

Project Plan Document

Team Number	Team 33
Project Title	Framework for Automated Student Assessment using NLP - Audio
Document	Software Requirements Specification Documents
Creation date	2023/02/16
Created By	Devisetti Sai Asrith, Geethika Thota, Sidhi Panda, P Pavan
Client	Arjun Rajasekar, RCTS

Brief problem statement

This application is for students to improve their skills by ongoing day-to-day assessment and being supervised by an experienced teacher. Doing this physically is time-consuming and is an administrative burden.

The current work proposes to automate the test-taking/grading process by using the audio of the student-teacher interactions during class, to perform this assessment. The work shall start with a limited set of known questions with clear answers in the form of multiple choices or True/False. Based on the progress of work, an exploration into the use of semantic matching for allowing rephrasing of the questions by the teacher may be carried out.

To summarise main features of this application are:

- Automate the student assessment based on the student-teacher interactions during class.
- Start with basic MCQs and True/False questions and further expand the work to long answer questions.

Team Members:

Team Member	Role on the project
Devisetti Sai Asrith	Developer, Tester
Thota Venkata Sai Lakshmi Geethika	Developer, Tester
Sidhi Sankalp Panda	Developer, Tester
P Pavan	Developer, Tester

Team Communication:

Regular in-person meets i.e, for 3 hours 2 times, and a 1.5-hour session between two client meets.

Development Environment:

Development tools	Application of this tool in the project
ASR Models	Conversion of speech-to-text
Python	Data base connectivity, gluing together different APIs.
Fast API	Quickly create web APIs that implement best practices by default.
React	Creates a user-friendly interface
Mongo	Store data regarding the correct answers

Milestone Schedule:

Milestone	Due Date	Release	Deliverable?
Project Concept	27th Jan 2023	R1	Yes
SRS Document	9th Feb 2023	R1	Yes
Project Plan	16th Feb 2023	R1	Yes
ASR Model Installation	10th Feb 2023	R1	Yes
Make the ASR model work	17th Feb 2023	R1	Yes

Future milestones were not set by the client yet.