HOPE

User Manual

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Acknowledgement

I owe a great deal of gratitude to many people who have supported me in my internship journey and this project. This includes Ms. Sanjana Panda at Clevered, my mentors who have shared their knowledge and experience, Dr. Ken Kahn for providing us students with this wondrous learning experience, my enthusiastic classmates, and all the helpful forums and sites that provide a wealth of information and resources. I am also thankful for my parents and friends who have encouraged me along the way to put in tremendous effort into this internship. It truly has been a collective effort.

Thank you!

About Me

- Age: 17
- Grade: 12
- School: Indian School Muscat
- Skills:
  - Programming (Python, HTML, CSS, Java, JS, SQL)
  - iOS Mobile App Development
  - Data Analytics
  - Ethical Hacking
  - Computational Logic
- Linked Profile: Karthikeyan Vinodkumar

My Internship Journey

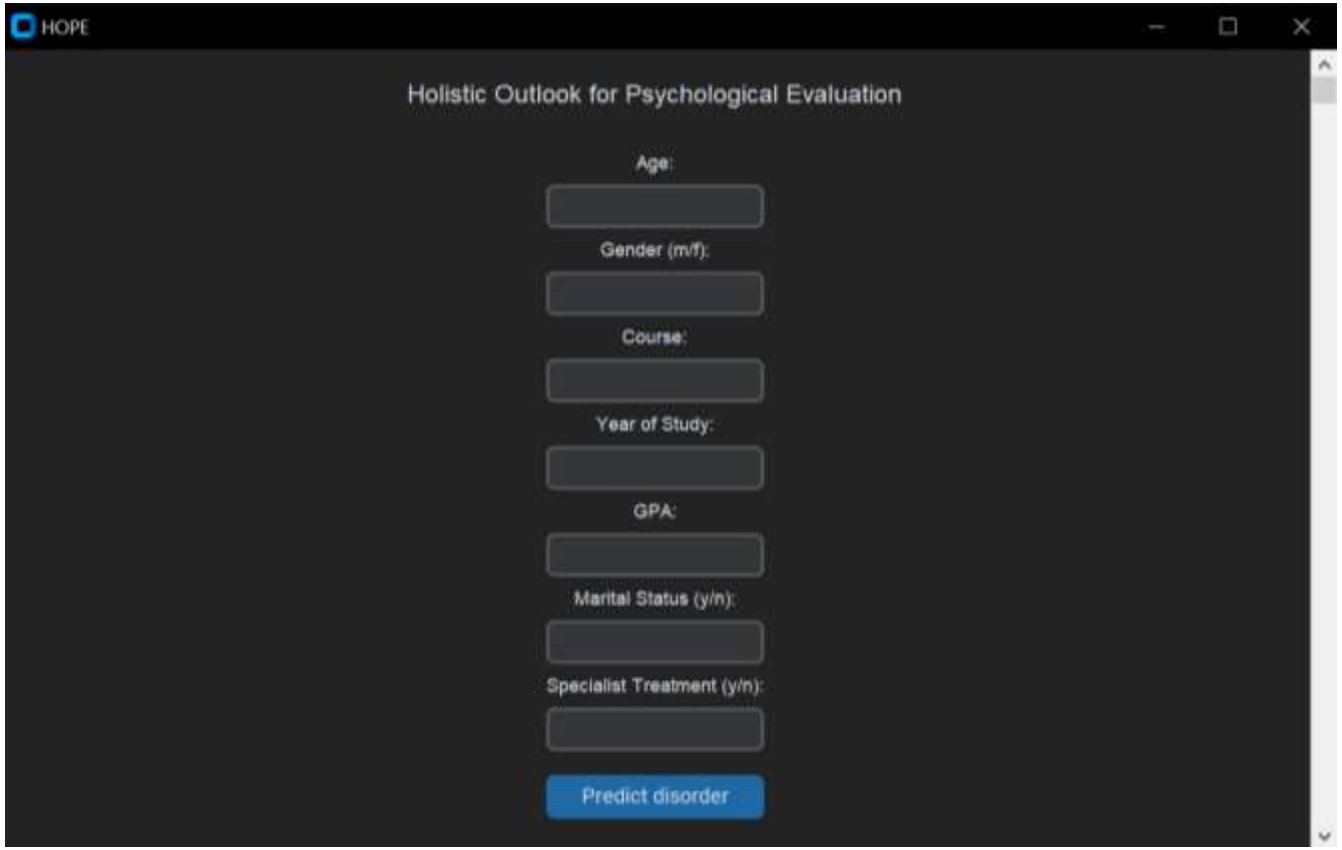
During my Artificial Intelligence Internship Program (AIIP) at Clevered, I was taught a wide range of skills in data science and machine learning. I learned about data preprocessing, statistical analysis, and predictive modeling. I was also introduced to various machine learning algorithms and techniques, such as regression, classification, and clustering. I had the opportunity to work on a highly complex project, applying these skills to real-world challenges. It was a valuable experience that helped me grow my understanding and application of AI.

About HOPE

Brief Description

- HOPE stands for Holistic Outlook for Psychological Evaluation.
- The importance of mental health in college students cannot be emphasized enough. As students leave everything familiar to them and enter university, they may experience emotional and mental strain. Students from different courses, ages and years may experience mental breakdown at some point in their life.
- HOPE is a multiclass classification model that can diagnose Depression, Anxiety and Panic Attack in college students of different courses.

Main Menu


HOPE
Holistic Outlook for Psychological Evaluation
Age:
Gender (m/f):
Course:
Year of Study:
GPA:
Marital Status (y/n):
Specialist Treatment (y/n):
Predict disorder

Feature Description

- Age
  - Accepts the age of the patient.
  - Range that gives the most accurate results: 17-25
- Gender
  - Accepts the gender of the patient.
  - Accepts values as “male” or “Male” or “m” or “M” or any other equivalent.
- Course
  - Accepts course taken by the patient.
  - Accepts values as “Mat” or “mat” or “math” or “mathematics” or any other equivalent.

Feature Description

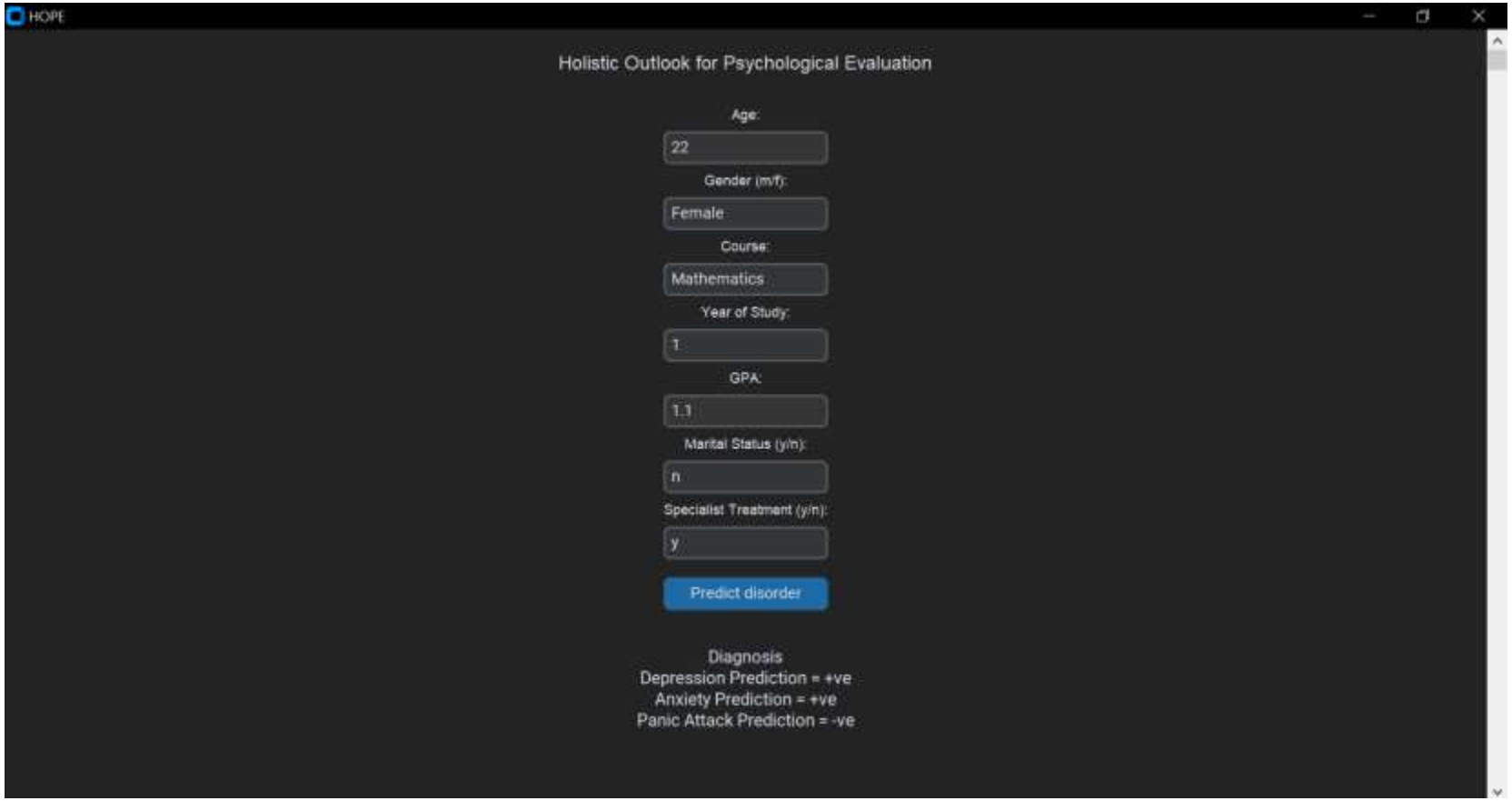
- Year of Study
  - Accepts the patient's current year of study.
  - Range that gives the most accurate results: 1-6
- GPA
  - Accepts the patient's Grade Point Average (GPA).
  - Range that gives the most accurate results: 0.00 – 4.00
- Marital Status
  - Accepts the marital status of the patient.
  - Accepts values as "yes" or "Yes" or "y" or "Y" any other equivalent.

Feature Description

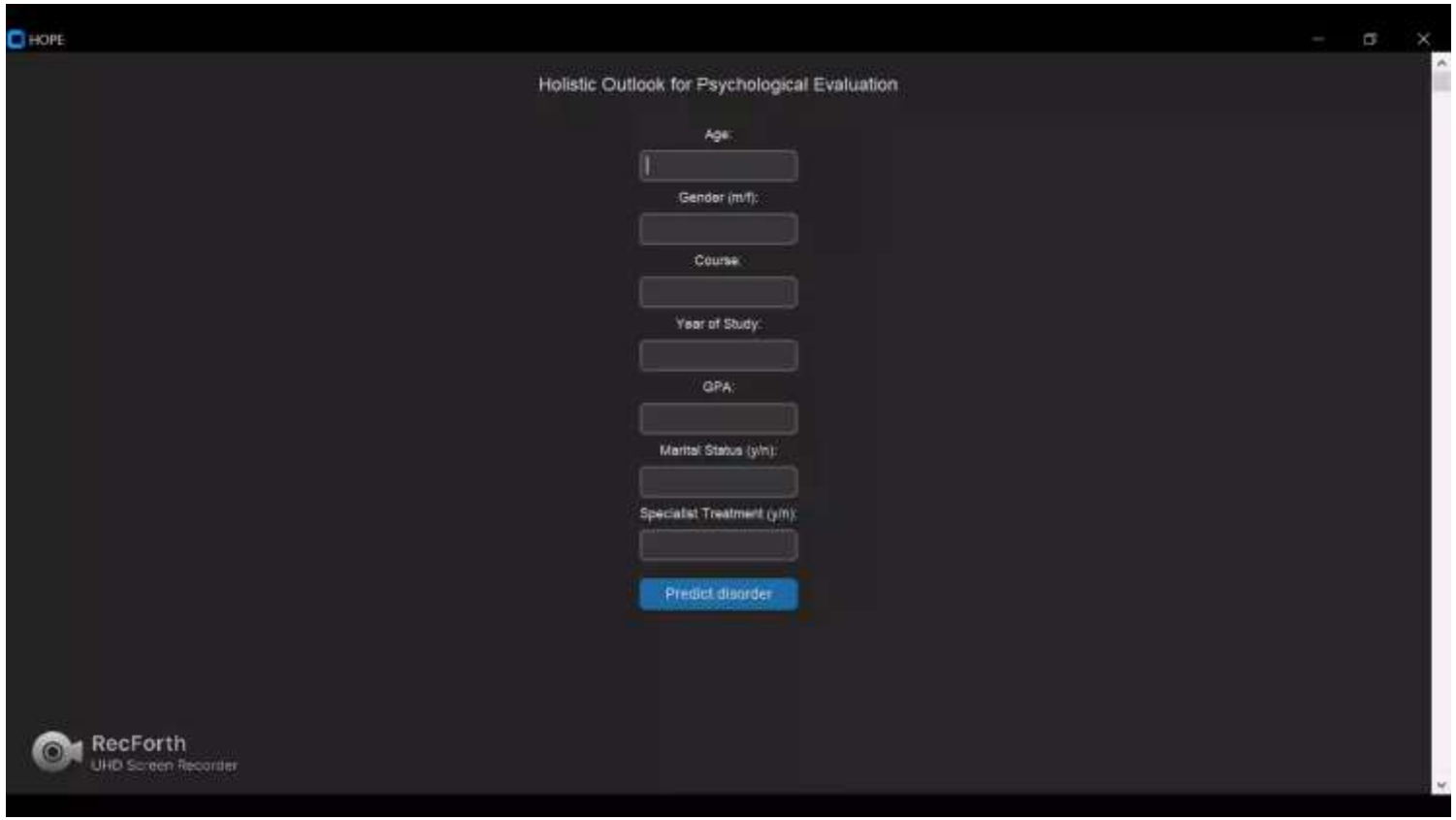
- Specialist Treatment
  - Accepts any instance of specialist treatment.
  - Accepts values as “yes” or “Yes” or “y” or “Y” any other equivalent.

Note: HOPE has extremely reduced risks and dependencies and is very user-friendly.

App Trial


HOPE
Holistic Outlook for Psychological Evaluation
Age:
22
Gender (m/f):
Female
Course:
Mathematics
Year of Study:
1
GPA:
1.1
Marital Status (y/n):
n
Specialist Treatment (y/n):
y
Predict disorder
Diagnosis
Depression Prediction = +ve
Anxiety Prediction = +ve
Panic Attack Prediction = -ve

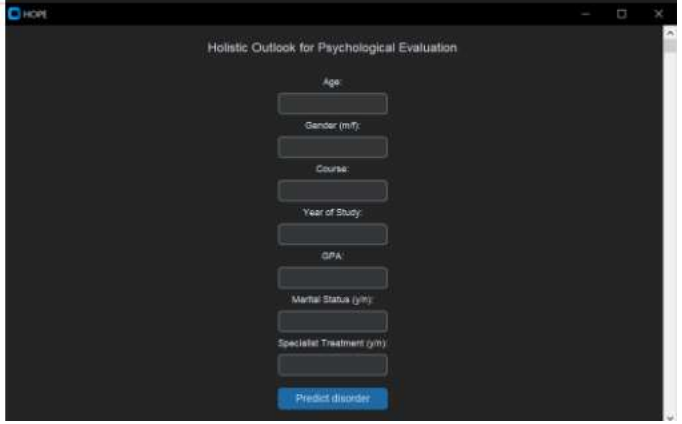
Demo Video


HOPE
Holistic Outlook for Psychological Evaluation
Age:
Gender (m/f):
Course:
Year of Study:
GPA:
Marital Status (y/n):
Specialist Treatment (y/n):
Predict disorder
RecForth
UHD Screen Recorder

App Development Toolkit Workbook Walkthrough

Project Requirements		
S. No.	Requirement / Feature	Status
1	Appropriate Dataset	Done
2	Processed Dataset (Cleaning and EDA)	Done
3	Multiclass Classification Algorithm	Done
4	Training Model	Done
5	Testing Model	Done
6	Mental Disorder Detection Algorithm	Done
7	Mental Health Analytical Predictor	Done

App Development Toolkit Workbook Walkthrough

UI Version	Date Modified	Illustration
1.1	3/18/2024	
2.1	4/20/2024	

App Development Toolkit Workbook Walkthrough

Event Handlers Matrix			
S. No.	Element	Action	What happens?
1	Holistic Outlook for Psychological Evaluation	Heading	Displays software name
2	Age	Text	Displays disorder detection question
3	Enter field.	Input	Takes user's input
4	Gender	Text	Displays disorder detection question
5	Enter field.	Input	Takes user's input
6	Course	Text	Displays disorder detection question
7	Enter field.	Input	Takes user's input
8	Year of Study	Text	Displays disorder detection question
9	Enter field.	Input	Takes user's input
10	GPA	Text	Displays disorder detection question
11	Enter field.	Input	Takes user's input
12	Marital Status (y/n)	Text	Displays disorder detection question
13	Enter field.	Input	Takes user's input
14	Specialist Treatment (y/n)	Text	Displays disorder detection question
15	Enter field.	Input	Takes user's input
16	Predict disorder	Click	When clicked, gives below results
17	Diagnosis	Text	Displays diagnosis

App Development Toolkit Workbook Walkthrough

Test Plan							
S. No.	Element	Action	What happens?	Tested	Results	Pass/ Fail	Corrected
1	Holistic Outlook for Psychological Evaluation	Heading	Displays software name	Yes	Functioning	Pass	
2	Age	Text	Displays disorder detection question	Yes	Functioning	Pass	
3	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
4	Gender	Text	Displays disorder detection question	Yes	Functioning	Pass	
5	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
6	Course	Text	Displays disorder detection question	Yes	Functioning	Pass	
7	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
8	Year of Study	Text	Displays disorder detection question	Yes	Functioning	Pass	
9	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
10	GPA	Text	Displays disorder detection question	Yes	Functioning	Pass	
11	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
12	Marital Status (y/n)	Text	Displays disorder detection question	Yes	Functioning	Pass	
13	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
14	Specialist Treatment (y/n)	Text	Displays disorder detection question	Yes	Functioning	Pass	
15	Enter field.	Input	Takes user's input	Yes	Functioning	Pass	
16	Predict disorder	Click	When clicked, gives below results	Yes	Functioning	Pass	
17	Diagnosis	Text	Displays diagnosis	Yes	Functioning	Pass	

Thank You!

For any questions, concerns or suggestions on the App, please reach out to Karthikeyan Vinod at karthikvinod237@gmail.com