Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation: RCCIIT

PS Code:SBHRCCIIT007

Problem Statement Title: Automatic Presentation Evaluation

Team Name: Victor

Team Leader Name: Jyotiraditya Roy

Institute Code (AISHE): C-6202

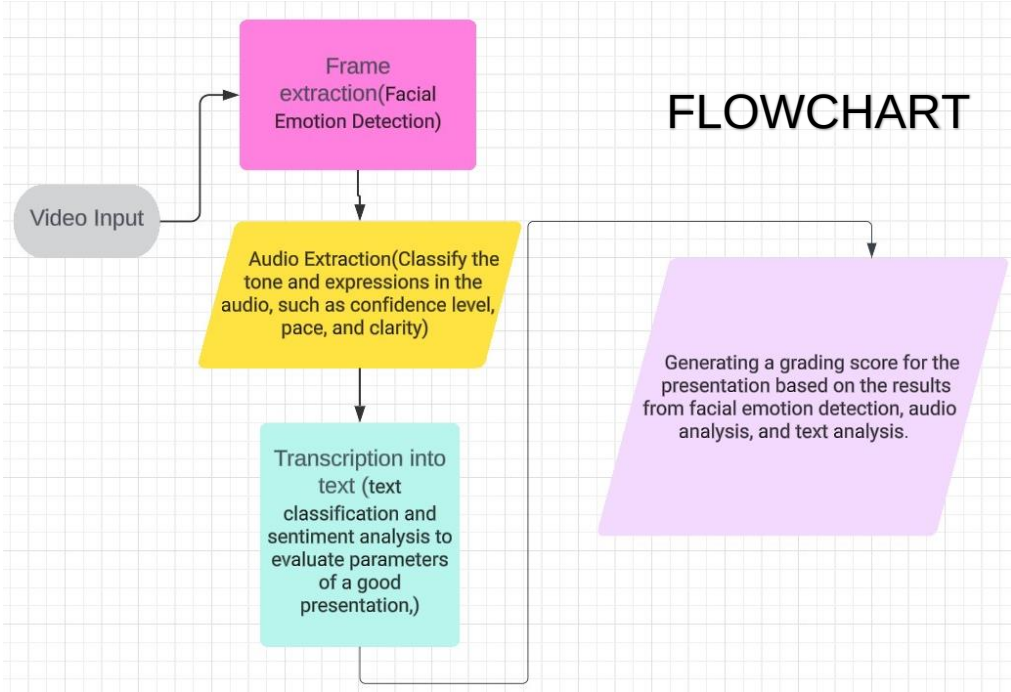
Institute Name: Heritage Institute Of Technology

Theme Name: Smart Education

Idea/Approach Details

Proposed idea/Solution:

The Presentation Evaluation Assistant provides an advanced video processing solution tailored for evaluating student presentations. Leveraging sophisticated algorithms encompassing face detection, text and audio classification, and emotion recognition, the application furnishes comprehensive insights into presenters' confidence levels, facial expressions, and overall presentation proficiency. Such thorough analysis serves to equip educators and students with valuable tools for refining their communication skills and delivering compelling presentations with greater impact.



Technology stack:

- Hugging Face pipelines(text and video classification)
- Assembly AI LeMUR framework(Audio processing)
- FastAPI(API development)
- NextJS,Tailwind(front end)
- Git(version control)

Idea/Approach Details

Use Cases

- Education: The application can be used in educational settings to evaluate student presentations. It provides valuable feedback on the presenter's confidence, expression, and overall performance, helping educators guide students towards improvement.
- Professional Development: The application can be utilized in professional development programs to assess presentation skills. It offers insights into factors such as facial expressions, text and audio quality, and emotional engagement, enabling individuals to enhance their communication abilities in various professional contexts.
- Public Speaking Training: Public speaking workshops can leverage the application to evaluate participants' presentation skills. By analyzing confidence, expression, and emotion, the solution provides valuable feedback for individuals to develop effective public speaking techniques and deliver impactful presentations.

Dependencies

- Lack of Sufficient Compute Resources and Memory: The limited availability of compute resources and memory constraints may hinder the ability to train custom models, impacting the application's performance and capabilities.
- Language Support Limitations: If the application lacks assistance for many languages, it may limit its usability and effectiveness in diverse linguistic contexts, potentially excluding a significant user base.
- Dependency on Third-Party APIs and Services: Relying on external APIs and services, such as Hugging Face and Assembly AI, introduces a dependency on their availability, reliability, and continued support. Any disruptions or changes to these services could impact the functionality of the application.

Team Member Details

Team Leader Name: Jyotiraditya Roy

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Member 1 Name: Aditya Datta

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Member 2 Name: Adhrit Bhowmick

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Member 3 Name: Rohit Choudhury

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Member 4 Name: Aniket Jasu

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Member 5Name: Anuradha Nair

Branch (Btech/Mtech/PhD etc):Btech | Stream (ECE, CSE etc): CSE-AIML | Year (I,II,III,IV): III

Team Mentor 1 Name: Dr. Sujay Saha

Category (Academic/Industry): Academic | Expertise (AI/ML/Blockchain etc): AI/ML | Domain Experience : 17