Python Note-taking AI

2000 Hours to automate

Goal is to develop and train an AI tool that transcribes and summarizes lectures for later review.
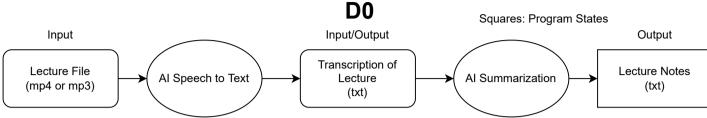
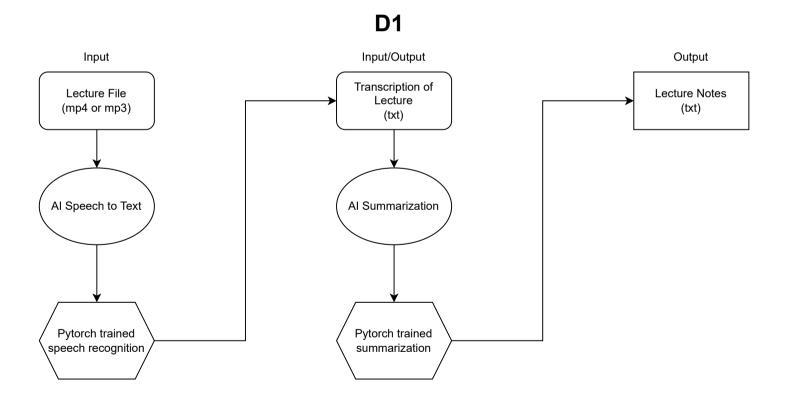# Key

Rectangles with round edges: Inputs

Rectangles: Outputs

Circles: Tasks

Hexagons: Implementations

Squares: Program States

D0

Input

Lecture File
(mp4 or mp3)

→ AI Speech to Text →

Input/Output

Transcription of
Lecture
(txt)

→ AI Summarization →

Output

Lecture Notes
(txt)

D1

Input

Lecture File
(mp4 or mp3)

↓

AI Speech to Text

↓

Pytorch trained
speech recognition

Input/Output

Transcription of
Lecture
(txt)

↓

AI Summarization

↓

Pytorch trained
summarization

Output

Lecture Notes
(txt)

D2

Transcription
Program
Start

Input/Output

Transcription of

Training Data
Lectures /w
corresponding
transcriptions
(mp4 or mp3 with txt)

Lecture
(txt)

Training Data
Lecture transcriptions
/w corresponding
summaries
(txt)

Audio Input Handling
through library such
as torchaudio

Pytorch training and
summarization

Lecture File
(mp4)

Lecture Notes
(txt)

Pytorch training and
transcription

Program End