***“LUNA”***

***Mini Project Report Submitted in partial fulfilment of the***

***Requirements for the award of the Degree of***

## BACHELOR OF ENGINEERING

IN

## INFORMATION TECHNOLOGY

By

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**Department of Information Technology Vasavi College of Engineering (Autonomous)**

## VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

### (AFFILIATED TO OSMANIA UNIVERSITY) HYDERABAD - 500 030

**Department of Information Technology**



### DECLARATION BY CANDIDATE

We, **M. Nikhil Narasimha, B. Ganesh, J. Shyam Prasad Yadav,** bearing hall ticket number, **1602-20-737-025, 1602-20-737-012, 1602-20-737-042**

hereby declare that the project report entitled “LUNA".

Department of Information Technology, Vasavi College of Engineering, Hyderabad, is submitted in partial fulfillment of the requirement for the award of the degree of **Bachelor of Engineering** in **Information Technology**

This is a record of bonafide work carried out by me and the results embodied in this project report has not been submitted to any other university or institute for the award of any other degree or diploma.

### B. Ganesh 1602-20-737-012

**M. Nikhil Narasimha 1602-20-737-025**

**J. Shyam Prasad 1602-20-737-042**

## VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS)

### (AFFILIATED TO OSMANIA UNIVERSITY) HYDERABAD - 500 030

**Department of Information Technology**



### BONAFIDE CERTIFICATE

This is to certify that the project entitled “LUNA” being submitted by **B. Ganesh, M. Nikhil Narasimha, J. Shyam Prasad** bearing **1602-20-737-012,** **1602-20-737-025,1602-20-737-042**, in partial fulfillment of the requirements for the completion of MINI PROJECT of Bachelor of Engineering in Information Technology is a record of bonafide work carried out by them under my guidance.

Internal Guide External Examiner Dr.K Ram Moahn Rao Mrs. Sireesha HOD, IT

## ACKNOWLEDGEMENT

We thank the department of INFORMATION TECHNOLOGY, for introducing the subject “Mini Project-2” in BE fifth semester.

We would also like to show our appreciation to our Honorable principal, Dr S V Ramana sir, our HOD K. Ram Mohan Rao for supporting us and our mini project lecturer, Mrs. Sireesha mam, for letting us properly understand the process of doing a project and for providing valuable insight and expertise that has greatly assisted us in the making of the project.

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**ABSTRACT**

Most people know it's important to take care of your physical health, but not everyone knows it's equally important to take the time to address their mental health needs. Learning how to handle stress and make time for yourself are just as important as eating right and exercising. All these things are aspect of self-care and can help people live their healthiest lives.

This is an emotional health assistant website developed by a team of engineers. It is designed to help users beat anxiety and depression, calm their minds, sleep better, be happier, and how to maintain their emotional and physical health. It uses artificial intelligence (A.I.) to personalize various techniques and incorporates strategies from Cognitive Behavioral Therapy, Acceptance and Commitment Therapy, Mindfulness, and other approaches to be a useful tool.

# CHAPTER 1 INTRODUCTION

**What is a Luna?**

This is an emotional health assistant website developed by a team of engineers. It is designed to help users beat anxiety and depression, calm their minds, sleep better, be happier, and how to maintain their emotional and physical health. It uses artificial intelligence (A.I.) to personalize various techniques and incorporates strategies from Cognitive Behavioral Therapy, Acceptance and Commitment Therapy, Mindfulness, and other approaches to be a useful tool.

### PURPOSE

It is designed to help users beat anxiety and depression, calm their minds, sleep better, be happier, and how to maintain their emotional and physical health.

**INTENDED AUDIENCE**

The intended audience for this project is everyone who is struggling with mental health problems, specially focused towards students.

## PRODUCT SCOPE

●This app interacts with the user with the help of the journal they write.

●The app analyzes the journal written by the user.

●It suggests different ways to improve their sleep schedule.

●It helps the user utilize their time in a better way.

●It helps the user to approach things positively.

●Helps the user set goals and achieve them accordingly.

### PROBLEM DEFINITION

Most people know it's important to take care of your physical health, but not everyone knows it's equally important to take the time to address their mental health needs. Learning how to handle stress and make time for yourself are just as important as eating right and exercising. All of these things are aspect of self-care and can help people live their healthiest lives.

# CHAPTER 2 RELATED WORK –

There has been a lot of notable work in the mental health field. Various patients feel difficulty in sharing thoughts with doctors.

Some applications like Calm, Headspace, Youper are working on solving mental health issues.

# CHAPTER 3 PROPOSED WORK –

* 1. **Use cases –**

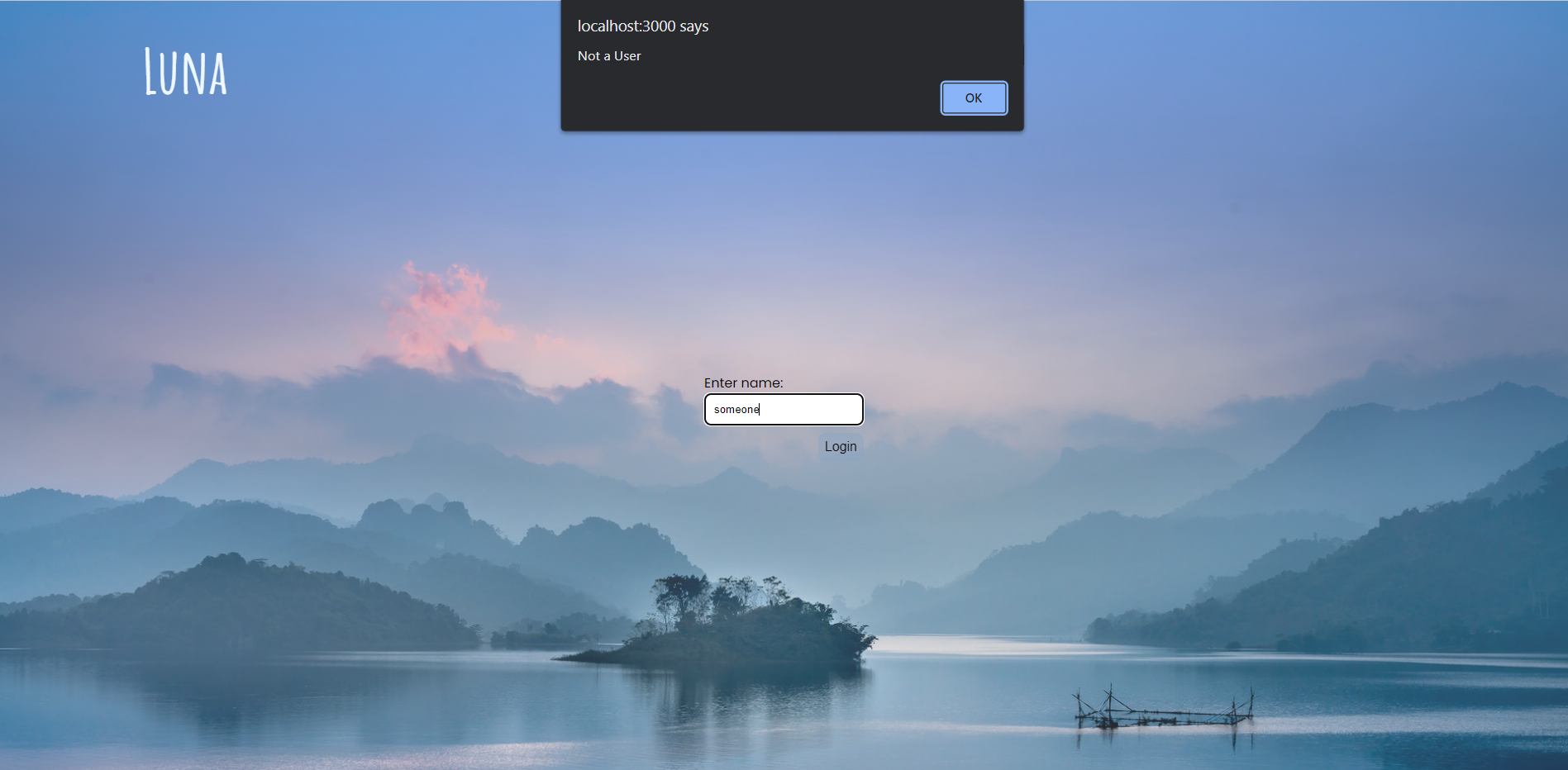
Diagram

Description automatically generated

# UI prototypes or screenshots

# A picture containing text, water, outdoor, mountain Description automatically generated

# A picture containing water, sky, mountain, outdoor Description automatically generated



Graphical user interface

Description automatically generated

Graphical user interface, application

Description automatically generated

Graphical user interface

Description automatically generated

Waterfall chart

Description automatically generated with medium confidence

Graphical user interface

Description automatically generated with medium confidence

A picture containing graphical user interface

Description automatically generated

* 1. **Architecture and Technology used –**

**Diagram

Description automatically generated**

Technology used

Front end – ReactJs

Backend – Flask API, python

Database – MongoDB

**Response:** This is the assistant’s output that is aimed at satisfying the user’s intent. The most accurate responses occur when a proper range of expressions have been correctly grouped into Intents. Accurate and simple responses are important traits for a good health assistant.

# Design –

### FLOW DIAGRAM

**Diagram

Description automatically generated**

**USE CASE DIAGRAM**

Diagram

Description automatically generated

**Code**

*Front End Code*

import {BrowserRouter,Routes,Route} from 'react-router-dom'

import logo from './logo.svg';

import './App.css';

import Journal from './Journal';

import Entrance from './Entrance';

import NewUser from './NewUser';

import OldOnes from './OldOnes';

import Login from './Login';

import { createContext, useState } from 'react';

import Hows from './Hows';

import Hows1 from './Hows1';

function App() {

const [auth,setauth] = useState();

const LoginContext = createContext();

return (

<>

<BrowserRouter>

<Routes>

<Route index element = {<Entrance/>}/>

<Route path="hows1" element = {<Hows1/>}/>

<Route path="Login" element = {<Login/>}/>

<Route path="journal" element = {<Journal/>}/>

<Route path="journal/Old" element = {<OldOnes/>}/>

<Route path="new" element = {<NewUser/>}/>

</Routes>

</BrowserRouter>

{/\* <Journal/> \*/}

</>

// <div>

// <h1>Health App</h1>

// <p>Welcome ✨✨</p>

// <img src="therapy.jpg" alt="therapist"

// width="360vh"

// height="305vh"></img>

// <form>

// <label for="fname">Enter name: </label>

// <input type="text" id="fname" name="fname"/>

// <br/>

// <br/>

// <input type="submit" value="Submit"/>

// </form>

// </div>

// <div>

// <h1>

// HEALTHIFY

// </h1>

// <div>

// <input placeholder='UserName'/>

// <br></br>

// <button >Enter</button>

// {/\* <br></br> \*/}

// {/\* <input placeholder='Enter Password'/> \*/}

// </div>

// </div>

);

}

export default App;

*//CSS file*

@import url('https://fonts.googleapis.com/css2?family=Lexend+Deca:wght@100;600&family=Montserrat:ital,wght@0,400;1,300;1,400;1,500&family=PT+Sans&family=Poppins:wght@100;300;400;500&display=swap');

body

{

/\* background-color:aliceblue; \*/

/\* background-image: linear-gradient(45deg, #85FFBD 0%, #FFFB7D 100%); \*/

/\* background-color:rgb(255,99,71); \*/

/\* font-family: 'Trebuchet MS', sans-serif;

\*/

/\* font-family: 'Lexend Deca', sans-serif; \*/

/\* font-family: 'Montserrat', sans-serif; \*/

font-family: 'Poppins', sans-serif;

/\* font-family: 'PT Sans', sans-serif; \*/

/\* background-color: aqua; \*/

/\* text-align: center; \*/

/\* padding: 6px; \*/

/\* color: pink; \*/

}

/\* .navlink:hover {

background-color:rgb(194, 207, 218);

background-color: #85FFBD;

background-image: linear-gradient(0, #85FFBD 0%, #FFFB7D 100%);

transition: 1s;

} \*/

h1

{

margin-top: 0;

font-weight: 300;

}

.entrance

{

/\* display: flex; \*/

/\* flex-direction: column; \*/

/\* justify-content: center; \*/

/\* align-items: center; \*/

height: 100vh;

/\* background-color:rgb(194, 207, 218); \*/

/\* background-color: #85FFBD; \*/

/\* background-image: linear-gradient(45deg, #85FFBD 0%, #FFFB7D 100%); \*/

}

.entrance label

{

font-size: large;

/\* padding: 1vh; \*/

}

.entrance input

{

border-radius: 1vh;

padding: 0.8vh;

}

.neuron

{

/\* background-color: #FFFB7D; \*/

/\* flex-direction: row; \*/

/\* justify-content: center; \*/

/\* align-items: center; \*/

/\* align-items: baseline; \*/

/\* flex-wrap: wrap; \*/

/\* display: flex; \*/

/\* display: inline-block; \*/

}

.neuron img

{

/\* width: auto; \*/

/\* height: 10; \*/

/\* height: 100px; \*/

}

p

{

font-size: 120%.

}

*//React File*

import React, { useState,createContext } from 'react';

import { Link,redirect,useNavigate} from "react-router-dom";

import axios from 'axios';

import './Entrance.css'

function Entrance() {

const LoginContext = createContext();

const navigate = useNavigate();

const [input,setinput] = useState(null);

const [auth,setauth] = useState(null);

const login = (e) =>

{

console.log("Ho");

e.preventDefault();

const ob = {

Name:input,

}

console.log(ob);

axios.post("/login",ob).then((response) => {

console.log(response.data);

if(response.data==="Success")

{

setauth(true);

navigate('/Journal',

{

state:{

Name:input

}

});

}

else

{

setauth(false);

alert("Not a User");

}

// console.log(response.status);

});

}

const styleOb ={

fontSize:"60px"

}

const styleOb2 ={

fontSize:"25px"

}

return (

<>

<div className='entrance'>

{/\* <h1 className='logo'>Luna</h1> \*/}

{/\* <p className='logo'>Luna</p> \*/}

<div className='nav'>

<ul>

<li><p className='logo'>Luna</p></li>

<li className='leftnav'><a href='new'>Sign up</a></li>

<li className='leftnav'><a href='Login'>Log in</a></li>

</ul>

</div>

<div className='entrytext'>

This is an emotional health assistant website. It is designed to help users beat anxiety and depression, calm their minds, sleep better, be happier, and how to maintain their emotional and physical health. It uses artificial intelligence (A.I.) to personalize various techniques and incorporates strategies from Cognitive Behavioral Therapy, Acceptance and Commitment Therapy, Mindfulness, and other approaches to be a useful tool.

</div>

{/\* <h1 style={styleOb}>Neuron 🧫</h1> \*/}

{/\* <img

width={"auto"}

height={100}

src='mental.png'

alt="emle"

/> \*/}

{/\* <p style={styleOb2}>Welcome ✨✨</p> \*/}

{/\* <p> (Please install grammarly for better experience)</p> \*/}

{/\* <img src="pic2.png" alt="therapist"

width="400vh"

height="350vh"/> \*/}

<br></br>

{/\* <hr></hr> \*/}

{/\* <form>

<label for="fname">Enter name: </label>

<input

onChange={(event)=>setinput(event.target.value)}

type="text" id="fname" name="fname"/>

<br/>

<br/>

<input

className='navlink submit'

onClick={(event)=>{

console.log("HI");

login(event)}}

type="submit" value="Login"/>

<Link

className='navlink'

to="/new">

New User

</Link>

</form> \*/}

{

auth?<redirect to="Journal"/>:null

}

</div>

</>

)

}

export default Entrance

*//CSS file*

.entrance{

/\* background-color: aqua; \*/

background-image: url("ibgimage.jpg");

background-repeat: no-repeat;

background-size: cover;

height: 100vh;

margin-top: 0;

/\* padding-top:10 ; \*/

padding: 4vh;

padding-left: 6vw;

padding-right:6vw;

}

.logo

{

font-family: 'Amatic SC', cursive;

font-weight: 900;

font-size:8vh;

color: aliceblue;

margin: 0;

/\* text-decoration: underline; \*/

/\* text-decoration-thickness:0.4vh; \*/

}

.entrance ul{

/\* background-color: rgb(174, 194, 235); \*/

/\* background-image: url(''); \*/

list-style: none;

margin:0;

overflow: hidden;

/\* padding: 0; \*/

/\* color:blue; \*/

/\* float: left; \*/

}

.entrance ul li{

float: left;

}

.entrytext

{

color: aliceblue;

margin-left: 42px;

margin-top: 28vh;

max-width: 50vw;

font-size: 1.9vh;

font-weight: 400;

/\* background-color: rgba(80, 122, 162, 0.2); \*/

}

.entrance ul .leftnav

{

float:right;

}

.entrance ul li a{

text-decoration: none;

display: block;

padding:20px 30px;

margin: 0.5vh;

color:aliceblue;

/\* border: 3px; \*/

border-radius: 10px;

/\* background-color: aliceblue; \*/

/\* border-style: solid; \*/

}

.entrance ul li a:hover{

color: black;

transition: 1s;

/\* text-decoration: underline; \*/

/\* text-decoration-color: black ; \*/

}

import React, { useState } from 'react'

import './Hows.css';

function Hows() {

const [text,settext] = useState(null);

var matter="";

var emoji ="";

if(text.toLocaleLowerCase() ==="HAPPY".toLocaleLowerCase())

{

emoji = "😀";

matter = "GG, Happy to know"

}

else if(text.toLocaleLowerCase() === "SAD".toLocaleLowerCase())

{

emoji = "😔";

matter = "Be Stronger, Everything will get better!!"

}

else if(text.toLocaleLowerCase() === "Angry".toLocaleLowerCase())

{

emoji = "😠";

}

else if(text.toLocaleLowerCase() === "Surprise".toLocaleLowerCase())

{

emoji = "😮";

}

else

{

emoji = "🙂";

}

return(

<div

className='Hows'

>

<h1> How are you feeling today ?</h1>

<input

onChange={(event)=>

settext(event.target.value)

}

type='text'/>

<p>{emoji}</p>

<div>

</div>

{matter}

</div>

)

}

export default Hows

.Hows

{

display: flex;

flex-direction: column;

justify-content: center;

align-items: center;

height: 100vh;

}

.Hows p

{

font-size: 5vh;

}

.Hows input

{

padding: 20px;

font-size: 20px;

}

.trans

{

transform: 1s;

import React, { useState,createContext } from 'react';

import { Link,redirect,useNavigate} from "react-router-dom";

import axios from 'axios';

import './Login.css';

function Login() {

const LoginContext = createContext();

const navigate = useNavigate();

const [input,setinput] = useState(null);

const [auth,setauth] = useState(null);

const login = (e) =>

{

console.log("Ho");

e.preventDefault();

const ob = {

Name:input,

}

console.log(ob);

axios.post("/login",ob).then((response) => {

console.log(response.data);

if(response.data==="Success")

{

setauth(true);

// navigate('/Journal',

// {

// state:{

// Name:input

// }

// });

navigate('/hows1',

{

state:{

Name:input

}

});

}

else

{

setauth(false);

alert("Not a User");

}

// console.log(response.status);

});

}

return (

<div className='Login'>

<h1 className='loginlogo'>Luna</h1>

<form>

<label for="fname">Enter name: </label>

<input

className='userinput'

onChange={(event)=>setinput(event.target.value)}

type="text" id="fname" name="fname"/>

<input

className='navlink submit'

onClick={(event)=>{

console.log("HI");

login(event)}}

type="submit" value="Login"/>

{/\* <Link

className='navlink'

to="/new">

New User

</Link> \*/}

</form>

</div>

)

}

export default Login

.Login

{

/\* text-align: center; \*/

display: flex;

/\* flex-direction: column; \*/

justify-content: center;

align-items: center;

height: 100vh;

background-image:

linear-gradient(to bottom, rgba(161, 196, 253,0.45),rgba(194, 233, 251,0.15) ),

url("ibgimage.jpg");

/\* rgb(161, 196, 253) \*/

/\* rgb(194, 233, 251) \*/

/\* background-image: url("ibgimage.jpg"); \*/

background-repeat: no-repeat;

background-size: cover;

/\* background-image: linear-gradient(120deg, rgb(161, 196, 253) 0%, rgb(194, 233, 251) 100%); \*/

/\* background-color: #8BC6EC; \*/

/\* background-image: linear-gradient(135deg, #8BC6EC 0%, #9599E2 100%); \*/

padding: 4vh;

padding-left: 6vw;

padding-right:6vw;

}

form

{

display: flex;

flex-direction: column;

}

.navlink

{

/\* font-size: larger; \*/

/\* color:rgb(202, 202, 234); \*/

color:black;

text-decoration: none;

/\* background-color: #abd7e7f9; \*/

/\* background-color:rgb(194, 207, 218); \*/

/\* background-color: #85FFBD; \*/

/\* background-image: linear-gradient(145deg, #85FFBD 20%, #FFFB7D 100%); \*/

/\* background-color: #85FFBD; \*/

/\* text-align: end; \*/

/\* align-self: flex-end; \*/

padding: 0.4rem;

/\* margin: 1rem; \*/

border-radius: 1ch;

/\* text-align: right; \*/

}

.submit

{

border: none;

/\* color:white; \*/

padding: 0.5rem;

/\* margin:2vh; \*/

margin-top: 1vh;

font-size:medium;

/\* background-color: none; \*/

background-color: rgb(138, 165, 194,0.5);

align-self: flex-end;

}

.navlink:hover

{

opacity: 0.6;

}

.Login .userinput

{

padding: 10px;

}

.loginlogo

{

/\* align-self:flex-start ; \*/

position: absolute;

left:0;

/\* right:6vw; \*/

top:0;

padding: 4vh;

padding-left: 9vw;

padding-right:9vw;

/\* font-family: ; \*/

font-family: 'Amatic SC', cursive;

font-weight: 900;

font-size:8vh;

color: aliceblue;

margin: 0;

/\* right:0; \*/

/\* align-content: flex-start; \*/

/\* justify-self: flex-start; \*/

/\* justify-content: flex-start; \*/

}

import axios from 'axios';

import React, { useState } from 'react'

import './NewUser.css';

function NewUser() {

const [newuser, setnewname] = useState(null);

const fun = (e) =>

{

e.preventDefault();

console.log("HI");

const user = {

Name:newuser,

}

axios.post("/newuser",user).then((response) => {

console.log(response.data);

if(response.data===newuser+" Created")

{

alert(newuser+" Created");

}

else if(response.data==="User Exists")

{

alert("User already exists")

}

else

{

alert("Error");

}

console.log(response.status);

});

}

return (

<div

className='newuser-container'

>

<form onSubmit={(event)=>{fun(event)}}>

<p>New User</p>

<input

onChange={(event)=>{

setnewname(event.target.value);

}}

placeholder="New User"

/>

</form>

</div>

)

}

export default NewUser;

.newuser-container

{

display: flex;

align-items:center;

justify-content: center;

flex-direction: column;

background-color:rgb(194, 207, 218);

background-color: #85FFBD;

background-image: linear-gradient(145deg, #85FFBD 20%, #FFFB7D 100%);

height: 100vh;

}

input

{

padding: 10%;

border-radius: 1ch;

}

import React, { useState ,useEffect} from 'react'

import { useLocation } from 'react-router-dom';

import axios from 'axios';

import './OldOnes.css';

function OldOnes() {

var s = 0;

const [data,setdata] = useState(null);

const loc = useLocation();

const loggedin = loc.state.Name;

useEffect(() => {

const ob = {

"Name":loggedin

}

axios.post("/getjournals",ob).then((response) => {

if(response.data==="Not Found")

{

alert("Not Found");

}

else

{

setdata(response.data);

}

// console.log(response.status);

});

console.log("Oven");

}, [loggedin])

return (

<>

<div className='oldjournalback'>

<h1>{loggedin}'s Journals</h1>

<div className='outercards'>

{data && data.map((dt)=>{

s++;

return(

<div

id={s}

className='cards'>{dt}</div>

)})}

</div>

</div>

</>

)

}

export default OldOnes

.cards

{

background-color: rgb(0, 255, 85);

margin: 2vh;

padding: 5vh;

width: 30vw;

/\* height: 30vh; \*/

}

.outercards

{

display: flex;

flex-direction:row;

/\* flex-direction: column; \*/

flex-wrap: wrap;

/\* background-color: aqua; \*/

justify-content:space-around;

/\* background-color: aqua; \*/

/\* align-items: center; \*/

}

.oldjournalback

{

background-color: aliceblue;

height: 100vh;

}

*Backend Code*

from flask import Flask,request,jsonify

from flask\_pymongo import pymongo

import db

import json

#test to insert data to the data base

app = Flask(\_\_name\_\_)

@app.route("/login",methods=["GET","POST"])

def log():

dict = request.json

# print(dict['name'])

st = dict['Name']

ct = db.db.MP\_UserLogin.find({"Name":st})

if(ct!=None):

print("Found")

else:

print("Not Found")

c=0

for i in ct:

print(i)

c=c+1

if(c!=0):

return "Success",200

else:

return "Failed"

@app.route("/getjournals",methods=["GET","POST"])

def journals():

dict = request.json

# print(dict['name'])

st = dict['Name']

print(st)

ct = db.db.Journal.find({"Name":st})

print(ct)

l = []

for i in ct:

print(i)

l.append(i['Notes'])

if(len(l)>0):

return l

else:

return "Not Found"

return l

@app.route("/newuser", methods=["POST"])

def newuser():

dict = request.json

# print()

dict = {"Name":dict['Name']}

ct = db.db.MP\_UserLogin.find({"Name":dict['Name']})

if(ct!=None):

print("Found")

else:

print("Not Found")

c=0

for i in ct:

print(i)

c=c+1

if(c==0):

db.db.MP\_UserLogin.insert\_one(dict)

return dict['Name']+" Created",200

else:

return "User Exists"

return "error",404

@app.route("/test",methods=["post","get"])

def test():

dict = request.json

db.db.Journal.insert\_one(dict)

return "success"

@app.route("/notes",methods=["get"])

def notes():

# db.db.Journal.insert\_one(dict)

items = db.db.Journal.find({'notes': 'mmm'})

for i in items:

print(i)

# return items

return list(db.db.Journal.find({},{"\_id":0}))

# for x in col.find({}, {"\_id":0, "coursename": 1, "price": 1 }):

@app.route('/')

def index():

return "Hello, world!"

if \_\_name\_\_ == '\_\_main\_\_':

app.run(debug=True)

**CHAPTER 5**

DISCUSSION AND FUTURE WORK –

* This application helps in dealing with the mental health problems of ours and younger generation. The plan is to add sleep assistant that helps with sleep by suggesting music and ways to calm down. We will also include real time mood tracker which changes while the journal is being written
* To add a chat bot which talks to the user and makes it easier for them to use the website and express their feelings better.

# References

* <https://www.calm.com/>
* <https://www.youper.ai/>
* <https://cssgradient.io/>
* <https://developer.mozilla.org/en-US/>
* <https://www.mongodb.com/atlas/database>
* <https://www.pexels.com/>
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