🧠 AI for Early Mental Health Detection Hackathon

📘 Evaluation Metrics and Deliverables

📊 Evaluation Metrics

Criteria	Description	Weightage (%)
Innovation	Originality of approach, creativity in integrating multi-modal data (text, audio, vision), and novelty in AI/ML pipeline or dashboard design.	20
Accuracy & Robustness	Performance of the AI model (precision, recall, F1-score, ROC-AUC, etc.) and consistency across datasets and noise conditions.	25
Ethical Design	Adherence to privacy and consent principles, fairness, bias mitigation, explainability, and data anonymization practices.	20
User Experience (UX/UI)	Simplicity, intuitiveness, and accessibility of the dashboard or app; visualization clarity of emotional trends.	15
Social Impact	Real-world applicability, usefulness in supporting mental health awareness or early detection, and potential community reach.	10
Documentation & Presentation	Quality of technical documentation, clarity of explanations, and effectiveness of presentation/demo materials.	10

📦 Expected Deliverables

Deliverable	Details	Format / Platform
AI Model / Prototype	Functional model performing emotion, sentiment, or tone analysis (text/audio/visual).	Jupyter / FastAPI / React
Technical Documentation	Dataset, preprocessing, model architecture, training pipeline, evaluation results, and ethical considerations.	PDF / Markdown
Dashboard / App Interface	Interactive visualization of emotional trends, stress levels, or user well-being summaries.	Web / Mobile Prototype
Explainability Feature (Optional)	Highlight keywords, frames, or segments influencing predictions (XAI component).	Integrated / Report
GitHub Repository	Organized project repo containing code, README.md, dataset links, and documentation.	GitHub Link
Presentation Slides	Concise pitch deck summarizing problem, approach, results, and impact.	PDF / PPT
Ethical Statement	Section describing user privacy, consent, and data handling practices.	Part of Report

📁 Suggested Folder Structure (for GitHub Repo)

```
AI-MentalHealth-Detection/
│
├── data/
│   ├── sample_data.csv
│   └── audio_samples/
│
├── notebooks/
│   └── model_training.ipynb
│
```

```
├── src/
│   ├── text_analysis.py
│   ├── audio_analysis.py
│   ├── vision_analysis.py
│   └── dashboard_app/
│
├── docs/
│   ├── Technical_Report.pdf
│   ├── Ethical_Statement.pdf
│   └── Presentation_Slides.pdf
│
├── README.md
└── requirements.txt
```

🎬 Final Submission Checklist

✅ GitHub Repository with clear README.md

✅ Documentation (Technical Report + Ethical Statement)

✅ Working Demo (Dashboard / Web App)

✅ YouTube Demo Video (3–5 mins)

✅ Presentation Slides (Pitch Deck)

✅ Optional: Explainability & Recommendation Features

Prepared for: AI for Early Mental Health Detection Hackathon

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