Slide 1:

Hello, everyone. We, Team 1, are presenting our final project for INFM 600. Our project is on making mental health information more accessible for all. Our goal was to create an information service where mental health information such as common conditions, providers, and services are available in an accessible manner for those with a variety of technological backgrounds specialized for children, adolescents, and their families. We did this by creating a website, web app, and several data visualization dashboards presented here. You can also access these artifacts in our Github repository.

Slide 2:

Now, onto the background for our project. We are interested in this project because we are interested in mental health and making this a less stigmatized issue. In children and adolescents (0-18 years old), mental health is often overlooked and not taken as seriously as physical health conditions in this age group. While a physician can tell if someone has a broken leg, it is much more nuanced to know if someone is depressed or has other mental health conditions. Additionally, mental health conditions account for more costs than diabetes, cancer, and respiratory disorders combined. While Prince George’s County has a source with mental health providers for all age groups, the way the source exists currently is that a user must manually go through a time-consuming and cumbersome process to gather the information they need. Often people dealing with a mental health crisis need help right away, and having to spend time looking for information is frustrating and can have serious consequences. Our group also determined a specific need for an information service for children and adolescents, which we have created.

Side 3:

Furthering why this service is essential and needed, we found that an information service for adolescents and children did not exist when we conducted our literature review. Moreover, existing services are not evidence-based and population-specific enough to be beneficial for our target population. We found that “many mental health apps are not evidence-based, particularly for the pediatric population. Moreover, some apps may be not only ineffective but also harmful, with many sharing health data with third parties.” Such findings further clarify the need for this service.

Additionally, adequate social and emotional support is severely lacking in Prince George’s County, compared to other counties in Maryland, making the need for this source more critical. There is also, as previously stated, a need for easy-to-access information by parents, family members, clinicians, and adolescents and children. Our information service provides this information in an easy-to-understand, accessible manner. Furthermore, our service would rely on information gathered in an evidence-based way with a pediatric population in mind.

Slide 4:

An innovative proposed solution by Team 1 is the creation of an interactive website along with a web app. These interfaces provide a plethora of information on mental health providers and the specific services they provide so that the users do not have to search separately for the services for children and young adults specifically. It is a relatively easy-to-use application that can be accessed easily by parents, family, guardians, or our target age group of under 18, as well. It is easy to navigate, even for people who are not that comfortable with technology. The interface acts as a resource guide that helps in narrowing down the services according to geography. There are interactive visualizations of resources and all the information of the services for particular providers, which makes it pretty handy for concerned people to use in the time of need.

Slide 5:

Here is an overview of our project. Our created website and web-app service enable users to find relevant information that they need. Integrated into the web app and website is an interactive map. Other Tableau dashboards are provided that provide further information and analytics for users. The dashboards and interactive map can also function on their own and are easy to use. They are designed for users with all levels of technological backgrounds to help find services and necessary information for mental health needs. A user could examine the data to answer the questions, “Where is the closest crisis center near me?” and “Who do I call if I am feeling suicidal?” Online accessibility would be the best way to put this service into use because most people have access to the internet and any person with internet access has access to this tool.

Children and young adults can sometimes face multiple issues all at once, and their problems usually go on without proper detection and proper treatment. This website and web-app service provide users to find relevant information that they need quickly in their time of need. The interactive map and other dashboards integrated into the interface make it easy to navigate and find intricate details with just a click of their button. They are designed for users with all technological backgrounds to help find services and necessary information for mental health needs. Online accessibility is the most feasible method for this service because most people have access to the internet and any person with internet access has access to this tool.

Slide 6:

Our goal is that the concerned parents, families, caregivers have easy accessibility to find all the relevant mental health resources and information. This is done through our interactive platform, which can be used in difficult times so that they can focus on healing with the highest quality, compassionate health care. Our tool provides users with a way to find their correct diagnoses from mental health providers meaning that users do not have to spend time needlessly searching for the right kind of help. While this tool currently focuses on PG County, MD, our vision is to expand this service throughout the United States. This not-for-profit service can be used independently of factors such as insurance companies or mental health agencies.

Slide 7:

For this project, we have used the 2017 data that Prince George’s County has provided. When we go live for this service, we plan to request the Maryland and PG County Health Department for updated information every year to update basic information and ensure that our information is reliable and up to date.

Slide 8:

This data flow diagram shows the flow of data throughout our service. The main external entities are the “Prince George’s County and Maryland Departments of Health” and the “User.” The departments of health are our primary source of information. The data that we get from their reports and publications has to be processed into data that we can use for our service. This is process 1.0. The data then lives in datasets. On the DFD, represented by the store “Datasets for Dashboards and Search Query Usage,” From there, the DFD shows how this information goes from rest to being transformed into Tableau dashboards and then ultimately displayed to the user. These are processes 2.0 and 5.0. Processes 3.0 and 4.0 describe how our service handles user search queries on the application and returns their results, using our datasets as a resource.

Slide 9: The Entity Relationship Diagram shows the relationship between involved entities. Even Though our data is coming from the MD & PG County health department, the information is about the service providers. So we have them on the left with their attributes. However, we are not planning to require people to log in to the system or leave their records for the users. Therefore we would only collect the log Id, last accessed time of the users. Users can browse through to search for whatever information they need but can not elect one provider. This way, the user can be more confident with their searches since it is anonymous.

Slide 10:

We are showing a few mock user-cases. This will illustrate the user experiences.

Slide 11:

First, it is Eryn Grey. She is a single mom living in Hyattsville looking for resources for her child and herself. On our website, she will quickly and easily identify where help for her specific situation is offered. She can find the contact information for care providers rapidly and contact them if she chooses to do so. Say she wasn't as eager to reach out to a care provider immediately, she could also use our website to learn more about her situation and what actions are most advised to do in her position. She could learn more about substance abuse and how to address her child about it. Our website would allow her to approach her situation from many different angles, which would help her achieve her goals. However our website will Not collect anything from her, since it will involve only the search capabilities

Slide 12

We have an adolescence who we envision would benefit from this information service: Meet Kristin, a 15-year-old 10th grader from Riverdale, MD. Kristin lives with her mom and sister, but since her father passed, she has struggled with mental health and is considering ending her own life. She wants someone to reach out to and help her out. One of her most significant core needs is having someone to talk to outside of her mother. However, she is frustrated that available apps are confusing and lack confidentiality. Also, she needs a one-stop area for all the hotlines in case of any emergency.

She would most benefit from this service because it is easy to use and anonymous.

Slide 13

Our final user is social worker Alison. Alison works in a youth homeless shelter in College Park, MD. Her biggest goal is to find reliable, factual, and helpful information on mental service providers for her clients to get them the best care possible. Still, there is little to nothing on the market that is reliable and up-to-date enough for her to use in practice. Additionally, most sites and apps are not for the youth and adolescent age range.

As you can imagine, she has a lot of clients, so she needs to be able to find resources in a snap versus spending hours scouring the internet for help.

She would most benefit from the app because it allows her to quickly gather information

and meet all the needs of her clients by increasing mobility to her clients.

Slide 14

The essential features of our website and web app are as follows: the ability to search for certain providers based on criteria such as race, languages spoken, and location. Our website and web app also allow users to search for common mental illnesses, symptoms, and common treatments. And perhaps most importantly, the website and web app enable users to call 911 or utilize other emergency services within the website or web app itself.

Slide 15

Regarding our Tableau dashboards, there are essential features that enable users to look at information differently, perhaps equipping users with a better understanding of the information. First, the dashboards allow users to see where providers are and their services via an interactive map. Secondly, the dashboards have two other ways of accessing information: a pie chart and a bar graph. While our website and web app showcase the interactive map, the bar graph and pie chart can be added to other websites, including governmental sites where information is showcased, allowing users to see important information on those sites. It is also easy to update the dashboards, making them easy to reuse, another critical feature.

Slide16

We created both desktop and phone versions of the interface. This way, the user can easily access the information with any devices.

Slide 17

This is our home page. On both versions, we made sure to have the emergency button and the navigation menu on each page for easy access.

Slide 18

This is the introduction of each menu. We have this page to show what kind of information is on each menu.

Slide 19 This is the page about the service provider. The user can search the service that they are seeking. The result will provide the service provider who handles it.

Slide 20 continuing from the previous page, it also has an interactive map. This way, people can access the service from a different point of view. We will discuss more about the capability of this map during our service demo.

Slide 21 this is the advanced search of the service provider. The user can filter the categories to do a further search.

Slide 22 this page provides few of the readings regarding the youth mental health. All of the articles are from reputable sources, such as NIH. This way, the information would be accurate.

Slide 23 This page is the glossy of the mental health conditions. The user can search the condition which will provide the common symptoms and treatments.

Slide 24 This is a page about us and our data. This will show the users for our intention and the quality of the data.

Slide 25 this page will appear once the user clicks on the Emergency button on the top. The user can click on the hotlines and 911 to connect with them. Also the user can find out more information about the emergency room near the person.

Slide 30

Here are a few lessons that we learned from this project.

Slide 31:

Thank you for listening to our presentation! If you have any questions about our presentation, please feel free to reach out to us.