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Problem Statement: Many people struggle with mental health issues, ranging from stress, to anxiety, to depression, and more. At times, certain techniques or activities can help to reduce the symptoms of these issues or lead to more general improvement of one's mental state. For some, certain daily tasks become more difficult, and accomplishing even basic aspects of living, such as remembering to eat, becomes a challenge to complete. Our app seeks to provide a way for a user to track their mental health-related habits, whether they be listening to calming music, eating enough food, seeing their therapist, or anything in between, as well as their effects. Ideally, this will allow the user to better understand what methods are effective for them and which are not, in addition to allowing them to more clearly see patterns in their mental condition, activities, and progress. Furthermore, the app will allow the user to find new resources that may help them or add and share resources of their own creation/finding that may help others. Should users choose to make parts of their habit/mood information available to the database, this data can be analyzed to better understand what problems users face and how/what types of resources to focus on to help them.

Features/feature extensions in italics will be attempted after the basic structure of the feature is working.

#### User App Features

##### **User Stories:**

- Habit templates: (~4 story points)
  - As a user, I will be able to track their use of certain habits (such as meditating for half an hour, eating three meals a day, etc), and each instance of performing that habit's effect on their mental state/mood by creating a habit entry based on a habit template. I can specify a specific name and frequency of occurrence. This will allow me to create tracking for many different specific habits.
    - As a user, I will be able to enter information into habit entries for each previously specified time span. This information includes whether/to what extent the activity was performed, the time the activity was performed, my general mood before and after the activity, and additional notes. This will allow me to record information about a certain habit so they can better understand its effects/their history of doing that activity.
  - *As I user, I will be able to create custom habit templates by specifying a name for the template, the type of habit, and the method of tracking (for example, amount of activity done vs whether the activity was done). This will allow me to track habits that are unique to them and/or don't fit within one of the standard templates.*
  - *As a user, I will be able to make each habit template separately private or public (added to the database or only available to the user). This will allow me to decide whether they wish to keep sensitive information to themselves or allow others to benefit from their data.*

- *As a user, I will also be able to make their custom templates visible to the public or keep them private. This will allow me to share useful templates with others or keep them to myself.*
  - *As a user, I will be able to add tags to habit templates to make them more searchable. This will allow me to more easily find the habit template that best fits the habit they want to track.*
  - As a user, I will be able to add tags to their own habit entries. This will allow me to more easily find the habit they want to view or edit, and can be a good way to review general information/personal notes about the habit at a glance
  - As a user, I will be able to search for existing basic and and later potentially public user-created templates (by tag, purpose, type, popularity, etc). This will allow me to find templates to use to create their habit entries.
  - As I user, I can opt into notifications connected to a habit that remind them to perform a certain activity at a certain time. This will allow me to more consistently remember to do the activity they want to do.
- Login (~1 story point)
  - As a user, I can register and log in to the app with a username and password. This will allow me to keep their potentially private information behind password security.
  - As a user, I can request to reset their password by entering their username and temporary password and specifying a new password.. This will allow me to retain access to their account data even if i forget my original password.
- UI
  - As a user, after logging in, i will be able to see a dashboard with tabs leading to each of the features (resources, habits, surveys, visualizations). This will allow me to access the features of the app and separate each distinct feature so the app is easier to use and view.
- Trend viewer (visual/graph element) (~2 story points)
  - As a user, I can see how consistently i am happy/my trends in mood. This will help me better understand my mental state over time.
  - As a user, I can see which activities corresponded most often with positive/improved mental trends. This will allow me to easily see which activities/habits are most effective for me.
  - As a user, I can see for each habit, how often/consistently i did it and its effects. This will allow me to easily see, for example, how often i was able to meet their goal of doing an activity a certain amount, as well as see how doing the activity for a certain amount of time or with a certain frequency influences mood/mental health trends.
- List of resources (~3 story points)
  - As a user, I will be able to view and search for (by type, popularity, purpose, tags, etc) resources “entries” like hotlines, calming music websites/playlists, therapy/mental health care centers, etc. This will help me find resources i need to help me with my mental health concerns.

- *As a user, I am able to add their own resource entries, which can be permanent or temporary/event-based. This will allow me to share resources i feel would be helpful to others.*
- *As a user, I will be able to add tags to resource entries to help themselves and others understand the nature of the resource. This will allow other users to better understand what a resource is, how it can be used, and what it is usually used for.*
- *As a user, I will be able to request verification for my account or event/resource. This will help other users identify official events/resource information and help them to judge which resources to access. It will allow me who make the request to have their identity confirmed and show others they and their events/resources are associated with the actual organization i claim to represent.*
- Goal tracker & progress report (~2 story points)
  - *As a user, I can optionally set goals connected to their habits, which can report to me whether i met the goal at each (planned) recurrence of the habit and over the entire time span of the habit. This can help me to understand how often/to what extent i was able to meet my goals and perhaps be affirmed by my success, reconsider the goal, or attempt a higher one later.*
- Surveys (~1 story point)
  - *As a user, I will be able to fill out surveys sent by the app. This will allow me to help improve the app and provide information about my habits/mental health/etc i may have decided not to share directly by making a habit public*

#### Administrator Console Features:

##### **User Stories:**

- *As an admin, I can verify users, events, and resources if the user is (can be verified to be) a representative of an organization behind a resource and requests verification, or an event or resource is created by such a user (or deny verification requests if they are faulty). This will allow users/resources to be verified if they made a request and get more information about how official the resource/its description is if they are viewing a resource entry. (~3 story points)*
- *As an admin, I can delete malicious users/resource or event entries/potential bots. This will prevent problems caused by users who attempt to create many templates to flood the database, skew the data, or provide false information. (~2 story points)*
- *As an admin, I can create surveys and send them to users to fill out (for example, asking what type of activity/resource has been most helpful). This will allow the app to gather information to better analyze overall trends in how people use the app, what habits they find effective and ineffective, and what effects they have observed. (~1 story point)*
- *As an admin, I can create and modify habit templates and add them to the database. This will provide new and updated templates as the need arises. (~2 story points)*
- *As an admin, I can create or change resource entries and add them to the database. This will allow for new resources to be added and updates to resource information. (~2 story points)*

- As an admin, I can access data about a particular user and have that information outputted as a text file. This will allow the information to be shared with others, such as a user's doctor.

#### Data/engineering tasks

- Creation of 4? separate databases
  - user database: stores information about each user and their habits. (Fields include: Username, Password, list of habits (containing data about each), list of surveys (including data about their responses, if any), verification status, time account created?)
  - habit template database (stores basic and potentially user-created templates) (Fields include: template ID, type of tracking, popularity?)
  - list of resources database (stores options for available resources, such as nearby therapists or counseling services, mental health hotlines, recommended music, helpful breathing techniques, and other activities that can improve mental health). (Fields include: resource ID, online/offline type, general type/purpose, verification status)
  - database of surveys and their responses (fields include: Survey ID, survey type, number of responses?, date sent out?)
- Password encryption
- Integrate/link google maps with location information of resources if physical address exists

#### Additional Considerations

- The story points are very general estimates. None of us have worked with Android or JavaScript, so we are overall unsure of what to expect in terms of the difficulty and time associated with our user stories.