system also provides set of assessment tests to the user. The results help tailor online therapy programs for each individual user.

**Strengths**

- This app is free.

- The system can understand more about the user through their assessment answers.

- Users can connect with the trained specialists anytime.

**Weaknesses**

- Users might not like to spend their time on doing the assessments.

- It's hard to rely on the answers that the user provide for assessments.

- The system does not specially focused on protecting the privacy of the user.

# Our Solution

Our solution to these problems is to create a private social network/information site. This will allow the user to interact with other people of the same mental illness. Our hope with this, is that the people will make friends and find ways to cope or treat their illness better. This site will also have professionals to communicate with someone in need of a session or to just talk about their illness. There will be tips and strategies on the site to give people healthy ideas to strive for in their specific illness. This site will mainly be a healthy and safe environment for people of illness to come to.

For people wanting to learn more about mental illness, they can find information on the site and possibly talk with people of the illness that they want to learn about. This will keep them informed. It will also help them to live with someone with mental illness and show them what is going on in their mind. It will give them a chance to talk with others of the illness they want to learn, so that they can get to really learn more from personal experience what the illness is and what it means to live with it.

# Task Analysis

1. **Create an account**
   1.1.   Click on SignUp button.
   1.2.   Fill Mandatory fields in the first signUp page.
   - 1.2.1.   Type username.
   - 1.2.2.   Type email address.
   - 1.2.3.   Type password.
   - 1.2.4.   Type password again to confirm.
   - 1.2.5.   If you are a professional select the checkbox to indicate that you are a professional.
   - 1.2.6.   Select next button.
   1.3.   Fill the fields in the second page.
   - 1.3.1.   If you are a professional, Specify your field.
   - 1.3.2.   If you are a professional, Specify where you got your degree from.
   - 1.3.3.   If you are a professional, provide a link to your professional website.
   - 1.3.4.   If you are a professional, provide your contact information.
   - 1.3.5.   Select the topics that you want to subscribe. (Optional)
   1.4.   Select the create my account button.
   1.5.   Go to the email and confirm the account.

**2. Post information in the system**
- 2.1. Login.
  - 2.1.1. Type your username.
  - 2.1.2. Type password.
  - 2.1.3. Login.
- 2.2. Prepare to post an information.
  - 2.2.1. Go to the profile.
  - 2.2.2. Click on new post button.
- 2.3. Prepare the new post.
  - 2.3.1. Write the title of the new post.
  - 2.3.2. Write the body of the new post.
  - 2.3.3. Select the categories which this post relates to.
  - 2.3.4. Add images if necessary.
- 2.4. Click on the post now button.

**3. Rate a post.**
- 3.1. View the post.
  - 3.1.1. Click on the post.
  - 3.1.2. Read the post.
- 3.2. Upvote or Downvote the post using the updown arrows next to the post.

**4. View information regarding needs.**
- 4.1. Click on what you want more information on.
  - 4.1.1. Press the sleep to access the community on sleep issues.
  - 4.1.2. Press depression to access the community on depression.
  - 4.1.3. Press schizophrenia to access the community on schizophrenia.
- 4.2. Search for a category.
- 4.3. Read the posts in the selected category.

**5. Subscribe to a category.**
- 5.1. Search for the category.
  - 5.1.1. Type the category in the search bar.
  - 5.1.2. Hit enter.
- 5.2. Click on the subscribe button next to the category.

**6. Update profile.**
- 6.1. Click on edit profile link.
- 6.2. Change the necessary fields.
- 6.3. Click on submit button.

**7.    Talk with a professional.**
    7.1.    Go to the page of the professional.
    7.2.    Prepare a message.
        7.2.1.    Click on the message button.
        7.2.2.    Type a message heading.
        7.2.3.    Type a message body.
    7.3.    Click on the send button.

## Walkthrough of the Task Analysis

**Create an account.**

Sign up page of our system consists of 2 pages. In the first page, the user has to provide all the mandatory information. And other than that the system asks the user to indicate whether he/she is a professional (therapist) or not by selecting a checkbox (1.2.5).

If the user is a professional he/she has to provide the details regarding his/her profession in the next page. Such as link to the professional website. His/her field. Etc.

If the user is not a professional, he/she gets different fields to fill in the second sign up page (1.3.5).

Professionals
1.1, 1.2, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.4, 1.5.

Non professional users
1.1, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.2.6, 1.3.5, 1.4, 1.5.

**Post information in the system - Professionals/ Normal users**

Professional should add posts regarding the mental health awareness and mental health issues etc in order to make other people aware. Normal users can see these posts professionals share according to their subscriptions. Ex : If a normal user has subscribed for sleeping disorders, when a professional in the sleeping disorder post something new, the system suggest that post to the subscriber.

Normal users can share posts too. They can share posts regarding to their experiences, things they know about mental health etc. When a normal user shared a post, system suggest those posts to the subscribers of the category which the post related to.

**Rate a post**

Rating plays a major role in this system. According to the users rate of a post the system decides the actions that should take for the particular post. If the number of upvotes of a post are higher than a given number, system shares that post among the users more. In the same way, if the number of downvotes higher than a given number system deletes that post. And the system rates the users according to the rates they get for the posts they publish.

**View information regarding needs**

System provides links to the user for every category that they subscribed in to. Users can select that category and read information on it. Or else users can search for the category that they want the informations on.

Paths :

4.1, 4.3

4.2, 4.3

**Subscribe to a category**

Users can either subscribe for a category as mentioned above or they can subscribe to the categories when creating the user profile. Once a user subscribed to a category, system suggests posts regarding to those subscriptions to the user.

**Talk with a professional - Normal user**

Users can contact the professionals through the system. Users can chat with the professionals through the system and also, users can contact the professionals using the contact information of the professional.

# Supporting Evidence

## Participated Conference

Graduate school and Mental health conference with Dr. Joy Harden Bradford on Thursday Aug 30th, 2018 from 3:30 pm - 5 pm on MLC 214.



**Observation**

Many graduate students attended the conference, some of them shared their personal experiences with the audience and some of them asked questions regarding the UGA resources.

Around 30 students attended to the conference. But around 3 students shared their experience with others. Most of the graduate students, had issues regarding time management. And some of them had issues regarding mental health problems like depression and insomnia. One student asked about a way that helps her to reduce her nervous and increases her happiness.

Most of the directors at UGA attended the conference such as the director of health center at UGA and the director of psychology department at UGA.

**Inference**

- There are lot of people who are suffering from mental health issues.
- Though some people are aware of the mental health issues they have, there are many people who are not aware of them.

- There are so many people who want to talk about their issues. But only some of them actually talk about the issues with others. Many people do not talk about their mental health issues with others even if they have the need.
- There are lot of people who like to be aware of the mental health issues.

## Online Articles

*Does Going to College Damage Our Kids' Mental Health? [6]*

**Summary:** Several students undergoing stress at universities have the chance of developing some mental illnesses. One of the main ones is depression. The nature of large classes especially for first years can be devastating to the psyche of the students, as there is little to no intrapersonal interaction among students and teachers in those environments. Essentially, a lack of a small, like-minded group can potentially cause stress for students not use to the sudden change.

*Digital Health and the Rise of Mental Health Apps? [5]*

**Summary:** The rise in mental health apps can be viewed in two ways. The first one is a positive. The apps can provide a quick, cheaper way to understand one's self and potentially find a general idea about his or her potential mental issue. However, the negative would be the lack of ability to account for the person's subjective life. This means a person's external factors cannot be applied to their mental state, meaning misdiagnosis can be a potential cost. However, if actual professionals were present in these apps in some fashion, the accuracy of diagnostics would increase and potentially help future users.

**Pertaining to the project:** The website being created would act similar to a confidential networking site, meaning the potential mental health patients can describe their living and environmental situations to provide more accurate accounts of what they are undergoing. This would provide a larger picture of the issue that some apps today cannot account for (Lane). Professionals potentially part of the website would then be able have more information for proper assistance and diagnostics.

The users of the website will also be able to connect to the other users pertaining to the same or similar mental issues. This is to solve the problem of not being able to find like-minded individuals (Herbert). They would be able to communicate through a forum ranging from different content such as discussion of the mental issue they are going through to other users such as professionals or regular users. This can also be a way of moral support. Several users being in a similar group would provide relatability, allowing both friendships and emotional help.

# Learning Outcomes & Conclusion

Our goal is to create a social network which allows the users to interact with other people with same mental health issues and share their experiences. Also, our system facilitates the users to connect with the professionals according to the needs.

Our system is a general system which can be used by anyone. But, when identifying the users, and creating the personas we understood that there are certain user groups that can not benefit from our system, such as people who do not use internet. We learned how to define our target users by knowing what our system does and how it works. Specially, when creating the personas, we looked at the system with different user perspectives. This helped us to optimize the system and change it according to the users. As an example, when writing personas, we identified that the users who use our system can have different experience levels on social media. So we decided to keep the user interface of our system very simple and easy to use.

Also, when creating the personas, we identified that there can be some people with mental health issues who cannot use the system (John Smith). But we also identified that people who live with such people (Taylor Smith) can use our system as a knowledge hub to learn about the illnesses, behaviours and experiences of people with similar mental issues as the ones they live with.

We identified that there can be many people who looks really successful but do not care about their mental health (Olivia Tyson). We decided that a system like this would help such people to identify the issues they have and get the necessary treatments. We also identified that there are those who will be the main users on our site who have a love for social media, have mental health issues, and are wanting to connect with people. (Peter Parker)

By participating to the conferences we found out that there are lot of people who are suffering from mental health issues. Though some people are aware of the mental health issues they have, there are many people who are not aware of them. The conference had around 30 participants. But only 3 or 4 students shared their experiences with the others. We learned that though there are so many people who want to talk about their issues, only some of them actually talk about the issues with others. Many people do not talk about their mental health issues with others even if they have the ability to. There are lot of people who like to be aware of the mental health issues.

According to the survey we did, we found out that privacy and convenience are the things people value the most on social media website. For privacy, more people prefer to be not recognized on internet via using made up name and anonymous function. For social media, they regard confidentiality and ability to connect with others important, which is the point we are mainly considering. There is an exceeding number of people who rather search for help online than meeting in person.

By evaluating existing applications, we identified strengths and weaknesses of the existing applications. We determined to enhance the identified strengths and use them in our system. And by going through the weaknesses, we could find out best ways to complete the tasks in our system. We identified that some people with mental issues specially care about the anonymity so we determined that we should specially focus on protecting the users anonymity.

Also we identified that our system should specially focus on an approach that helps the users to find out which therapists that they should contact and which therapists are the best for them etc. There were some systems which does not suggest/help the users to find out which therapists they should contact. The users have to find the therapists by themselves. We identified this could be troublesome. So we determined that our system should have a mechanism to suggest the therapists to the users.

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[6]"Does Going to College Damage Our Kids' Mental Health?", *Psychology Today*, 2018. [Online]. Available: https://www.psychologytoday.com/us/blog/hormones-and-the-brain/201808/does-going-college-damage-our-kids-mental-health. [Accessed: 10- Sep- 2018]