

Project Proposal: New Horizons - Mental Wellness Website

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Real life problem: Mental Wellness

In modern society there is an epidemic of mental illnesses that plague millions of people in the US alone. According to the [National Institute of Mental Health](#), about 23.1% of Americans have some sort of mental illness. This ranges anywhere from anxiety and depression to schizophrenia and bipolar.

Despite growing public awareness about mental health, many people still face substantial barriers when seeking help. A national survey by the National Alliance on Mental Illness (NAMI) found that stigma and cost remain two of the most significant obstacles for those struggling with mental health disorders. ([NAMI Survey](#))

In addition to financial and social barriers, there is a notable shortage of mental health professionals. As of September 2021, an estimated 129.6 million Americans live in Health Professional Shortage Areas, where access to care is limited ([AAMC Report](#)). This indicates a significant gap between the demand for and supply of mental health services.

The COVID-19 pandemic has also made the existing mental health challenges worse. According to an Association of American Medical Colleges ([AAMC](#)) study, the pandemic has intensified mental health issues, particularly among the youth, with a sharp rise in suicide attempts and mental health crises. Addressing these challenges requires a strategy that includes expanding the mental health workforce, decreasing stigma, and improving access to affordable care.

This project outlines a web-based platform focused on mental wellness, with the aim of delivering accessible and trustworthy mental health support. Users will find carefully selected articles, research-backed exercises, community discussion forums, and interactive tools, all designed to strengthen emotional health and encourage a supportive environment for individuals seeking help. By utilizing technology, our project will bring awareness, reduce stigma, and guide individuals toward happier and healthier lives.

Potential Users

Our Mental Wellness Web Platform welcomes a wide variety of people who interact with mental health resources for their own unique reasons. The system's design prioritizes accessibility and usability for individuals from various backgrounds, experience levels, and personal goals. The potential users of this website would include:

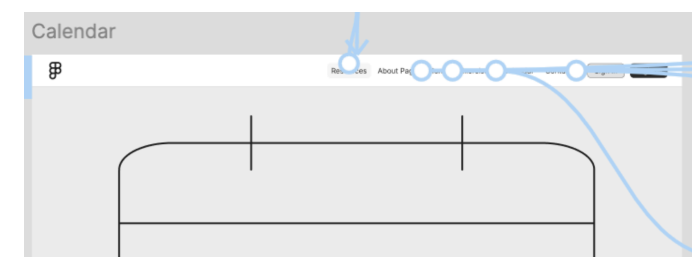
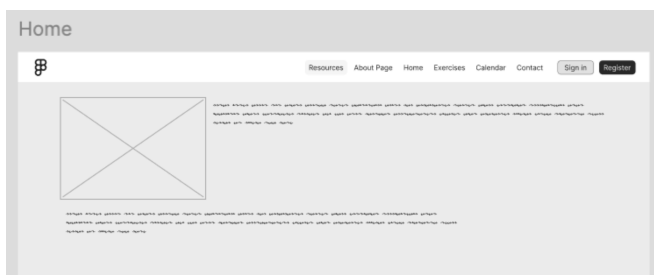
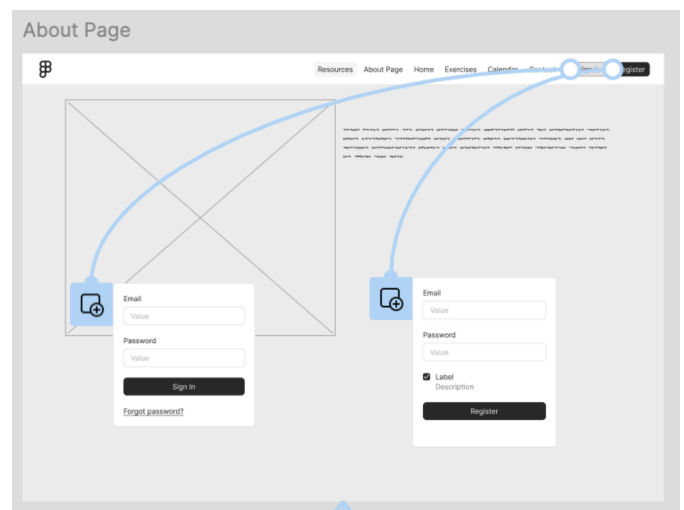
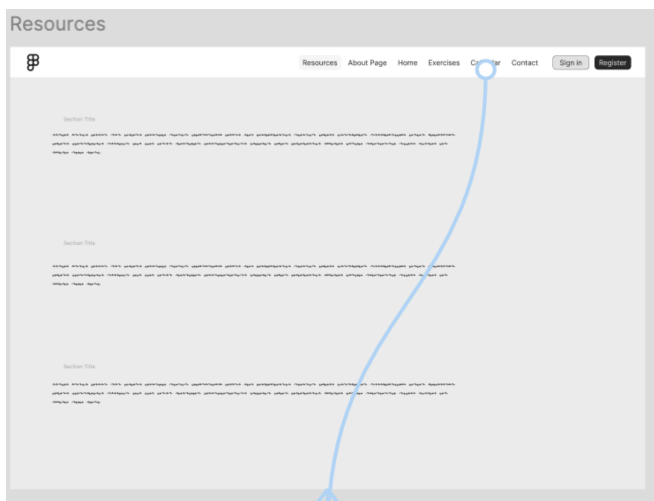
1. Individuals Seeking Personal Support

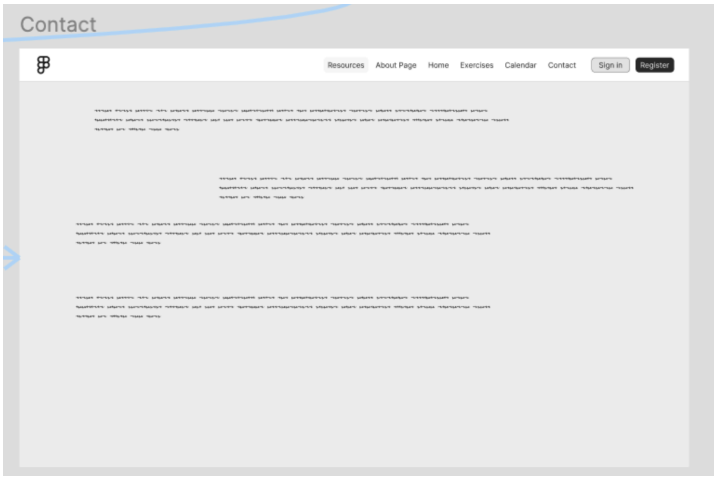
- Needs: Emotional support, self-help exercises, trustworthy information
- Expected Behavior: They will access articles, participate in community discussions, use mindfulness tools, and track their wellness journey

- Example Use Case: A college student struggling with anxiety visits the website to find guided meditation exercises
2. Supporters and Caregivers
 - Needs: Reliable educational content, coping advice, community discussions from other supporters or professionals
 - Expected Behavior: They can browse learning resources, share encouraging messages in discussion spaces, and connect with others others facing similar challenges
 - Example Use Case: A parent uses the site to learn how to talk to their teenager about depression and reads articles on how to recognize early signs of depression
 3. Learners and Advocates
 - Needs: Research backed educational materials
 - Expected Behavior: They may explore research articles and share information within the platform's educational community forum
 - Example Use Case: A psychology student browses the resource webpage for articles on mindfulness research

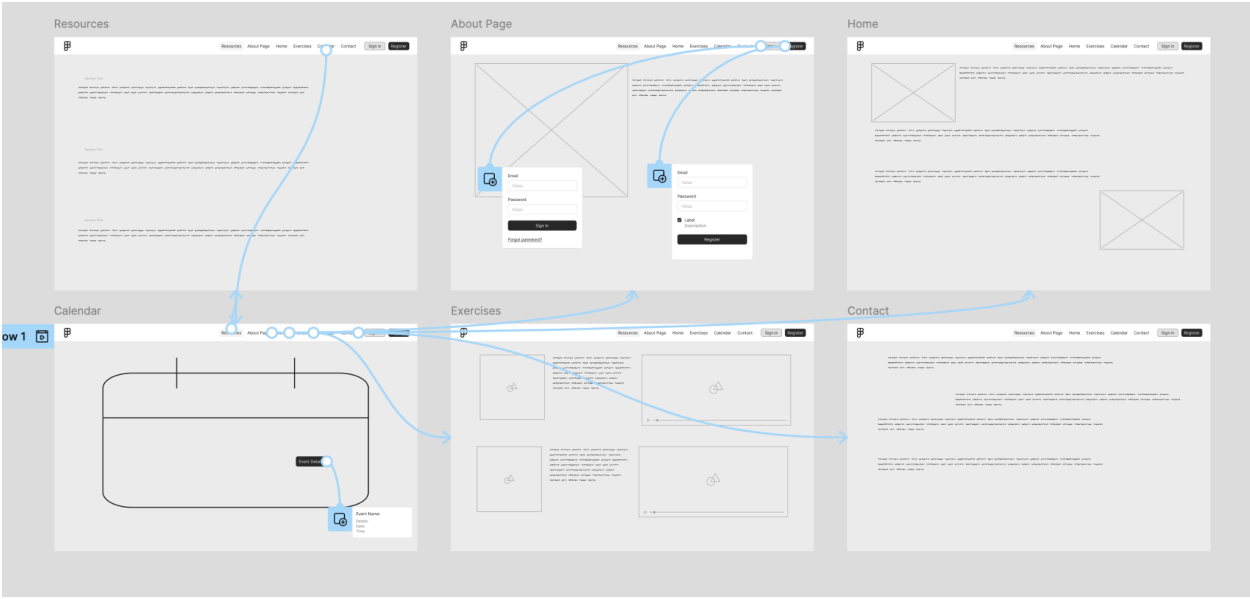
The platform emphasizes a welcoming, judgement-free experience that is easy to navigate. Features like straightforward menus ensure users can easily interact with the platform regardless of their familiarity with technology or how they're feeling emotionally. By understanding these different types of users, the platform creates meaningful experiences for everyone. Whether it's for those looking for support, people wanting to help others, or individuals who are looking to expand their understanding of healthy mental wellbeing practices, our platform will ensure each person finds values and comfort throughout their visit.

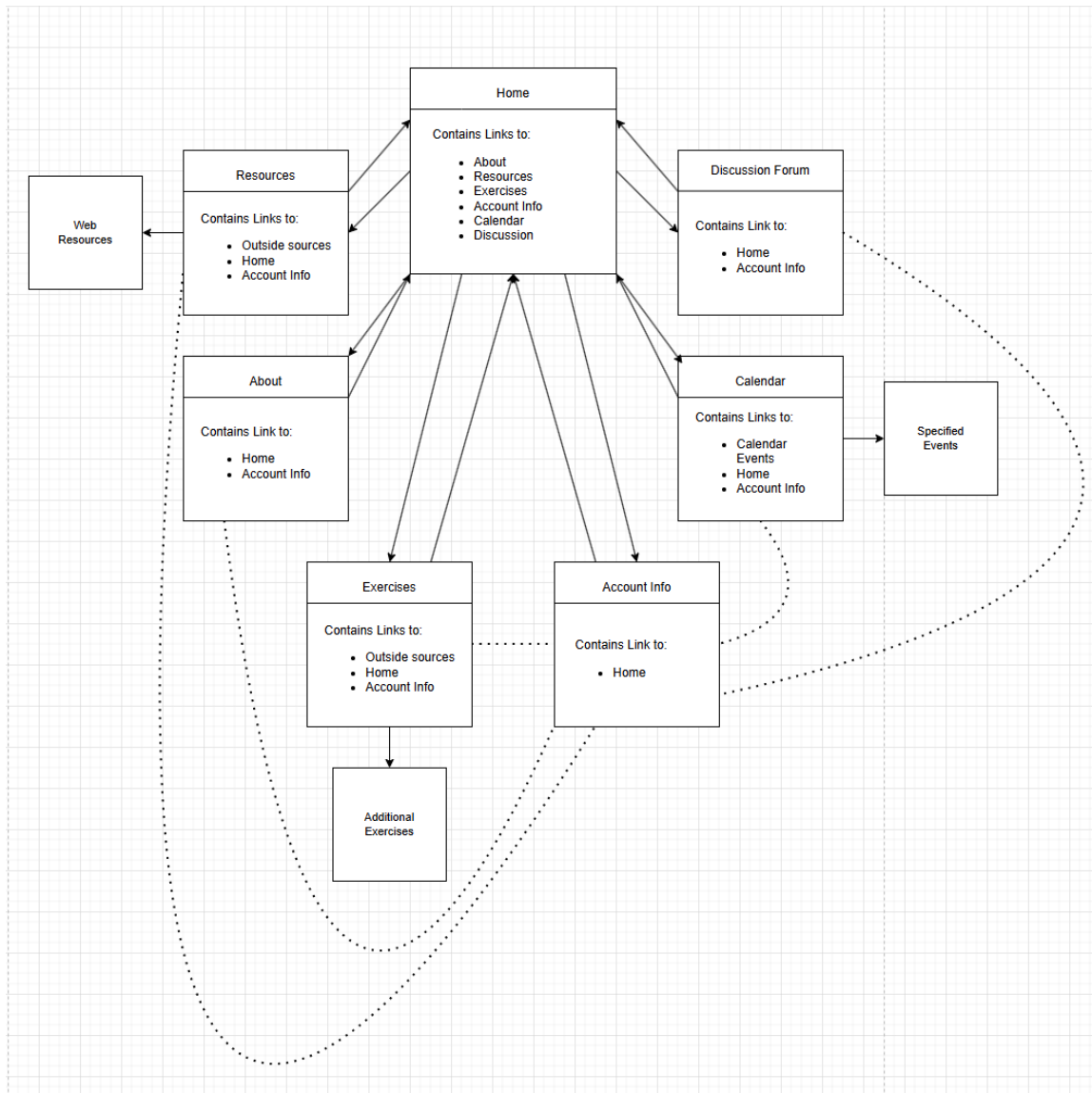
Webpage Wireframe





Connections to the wireframe:





As the diagram above shows, the user will first be greeted by the home window of the website. This page acts as a nexus from which all other webpages can be accessed by clicking on the corresponding link. Every other webpage also links back to the homepage so that a user may continue to easily browse the rest of the content that the website has to offer. Some pages (Resources, Exercises and Calendar) link to web pages that are not directly associated with this website should users choose to seek out additional information. Lastly, every page has access to the account information page.

- What can users/admins do?
 - Users would be able to browse a collection of helpful resources, practice proven mental wellness exercises, discuss what challenges they face with other users

- Admins would be able to suspend accounts, moderate chat rooms, provide user support (such as login assistance and user queries)
- Where would users perform these actions?
 - Users would be able to search for relevant pages from any page via the navigation bar positioned at the top of the window. They could navigate back using breadcrumbs.

In the mental wellness application, there are key system-related roles that ensure the platform is running as it should be. Each user has their own way of interacting with the application and what type of rights and admin power they are allowed to have.

Those who are visiting the website are visitors. They also have non-administrative rights, meaning that they only have access in a read-only format. This includes scrolling through wellness topics, using the search features, and looking through discussions and other surface-level features they are allowed to interact with.

Those who create an account are members, also known as registered users. They can fully engage with the platform, including posting their thoughts, commenting on discussions, and writing personal journal entries. Registered users also gain access to browse a collection of helpful resources within their dashboard. They can edit, delete, or update their own posts, profiles, and personal information as needed. While they can interact with the system, their permissions are still non-administrative and limited to the features based on what the administration gives them.

Administrators are the main users and overseers of the wellness platform. They are responsible for making sure that the website works properly and is safe for all users. Administrators can create, manage, and remove user accounts as needed. They can also revoke access from users who violate the platform's rules. Their responsibilities include moderating user posts, reviewing forum discussions, overseeing inappropriate or unethical content, and maintaining civil and proper discussions across the forums and community. Administrators also monitor the performance of the site to ensure security and proper functionality for all users on the platform.

User action and navigation

Visitors will have access to the home page, where it will offer a selection of features that the platform provides. Visitors can select between resources, exercise, discussion forum, account information, about and account information

Home page -> Resources

On visiting Resources, users will be able to choose a list of organizations. The list of organizations will have a link that will open in another tab that takes them directly to the website of said listed organization. Users can return home or register for an account.

Home page → Exercise

On visiting Exercising, the sections will present methods and guide to better exercising and better mental wellness. It will provide a short summary of how to do said exercise and how it can improve mental wellness. Users can return home or register for an account.

Home → Discussion Forum

On visiting the discussion forum, visitors can view the existing topics of the discussion forums, it will be limited to the visible discussion, once the user is logged the search function will appear. Visitors will remain on the discussions forum page until the user returns back to the home page or to register an account.

Home → Calendar

On the visiting calendar the visitor will be able to see specific events with data and time /or location. Users can return home or register for an account.

Members who are registered will have access to the home page, where it will offer a selection of features that the platform provides. Members can select between resources, exercise, discussion forum, account information, about and account information. As well be able to edit, search, update, save and as well other specific features.

Home → Account Info

A registered member can update their profile; this includes their name and email. After entering the changes and saving, the member remains on Account Info and sees an update to their information.

Home → Exercises

A registered member can visit the Exercises page, which presents links to methods and guides for better exercising and improving mental wellness. It provides a short summary of how to perform each exercise and how it can support mental health. Registered members can also save an exercise to their account, as well as use the search function to find a specific exercise by entering key terms. Users can return to the Home page at any time.

Home → Discussion Forum

Visitors can view existing discussion topics in the Discussion Forum. Registered users can use the search function and create new topics. Once a new topic is created, the page refreshes to display the new discussion. Users can return to the Home page at any time.

Home → Resources

Registered members can browse a list of organizations on the Resources page. Each organization listing includes a link that opens in another tab, taking the user directly to the organization's website. Registered members can also save resources to their account and use the search function to find specific resources by entering key terms. Users can return to the Home page at any time.

Home → Calendar

On the Calendar page, registered members can view specific events with details such as date,

time, and location. Registered members can also register for or bookmark an event. After viewing or marking an event, users can return to the Home page or their account page.

Administrators will have admin access to the mental wellness platform. They can edit and access tools such as removing accounts and managing other features.

Resources

Administrators will have access to the Resources page. They can enter the organization name, website link, phone number, and description. Once updated, the information will appear on the Resources page.

Exercises

Administrators will have access to the Exercises section. They can enter the exercise title and summary. After an update, the new exercise is displayed on the public Exercises page.

Forum Discussion

Administrators can open the Discussion Forum and remove or lock a post. Once updated, the page will refresh to show the change.

Calendar

Administrators can access the admin section for the Calendar, enter the title, date, time, and summary. After saving, the event appears on the Calendar page.

Account Info

Administrators can enter or edit a user's name, email, role, or suspend a user in Account Info. After saving, the system updates the User List showing the new status.

Database and Dynamic Features (CRUD Integration)

Table	Operations	Description
Users	Insert, Update, Delete, Search	Manages account creation, login, profile edits, and removal
Forum	Insert, Update, Delete, Search	Enables discussion creation, editing, and moderation
Resources	Insert, Update, Delete	Allows admin to manage educational links
Exercises	Insert, Update, Delete	Stores exercise data and user-saved lists
Events	Insert, Update, Delete	Displays upcoming wellness events on the calendar

Webpage count

Visitor

Home: linking all the section

Resources : list of organizations

Exercises : exercise methods/guides with brief summaries.

Discussion Forum : view discussion and search key terms. (Read only)

Calendar : view upcoming events as well as see date, time, location.

Specific event: detail of events

Register Members

Account Info : Register and Login also view/edit profiles and show save items as well as email and profile

Administrators

Home: make sure all section are good

Resources : create, edit, and update resource links

Exercises : create, edit, and update exercise methods/guides with brief summaries.

Discussion Forum : remove posts and moderate posts

Calendar : create, edit, and update events

Specific event: make detail of events as well as update events

Total: 13 web pages

Webpage Modifications/Improvements

- Added missing **About Page** and completed user flow for it.
- Updated the wireframe
- Updated all page names for consistency
- Integrated a plan for CRUD database operations for interactivity
- Added edit/delete topic features for members and admin-only controls

Formal Meeting Minutes

Time and Date	Location	Who attended	Who didn't attend	What was discussed	Problems encountered/solved
September 30th 3:45-500pm	Discord/GC	Xahn, Paige, William, Luis, and Arthur	N/A	General discussion of what to be planned for the website. Two options were proposed, one was	We discussed what to do, and tried to make sure the web page wasn't too complex for what we

				too ambitious so we decided to go for the mental health option.	could do.
October 7th 2:00-5:30pm	Discord/GC	Xahn, Paige, William and Luis	Arthur	We talked more in depth on the pages and what we wanted to include for each page. We also figured out the basic connection of each page to one another and how they would flow.	Figured out how to balance what we wanted to do for the website and tried to decrease the complexity of it.
October 13th 7:15-7:45 am	Discord/GC	Xahn, Paige, William and Luis	Arthur	We briefly talked about the project proposal as well as divvy out responsibilities for the project.	N/A
October 14th 9am-1:30 pm	Discord/GC	Xahn, Paige, William and Luis	Arthur	Continued the conversation from the 13th.	N/A
October 23rd 2-7pm	Discord/GC	Xahn, Paige, William, Luis and Arthur	N/A	Initial conversation about the webpages assignment	We determine who was working on what portions of the assignment
October 25th 2am-6pm	Discord/GC	Xahn, Paige, William, Luis and Arthur	N/A	Continued conversation about the webpages assignment focusing on what third party tool to use. William's Role: <ul style="list-style-type: none"> - Worked html files for About and Exercises page 	We came to an agreement as to what tool we would use for the webpages assignment.
October 26th 2pm-5pm	Discord/GC	Xahn, Paige, William, Luis and Arthur	N/A	Discussed assignment progress and version control. William's Role: <ul style="list-style-type: none"> - Continued to work on html files for About and Exercises page - Worked on completing css files for About and Exercises page 	Established version control via GitHub.
October 28th 5pm-11:30pm	Discord/GC	Xahn, Paige, William, Luis and	N/A	Determined what webpages still needed to	Assigned leftover webpages to whoever

		Arthur		<p>be completed.</p> <p>William's Role:</p> <ul style="list-style-type: none"> - Finished final touches on About and Exercises page 	could get them completed.
October 30th 9am-11am	Discord/GC	William, Xahn	Paige, Luis, Arthur	<p>William's Role:</p> <ul style="list-style-type: none"> - Gather all required components for submission that was due on the 30th - Submitted assignment <p>Xahn Role:</p> <ul style="list-style-type: none"> - Confirmed the submission looked good 	Little communication when trying to make sure the submission is solid.
November 3rd 11am-4pm	Discord/GC	William and Paige	Xahn, Luis, Arthur	<p>William's Role:</p> <ul style="list-style-type: none"> - Reviewed the feedback from instructor - Contact the group to divide the work up (No respond from anyone but William and Paige) - Worked on improving Project proposal per given feedback - Uploaded all the files to the class server - Organized and submitted all required components for the upload on canvas <p>Pagie's Role:</p> <ul style="list-style-type: none"> - Fixed project wireframe 	Little communication and assistance from the missing members.

TEAM MEETING PERFORMANCE PART 2

<u>TEAM MEETING PERFORMANCE</u>	Xahn Millsape	Paige Kunze	William Dory	Luis Ibarra Villagran	Arthur Dos Santos
Contribution to the agenda	Helped to facilitate discussions centered around the time of our meetings	Help organize the meetings and facilitate discussions	Helped with dividing tasks and facilitating communication	Took over tasks that weren't done.	Helped with facilitating discussions centered on the assignment of tasks.
Attendance and timeliness	Missed 1 meeting	Attended all meetings except one due to internet connectivity issues (communicated promptly)	Attended each meeting	Missed 2 meetings	Missed 2 meetings
Action item completion	Completed the base template of the project via use of the third party tool and designed the mockup for the account page.	Completed the calendar page of the webpages assignment. Improved webpage wireframe	Completed the About page/Mission Statement and exercises page. Published all the webpages	Completed the discussion forum page.	Completed the structure of the webpages and finished off the homepage.

			<p>on class server</p> <p>Gather all required components for submission</p> <p>Submitted all items</p>		
Quality of input	Great quality of input, particularly in development strategy and version control.	Great quality of input, provided thorough and thoughtful input in planning discussions	<p>High quality of input and helps push discussion forward</p> <p>Facilitates discussion on project work</p>	Okay quality of input. Completes the work that was provided to him	Good quality of input. Completed any assigned task.
Decision-making effectiveness	Displayed effective decision-making in content design and resource selection	Displayed the ability to promptly tackle any delegated task	Demonstrated strong decision-making in determining project scope and distribution of work.	Displayed the ability to promptly tackle any delegated task	Displayed the ability to complete the delegated task
Problem-solving skills	Helped troubleshoot HTML/CSS	Solved JS verification issue and	Assisted in resolving webpage	Solved his own issues	Solved GitHub access issues and deployment

	integration and maintained workflow clarity.	refined user interface styling.	layout issues and provided copy revisions.	with the forum page.	challenges efficiently.
Active participation	Active	Active	Active	Not very active	Kind of active
Effective communication	<p>Has displayed sufficient communication skills during meetings and in-between meetings</p> <p>Zero communication for the submission part due on Nov 4th</p>	Has displayed sufficient communication skills during meetings and in-between meetings	<p>Has displayed sufficient communication skills during meetings.</p> <p>Communicates a solid plan of action to the group.</p>	Has displayed sufficient communication skills during meetings, but lacked communication at the end of the submission part	Has displayed sufficient communication skills during meetings, but lacked communication at the end of the submission part
Encouraging others	Encouraged members to continue on with their given role	Encouraged members to continue on with their given role	Encouraged members to continue on with their given role	Encouraged members to continue on with their given role	Encouraged members to continue on with their given role
Constructive conflict	Assistance in providing either validation or critique of the work done by others	Assistance in providing either validation or critique of the work done by others	Assistance in providing either validation or critique of the work done by others	Assistance in providing either validation or critique of the work done by others	Assistance in providing either validation or critique of the work done by others

Access to Control Site (Public GitHub Repo)

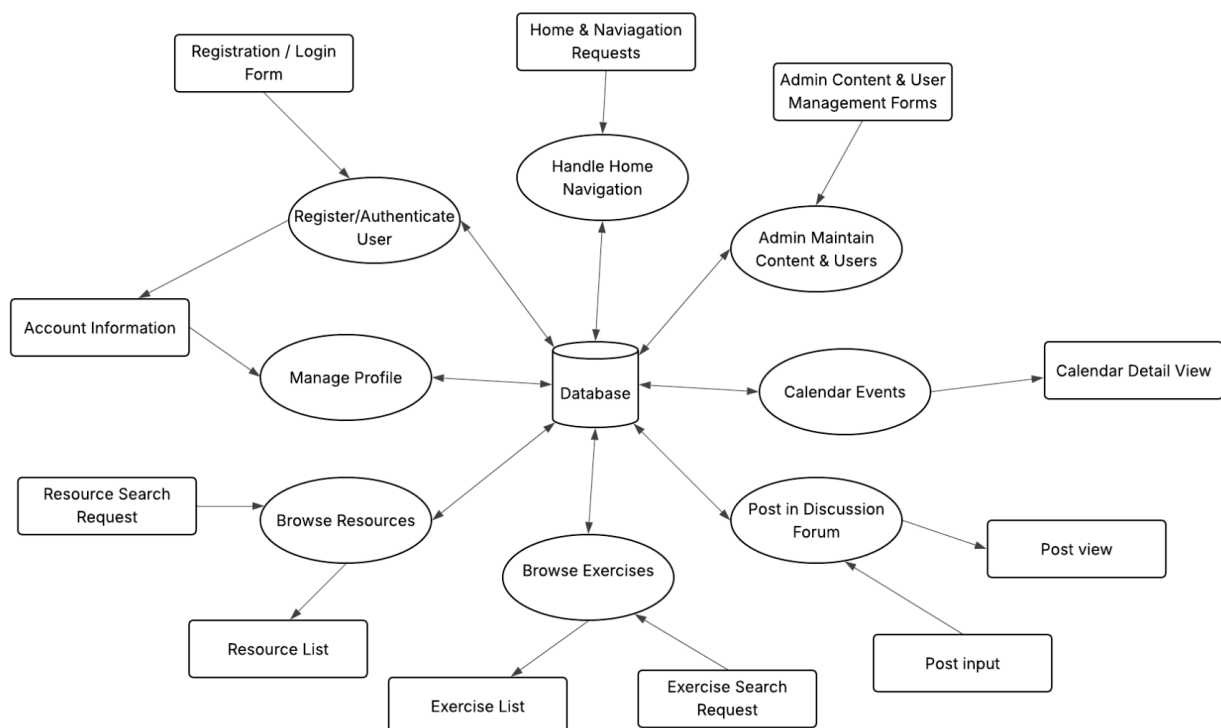
<https://github.com/dossa009/CS444-NewHorizon/tree/main>

Third-Party Software

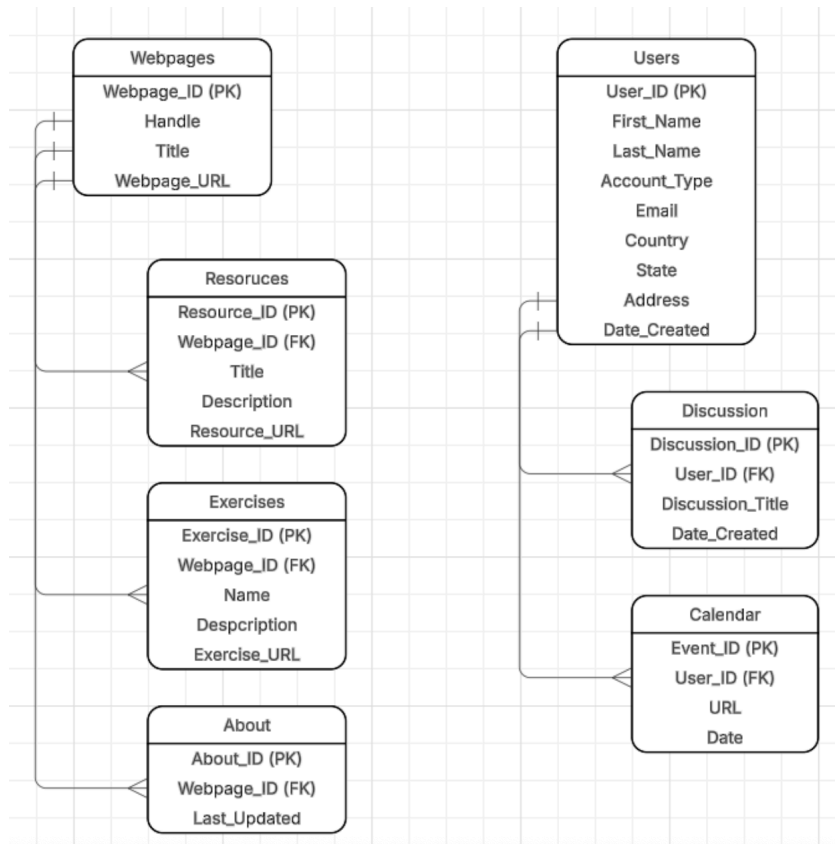
Canva: The software [Canva](#) was used in order to help create the visual aspects of the webpages and to maintain a consistent theme. It allowed us to collaboratively prototype our webpage structures, select color palettes, and experiment with typography and iconography before translating these visuals into HTML and CSS.

GitHub Pages: The project was deployed using GitHub pages, which is a free web hosting service provided by GitHub. This 3rd party platform allows us to automatically publish and host the New Horizon website directly from the project's source code repository. Using this helps keep our website updated whenever new commits are merged into the main branch. It also ensures that all team members could view, test, and verify the latest version of the website in real time.

Information Flow Diagram



ER Diagram



Database Schema

Table Implementation & Populating Data

Webpages Table

```
CREATE TABLE Webpages (  
  Webpage_ID INT AUTO_INCREMENT PRIMARY KEY,  
  Handle VARCHAR(100) NOT NULL,  
  Title VARCHAR(150) NOT NULL,  
  Webpage_URL VARCHAR(255) NOT NULL,  
  CONSTRAINT uq_webpages_handle UNIQUE (Handle),  
  CONSTRAINT uq_webpages_url UNIQUE (Webpage_URL)  
);
```

Users Table

```
CREATE TABLE Users (  
  User_ID INT AUTO_INCREMENT PRIMARY KEY,  
  First_Name VARCHAR(100) NOT NULL,  
  Last_Name VARCHAR(100) NOT NULL,  
  Account_Type ENUM('member','admin') NOT NULL DEFAULT 'member',  
  Email VARCHAR(150) NOT NULL,  
  Country VARCHAR(80),  
  State VARCHAR(80),  
  Address VARCHAR(255),  
  Date_Created DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  CONSTRAINT uq_users_email UNIQUE (Email)  
);
```

Resources Table

```
CREATE TABLE Resources (  
  Resource_ID INT AUTO_INCREMENT PRIMARY KEY,  
  Webpage_ID INT NOT NULL,  
  Title VARCHAR(200) NOT NULL,  
  Description TEXT,  
  Resource_URL VARCHAR(255) NOT NULL,  
  CONSTRAINT fk_resources_webpage  
    FOREIGN KEY (Webpage_ID)  
    REFERENCES Webpages (Webpage_ID)  
    ON UPDATE CASCADE  
    ON DELETE CASCADE  
);
```

Exercises Table

```
CREATE TABLE Exercises (  
  Exercise_ID INT AUTO_INCREMENT PRIMARY KEY,  
  Webpage_ID INT NOT NULL,  
  Name VARCHAR(200) NOT NULL,  
  Description TEXT,  
  Exercise_URL VARCHAR(255),  
  
  CONSTRAINT fk_exercises_webpage  
    FOREIGN KEY (Webpage_ID)  
    REFERENCES Webpages (Webpage_ID)  
    ON UPDATE CASCADE  
    ON DELETE CASCADE  
);
```

About Table

```
CREATE TABLE About (  
  About_ID INT AUTO_INCREMENT PRIMARY KEY,  
  Webpage_ID INT NOT NULL,  
  Last_Updated DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  CONSTRAINT fk_about_webpage  
    FOREIGN KEY (Webpage_ID)  
    REFERENCES Webpages (Webpage_ID)  
    ON UPDATE CASCADE  
    ON DELETE CASCADE  
);
```

Discussion Table

```
CREATE TABLE Discussion (  
  Discussion_ID INT AUTO_INCREMENT PRIMARY KEY,  
  User_ID INT NOT NULL,  
  Discussion_Title VARCHAR(255) NOT NULL,  
  Date_Created DATETIME NOT NULL DEFAULT CURRENT_TIMESTAMP,  
  CONSTRAINT fk_discussion_user  
    FOREIGN KEY (User_ID)  
    REFERENCES Users (User_ID)  
    ON UPDATE CASCADE  
    ON DELETE CASCADE  
);
```

Calendar Table

```
CREATE TABLE Calendar (  
  Event_ID INT AUTO_INCREMENT PRIMARY KEY,  
  User_ID INT NOT NULL,  
  URL VARCHAR(255),  
  Date DATE NOT NULL,  
  CONSTRAINT fk_calendar_user  
    FOREIGN KEY (User_ID)  
    REFERENCES Users (User_ID)  
    ON UPDATE CASCADE  
    ON DELETE CASCADE  
);
```

Populating the Tables with Sample Data

Webpages Data

```
INSERT INTO Webpages (Handle, Title, Webpage_URL)  
VALUES  
('home', 'Home', 'index.php'),  
('exercises', 'Wellness Exercises', 'exercises.php'),  
('resources', 'Mental Health Resources', 'resources.php'),  
('about', 'About & Mission', 'about.php'),  
('calendar', 'Events & Opportunities', 'calendar.php'),  
('forum', 'Discussion Forum', 'forum.php'),  
('account', 'Account Information', 'account.php');
```

Users Data

```
INSERT INTO Users (First_Name, Last_Name, Account_Type, Email, Country, State, Address)  
VALUES  
('Alex', 'Rivera', 'member', 'alex.rivera@example.com', 'USA', 'CA', '123 Sunset Blvd'),  
('Jordan', 'Lee', 'member', 'jordan.lee@example.com', 'USA', 'CA', '221 Palm Street');
```

('Taylor', 'Morgan', 'admin', 'admin.newhorizon@example.com', 'USA', 'CA', '1 University Way');

Resources Data

INSERT INTO Resources (Webpage_ID, Title, Description, Resource_URL)

VALUES

(3, '988 Suicide & Crisis Lifeline',
'Free, confidential 24/7 support for people in emotional distress or crisis.',
'https://988lifeline.org'),
(3, 'National Alliance on Mental Illness (NAMI)',
'Advocacy, education, and local support groups for individuals affected by mental illness.',
'https://www.nami.org'),
(3, 'Mental Health America',
'Articles, mental health screening tools, and wellness resources.',
'https://www.mhanational.org'),
(3, 'Crisis Text Line',
'Text HOME to 741741 for free crisis counseling via SMS.',
'https://www.crisistextline.org'),
(3, 'Active Minds',
'Organization supporting mental health awareness on college campuses.',
'https://www.activeminds.org');

Exercises Data

INSERT INTO Exercises (Webpage_ID, Name, Description, Exercise_URL)

VALUES

(2, 'Box Breathing',
'A calming breathing technique involving slow, equal inhales and exhales.',
'https://health.clevelandclinic.org/box-breathing'),
(2, '5-4-3-2-1 Grounding',
'A sensory grounding exercise that helps reduce anxiety and refocus attention.',
'https://www.therapistaid.com/therapy-article/grounding-techniques'),
(2, 'Progressive Muscle Relaxation',
'Slowly tense and release different muscle groups to reduce physical stress.',
'https://www.anxietycanada.com/articles/progressive-muscle-relaxation-pmr/'),
(2, 'Gratitude Journaling',
'Write down three things you are grateful for to promote positive thinking.',
'https://ggsc.berkeley.edu/well-being'),
(2, 'Mindful Body Scan',
'A guided introspection activity that increases awareness and relaxation.',
'https://www.mindful.org/body-scan-meditation/');

About Data

INSERT INTO About (Webpage_ID, Last_Updated)

VALUES

(4, NOW());

Discussion Data

INSERT INTO Discussion (User_ID, Discussion_Title)

VALUES

(1, 'How do you stay grounded during stressful weeks?'),
(2, 'Favorite quick exercises to reset your mood?'),
(3, 'Admin: Share your feedback about our new wellness tools here!');

Calendar Data

```
INSERT INTO Calendar (User_ID, URL, Date)
VALUES
(3, 'https://www.activeminds.org/events/', '2025-02-14'),
(3, 'https://www.nami.org/Support-Education/NAMI-Programs', '2025-03-01'),
(3, 'https://csusm.edu', '2025-04-10');
```