Programme	Batch	2021 - 2025	Project:	Multimodal AI Framework for Social Media Based Mental Disorder Detection and Personalized Wellbeing Insights
B.Tech CSE	Group	29	Names:	Soumyadeep Nandy, Prithwish Sarkar, Sagnik Mukhopadhyay, Arkapratim Ghosh

						Attendance (Insert below names)			
Date	**Project discussions**	**Semester**	**Deliverable**	**Issues**	**Guide's remark**	Soumyadeep Nandy	Prithwish Sarkar	Sagnik Mukhopadhyay	Arkapratim Ghosh
3-Jul-2024	Topic Discussion	7			Study relevant papers	Present	Present	Present	Present
17-Jul-2024	Additions to Project Rough Diagram 1	7		Classifying whether text is positve or negative	Using CNN	Present	Present	Present	Present
29-Jul-2024	Finalizing Project Rough Diagram 2	7		Data extraction from social media	Web Scraping and sample code	Present	Present	Present	Present
24-Aug-2024	Synopsis Discussion	7			Make the required changes	Present	Present	Present	Present
09-Sep-2024	Dataset and it's content	7		Extensive Dataset Required (Reddit + Twitter)	Using Reddit API and Kaggle datasets	Present	Present	Present	Present
28-Sep-2024	Mid-term Deliverables	7		What to include in the project report	Using Latex all sections should be filled and analysis results till date should be inserted	Present	Present	Present	Present
25-Oct-2024	Project Presentation and Prototype	7		What changes need to be made in PPT and Final Deployment	Seperate data collection for each class, XGBoost, improve interface	Present	Present	Present	Present
14-Nov-2024	Modified Prototype Presentation	7		Can audio mood be analyzed for videos with no speech or text	Define a set of parameters for mapping mental issue to mental wellbeing	Present	Present	Present	Present
15-Dec-2024	Additions made to the existing project after previous meet	7			Provide a brief writeup of all the added features and what all can be added in the next semester	Present	Present	Present	Present
13-Jan-2025	Review PRD	7		ML Model workflow diagram	Give diagrams for the workflow of the web application instead of code	Present	Present	Present	Present
16-Jan-2025	Prototype demo and PRD review	7			Make the required changes	Present	Present	Present	Present
29-Jan-2025	Next steps for the project	8			Add features and reduce PRD	Present	Present	Present	Present
15-Mar-2025	Review of Mid Term Deliverables for Semester 8	8			OK	Present	Present	Present	Present
21-Mar-2025	Full demo of the system	8			OK	Present	Present	Present	Present
Overall						**100%**	**100%**	**100%**	**100%**

Guide's signature:

(When maintained on hard-copy)

Area	Question	Raised By	Status (Open / Closed)	Response	Response By
Topic Discussion	What classification model should be used for text?	Team	Closed	Using various algorithms like Naive Bayes, Random forest for a comparative study	Project Mentor
Additions to Rough Diagram 1	What features should we extract from text data?	Team	Closed	Plan to use sentiment, keywords, and emotions. TF-IDF will be Helpful	Project Mentor
Rough Diagram 2 Finalization	What tools will be used for web scraping?	Team	Closed	Using Reddit API and sample Web scraping code	Project Mentor
Synopsis Discussion	How detailed should the project synopsis be?	Team	Closed	Synopsis should include a short Project overview	Project Mentor
Mid-term Deliverables	What format should the report follow?	Team	Closed	Use LaTeX and include all Analysis and results	Project Mentor
Presentation and Prototype	What changes need to be made in PPT?	Team	Closed	Implement different input types, Improve interface	Project Mentor
Video Analysis	Can audio be mood be analyzed if there is no speech or text in the video ?	Project Mentor	Closed	Using Frequency Analysis for preliminary classification. Using librosa module and MFCC	Team
Mapping mental issue to Mental wellbeing	Are there specific parameters for mapping mental issue to Mental wellbeing ?	Project Mentor	Closed	Changing the prompt for using Gemini API by adding Ryff's Scale of Psychological Wellbeing	Team
Detect facial emotions	How to detect facial expressions ?	Team	Closed	Using Deepface module of Python	Team
Image Description	Can situation depicted by an image be described ?	Team	Closed	Using Transformers (vit-gpt2 model)	Team
Model Retraining	Is only a single dataset considered the mother dataset all throughout the application ?	Project Mentor	Closed	No, model retraining is allowed if the user selects the option to analyze and retrain the model using the input	Team
Video Posts	Are videos from social media posts used ?	Project Mentor	Closed	Yes, video from twitter is extracted. Video and audio from reddit posts are extracted and combined to display in the website	Team
Visualization	Does a user get plain text result ?	Project Mentor	Closed	Graphs for emotion analysis, individual posts, overall probablities for each class after mental issue classification added	Team
Model Usage	Does the website implements single or multiple model ?	Project Mentor	Closed	Multiple models are used to create ensemble model and implemented in the website	Team
Dataset Size and Scalability	What observations were made regarding varying dataset size while model creation ?	Project Mentor	Closed	Accuracy varies. To keep the accuracy within acceptable variations, explored distributed architecture through sequential steps to show how bigger datasets can be divided into subsets, create models for those subsets, create ensemble model for each subset and finally combine them to have one final ensemble model	Team
Parameterized Association	How to associate between the mental wellbeing parameters and the issue probabilities ?	Project Mentor	Closed	Use Ryff Scale question set or any other parameters to associate with the issue parameters, create a heat map, get the cell with the highest value. With respect to the row and column value for the selected cell improve the gemini prompt	Team
PDF Analysis	Analyse typed or handwritten pdf text	Project Mentor	Closed	User uploads a typed or handwritten pdf. Extract text from there and analyse it	Team
Dynamic Input	Describing a auto generated image	Project Mentor	Closed	A random image is shown to the user, user describes it, the description is used for the mental issue prediction	Team
Wellbeing Insights	More specific insights	Team	Closed	Using Retrieval Augmented Generation	Team
Update PRD	Codes and final semester format	Project Mentor	Closed	Replacing codes with all in one / reduced number of algorithms	Team