College ID: 22IT121

Project Title: Speech-to-Phoneme Normalization with CMU Dictionary and TTS

WEEKLY REPORT

Work done in last week (Attach supporting Documents):

09/06/2025   Monday

9:30 – 11:30	Prepared final presentation slides, adding pipeline flow, UI snapshots, scoring algorithm, API details, and testing results.
12:00– 2:30	Finalized project directory structure, cleaned up files, and removed redundancy.
3:00– 5:00	Checked for bugs and fixed minor issues in the code.

10/06/2025 Tuesday

9:30 – 11:30	Tested application across different devices and browsers to validate functionality.
12:00– 2:30	Checked for cross-device recording, scoring, and history retrieval.
3:00– 5:00	Made small UI tweaks and improved error messages for a smoother user experience.

11/06/2025 Wednesday

9:30 – 11:30	Finalized project submission folder, including: • Source code • Report documents • Database backup • Installation instructions • Deployment link (PythonAnywhere) .
12:00– 2:30	Checked for completeness and proper naming of files and folders.
3:00– 5:00	Produced a project demonstration video (using OBS) to showcase all functionality in a clear walkthrough.

12/06/2025 Thursday

9:30 – 11:30	Presented the project to internal guides and professors.
12:00– 2:30	Received feedback and addressed questions about pipeline, scoring algorithm, and future applications.
3:00– 5:00	Made final tweaks based on feedback and polished UI messages.

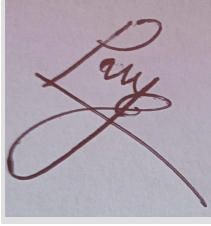13/06/2025 Friday

9:30 – 11:30	Presented the project to internal guides and professors.Demonstrated all main functionality and explained coding choices and pipeline.
12:00– 2:30	Conducted a feedback session with professors and friends, noting their suggestions for future improvements and additional features.
3:00– 5:00	Prepared a project summary and reflection report, reflecting on what I learned during this project and how I can apply these skills to future ML applications.

Reason for incomplete work:

1. N/A

References:

1. Speech-to-Text: SpeechRecognition, Google API

2. Text-to-Speech: pyttsx3

3. Phoneme Dictionary: NLTK cmudict

4. Audio: Sounddevice

5. Deployment: PythonAnywhere, WebRTC

6. UI: Flask, HTML, CSS, JavaScript

7. Database: SQLite (Flask-SQLAlchemy)

Signature of External Guide

Signature of Internal Guide

Student Id: 22IT121
Student Name: VYOM MUKESHKUMAR PATEL