



AN OVERVIEW ON: AI MEETING INTELLIGENCE A MEETING ANALYZER APP

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Abstract: We wish to express our heartfelt gratitude to all the people who have played a crucial role in the research for this project; without their active cooperation, the preparation of this project could not have been completed within the specified time limit. We are thankful to our respected Guide, **Prof. Atul Akotkar**, who supported us throughout this project with utmost cooperation and patience. Thank you for guiding us through the complex integration of AI models and for motivating us to complete this project with complete focus and attention. We are also thankful to the Head of Department, **Prof. Atul Akotkar**, and Principal, **Prof. Rasik Upadhye**. It is their kind help and support that have made our study and life a wonderful time. Finally,

I. INTRODUCTION

In today's fast-paced professional environment, meetings play a crucial role in decision-making, collaboration, and communication. However, manually tracking meeting discussions, action items, and decisions is time-consuming and prone to human error. To address this challenge, the proposed system titled "Meeting Intelligence System" is designed to automate meeting analysis using Artificial Intelligence. In the following sections of this paper, we will delve into the technical details of our proposed AI-driven approach to deepfake detection and prevention. We will explore the various machine learning algorithms, in addition to transcripts, the platform provides useful analytical support for better analytical mapping and collaboration. Users can easily export reports in PDF format for recovery and keeping and sharing by reducing manual work, the system saves time, improves clarity and strengthens team communication.

II. METHODOLOGY

In this phase, the functional and non-functional requirements of the system are identified through the research, literature survey, and user needs. This phase ensures a clear understanding of system goals and target users such as professional students, and organizations.

1) Data Collection:

Meeting data is collected in the form of audio recordings from various sources such as online meetings, lectures, discussions, and interviews. The dataset may include single-speaker and multi-speaker conversations to train and evaluate the system effectively.

2) Preprocessing:

The collected audio data is preprocessed to improve quality and compatibility with the system. This includes noise reduction, audio normalization, and format conversion. The audio is segmented into smaller chunks to ensure efficient processing.

3) Speech to text generation :

The preprocessed audio is passed through a speech recognition model (such as Whisper or any ASR system) to convert spoken language into text. This module generates a detailed transcript of the meeting, capturing all spoken

4) Speaker Diarization:



To identify multiple speakers in a meeting, speaker diarization techniques are applied. This process labels different segments of the transcript with corresponding speaker identities (e.g., Speaker 1, Speaker 2). It helps in understanding conversation flow and improves readability of meeting transcripts.

5) Application Development:

The generated transcript is processed using Natural Language Processing (NLP) techniques to create a concise summary of the meeting. The system extracts key points, highlights important discussions, and reduces redundant information.

6) Testing and Validation:

The system is evaluated using different audio samples to measure performance. Key evaluation metrics include:

III. FLOWCHART

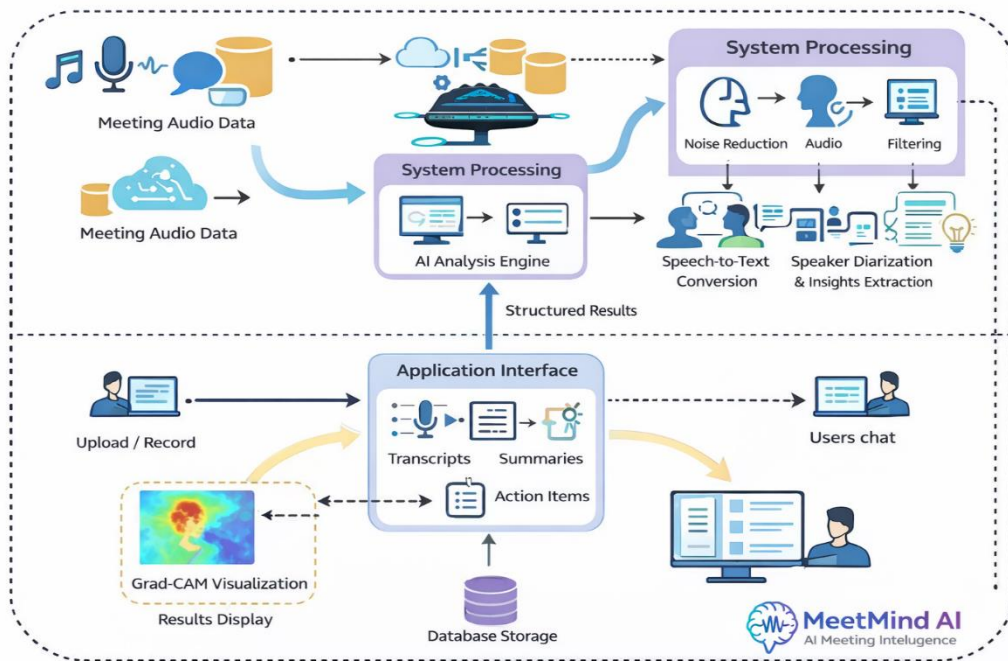


Fig.1: Flow of AI FakeBuster App

IV. RESULTS AND DISCUSSION

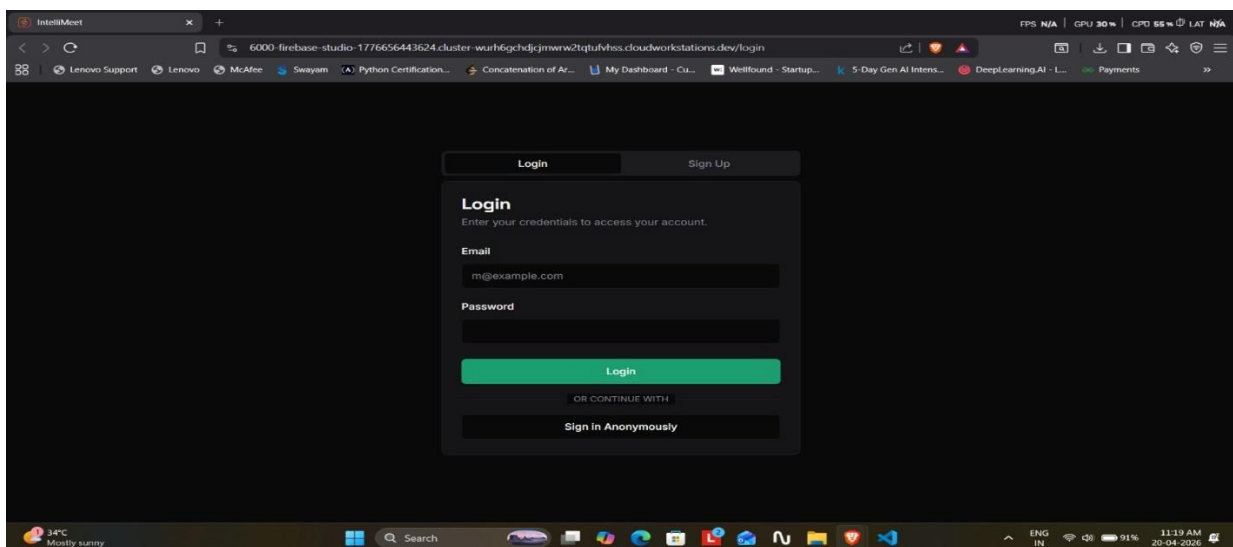


Fig.2: AI Meeting Intelligence Login Page



Discussion: It is the homepage of the project from where we can navigate to other pages of the website i.e., image, video, module etc.

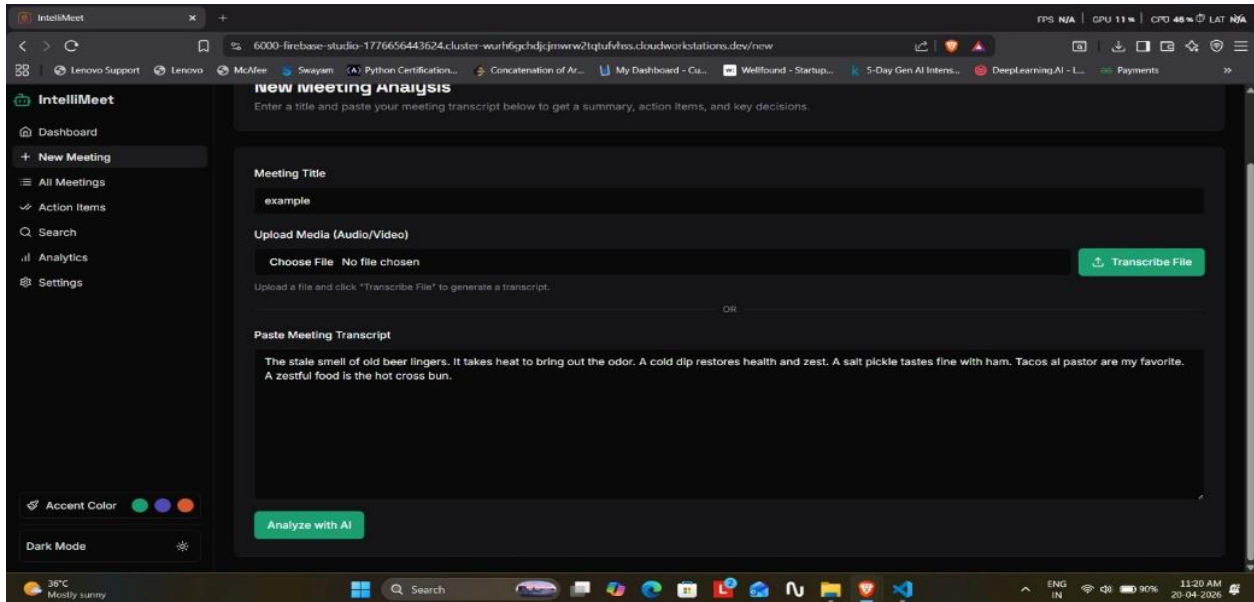


Fig.3: Browse Audio/Video

Discussion: Browse Image/Video is the step where can Select Image and Video for Analysis.

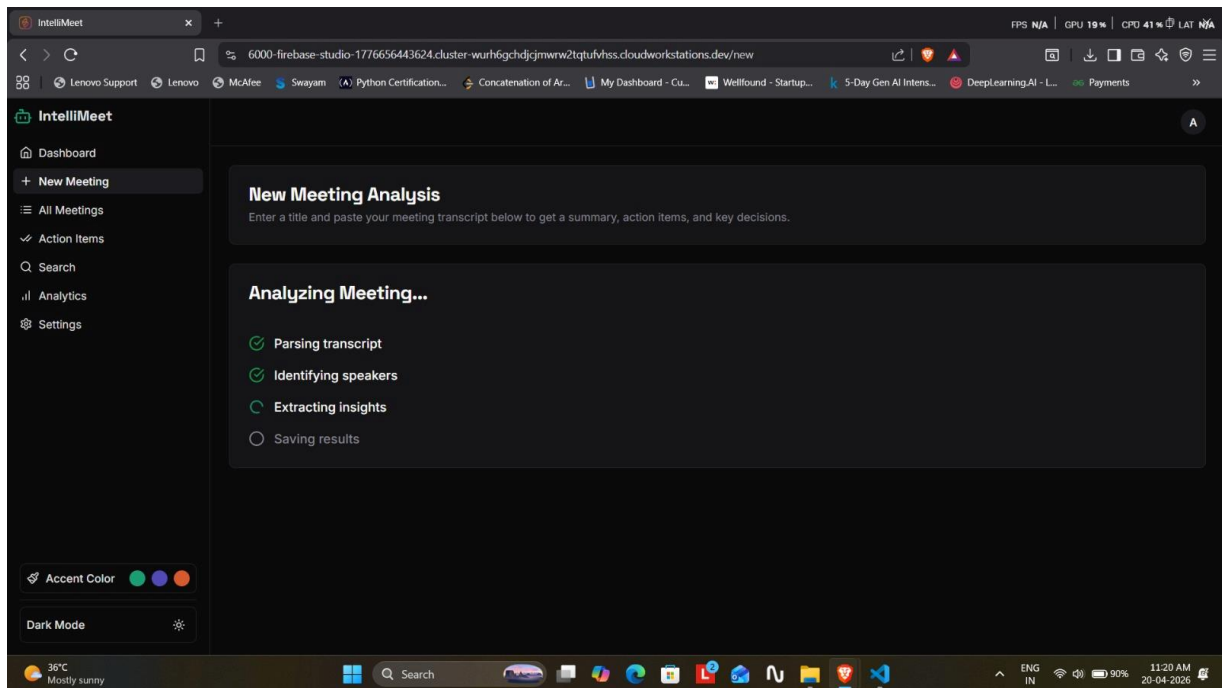


Fig.4: Text Generation

Discussion: Here can select the required Models for the analysis of Image/Video.

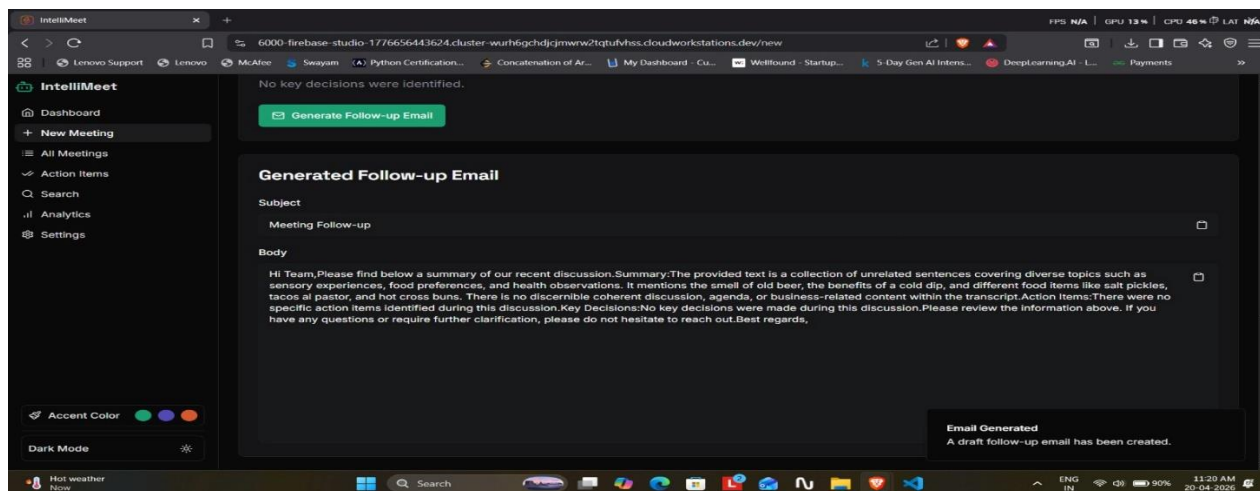


Fig.5: Check for result

Discussion: Here the Output of Image/Video given as Real or Fake with Probability.

V. CONCLUSION

The **Meeting Intelligence System** presents an effective and innovative solution for transforming traditional meeting processes into a smart, AI-driven digital workflow. By integrating technologies such as speech recognition, natural language processing, and automated summarization, the system successfully converts raw audio conversations into structured and meaningful insights. This significantly reduces manual effort, improves accuracy, and enhances productivity in both academic and professional environments.

Throughout the development of the system, it has been demonstrated that artificial intelligence can play a crucial role in simplifying complex communication processes. The system not only generates accurate transcripts but also extracts key information such as summaries, decisions, and action items, enabling users to quickly understand the outcomes of meetings. This helps in better decision-making and efficient time management.

In conclusion, the project successfully achieves its objectives and demonstrates how AI-powered systems can enhance communication, collaboration, and productivity. It serves as a strong foundation for future advancements in intelligent meeting analysis and automation technologies.

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