# ZenDiary

What is ZenDiary?

ZenDiary is an interactive webapp in which users can share about themselves and receive a diagnosis of their current mental affairs while also being directed to according resources to address their current mental state.

ZenDiary makes use of a locally hosted HTML webapp that can read a user's journal, analyze it with a pretrained AI sentiment analyzer, and then output to the user whether the sentiment of the statement is positive or negative, and then direct the user to the according resources.
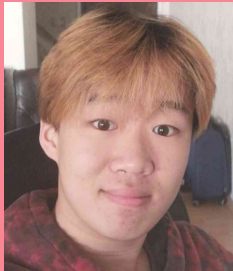
The Engineering Process We Used

01

Problem Definition

Recognizing a problem and brainstorming solutions

02

Research and Analysis

Gathering statistics and and analyzing the relevance of the problem

03

Design Process

Designing the solution: The UI and general functionality; frontend and backend

04

Testing and Deployment

Actually creating and putting into practice all our ideas into a functional website

01
Problem Definition

Concepts

Principal Issue

We realized the mental distress and trauma that the Covid-19 crisis has left on our community, and even as we return from covid, the effects have still lasted.

Project Proposal

To solve this issue we propose an webapp which is able to analyze the emotional sentiment of a person through journaling that can direct people to according resources.

02

Research and Analysis

"

Another report showed that mental health-related

emergency room (ER) visits for children aged 12 to 17 increased by 31 percent from April through October 2020. Students surveyed at seven American universities reported largely negative impacts of COVID-19 on their psychological

"

health and lifestyle behaviors.

- SOS Illinois study on teenage mental health

Before/Post Covid
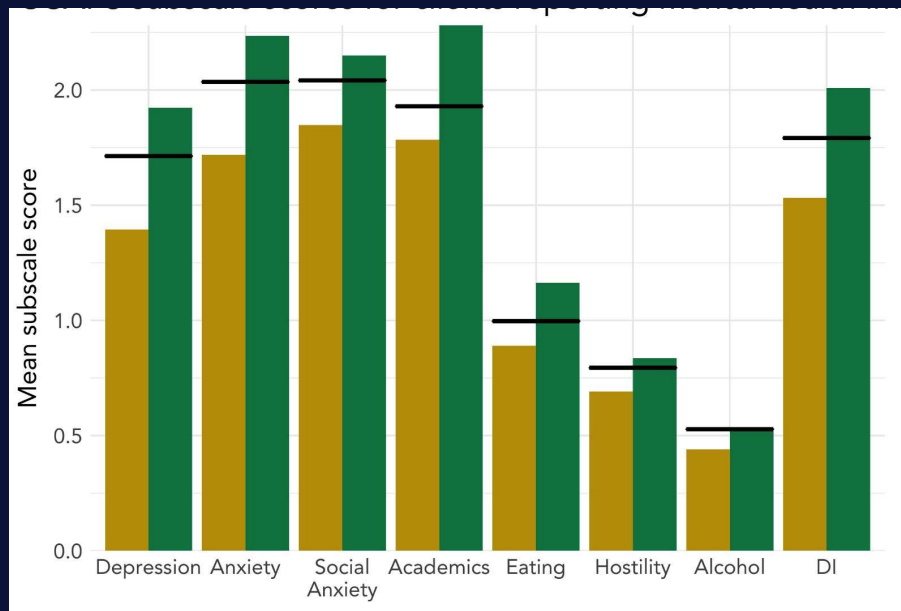
Before Covid

Ratings of various negative feelings and actions

After Covid

Ratings of various negative feelings and actions

Benefits To Mental Health Mindfulness

Reduces anxiety

Improves sleep

Cure Depression

Eating Habits

03

Design
Process

Purpose

Even though we were designing a thoughtful webapp we made sure to keep out purpose in mind, the functionality matters above all.

Accessibility

Accessibility is a given component that we had to include to make sure everyone could use our webapp

User-Centered

Our webapp emphasizes the importance of a good mental health and we make sure to keep this vision in mind

Division of Labor

Jerry primary worked on the backend in Python, laid the basic groundwork for the frontend in HTML, and also the integration of the backend and frontend. As the project manager, he delegated roles and managed the design process.

Vivaan offered his creativity and brainstorming in coming up with ideas for the project, worked on the slideshow to properly present our project, and also collaborated on the front end HTML and CSS. As the DevOps engineer, he acted as the lubricant in our collaboration that kept us going smoothly.

Shivansh pioneered the webapp design and CSS coding in order to make the website look nicer, dealing with things related to stylistic designs, font choices, and color schemes. As the UI designer, he played an integral role in the project's appearance.

04

Testing and Deployment

Welcome to ZenDiary

(Scroll Down)

Hello . Please share about yourself.

Enter your name:

Tell us how you are feeling today:

Submit

Challenges Overcome

➢ Figuring out how to connect our website to output our code
➢ Finding out what language to use and how to implement it to make a website directed towards our idea
➢ Positioning the images in our website
➢ Implementing AI into our website to give answers regarding the users input

Since we did not know any HTML, we had to learn it all from scratch using documentation and youtube tutorials, and after jumping through many hoops we made a functional front-end website.

Resources we have linked

Journaling Gratitude

Expressing gratitude has been shown to improve mental health

Practicing Meditation

Practicing to be in a more calm state of mind

Recommending certain books

Reading books which promote a strong mental stature

For extreme cases of negativity, suggesting hotlines and help

Limitations

Cannot save old journals,

The UI is not the prettiest,

Cannot make accounts to look back on development

Locally hosted, limited in outreach

Future Development

Make an account system that allows saving journals and tracking emotional development

An AI counseling chatbot that directly provides mental aid

An app or website hosted on our own domain rather than a locally hosted web app

Thanks

Questions?
Comments?
Concerns?