

MIDTERM PRESENTATION

Taper

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TAPER

Installation

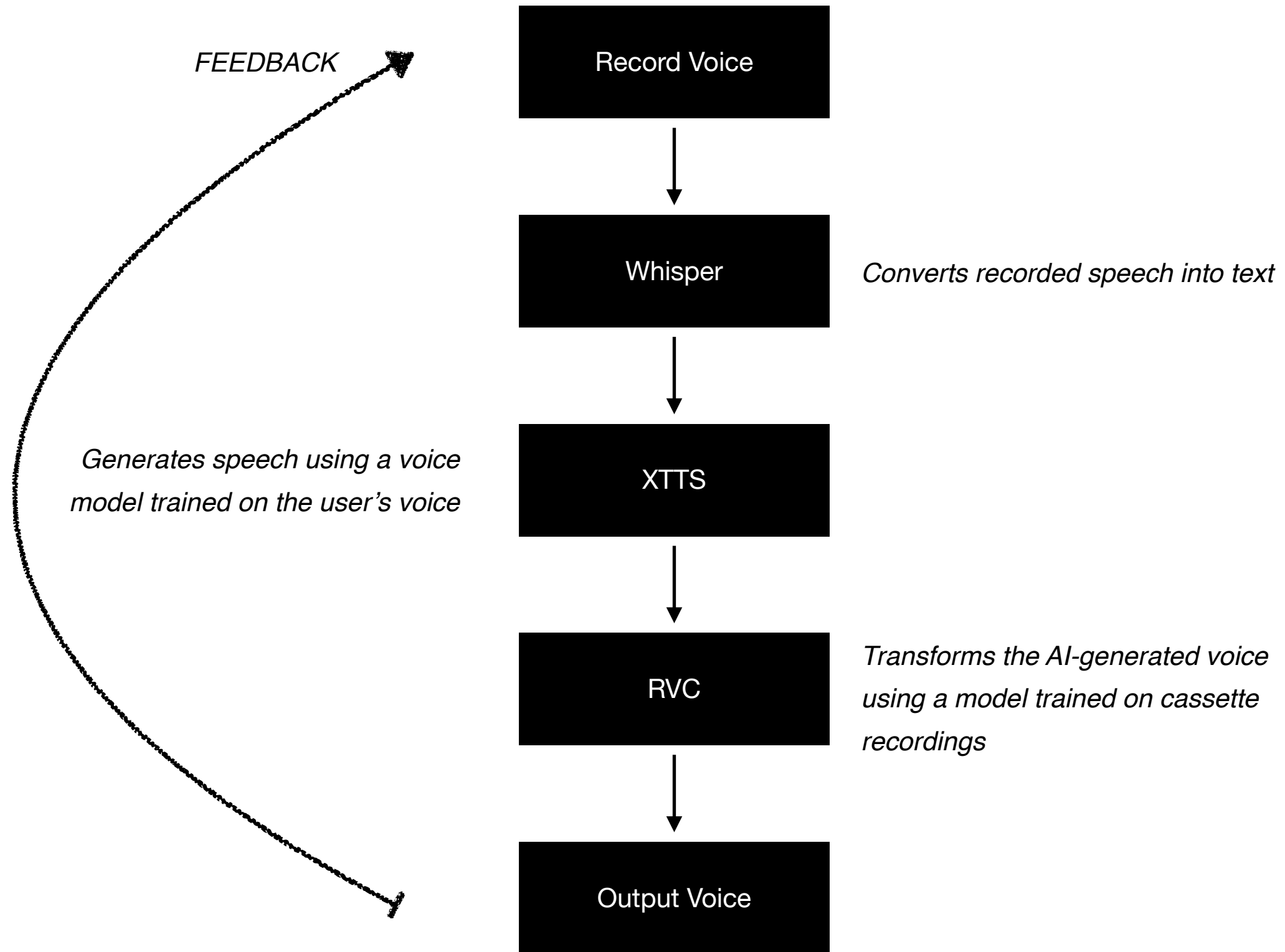
This installation explores audio recorded on an analog **cassette tape**.

The sound, combined with unstable noise, is analyzed using machine learning, and an **AI-generated voice is reconstructed** from it.

The generated voice is then recorded back onto a cassette tape, played again, and reintroduced into the learning process, creating a continuous **feedback loop** between analog media and AI.

Simultaneously, the model's learning process is **visualized** through extracted audio vector data. The visualization is created using Houdini, while a **PCB system** controls both the cassette tape and the AI-generated audio.

Through this feedback loop, the work explores whether machine learning can **imitate the aging and degradation of analog media, while revealing the limits of such imitation.**



Workflow

Korean

Cassette Voice Training Data (RVC)

English

Record Voice

Convert to Text

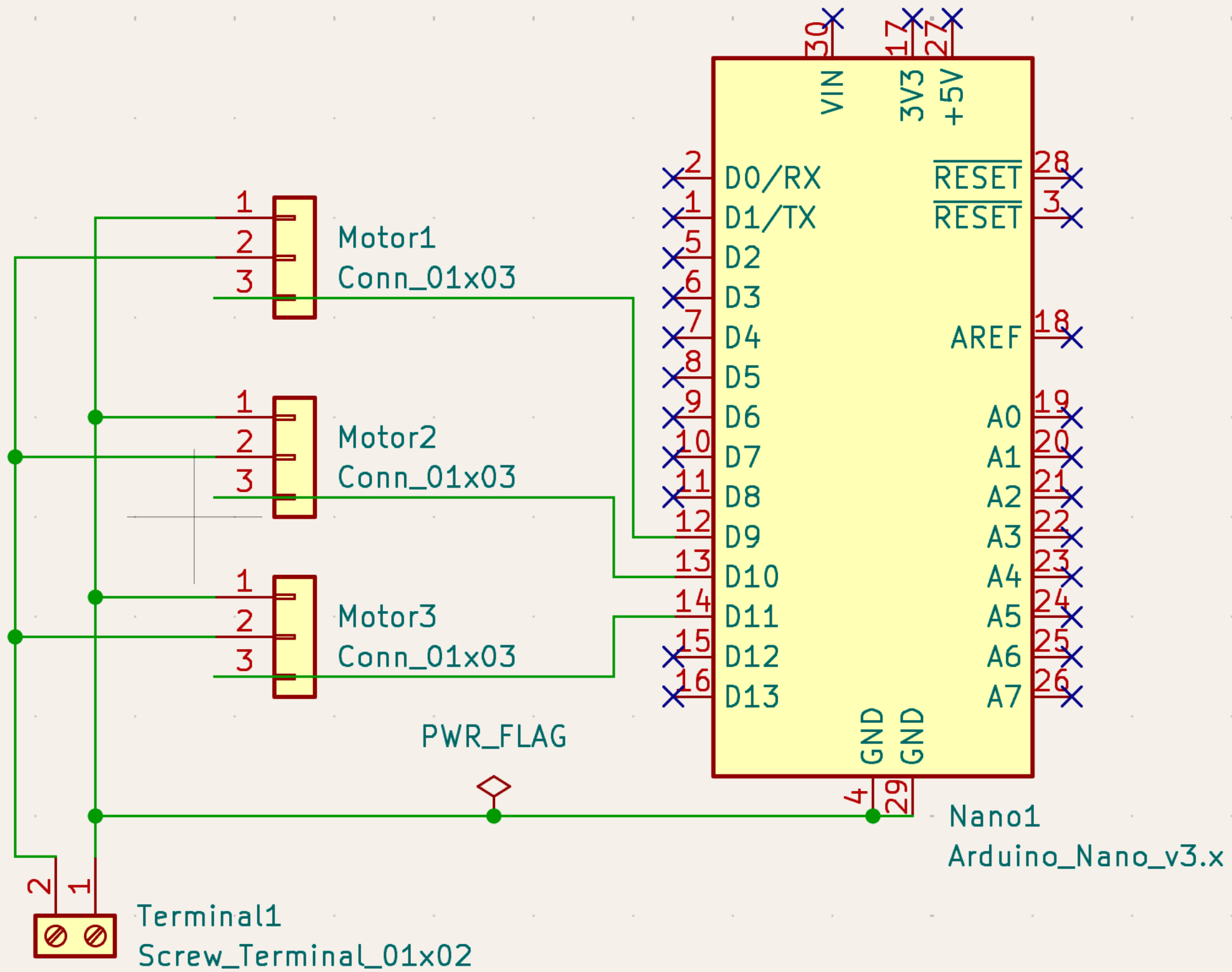
Whisper

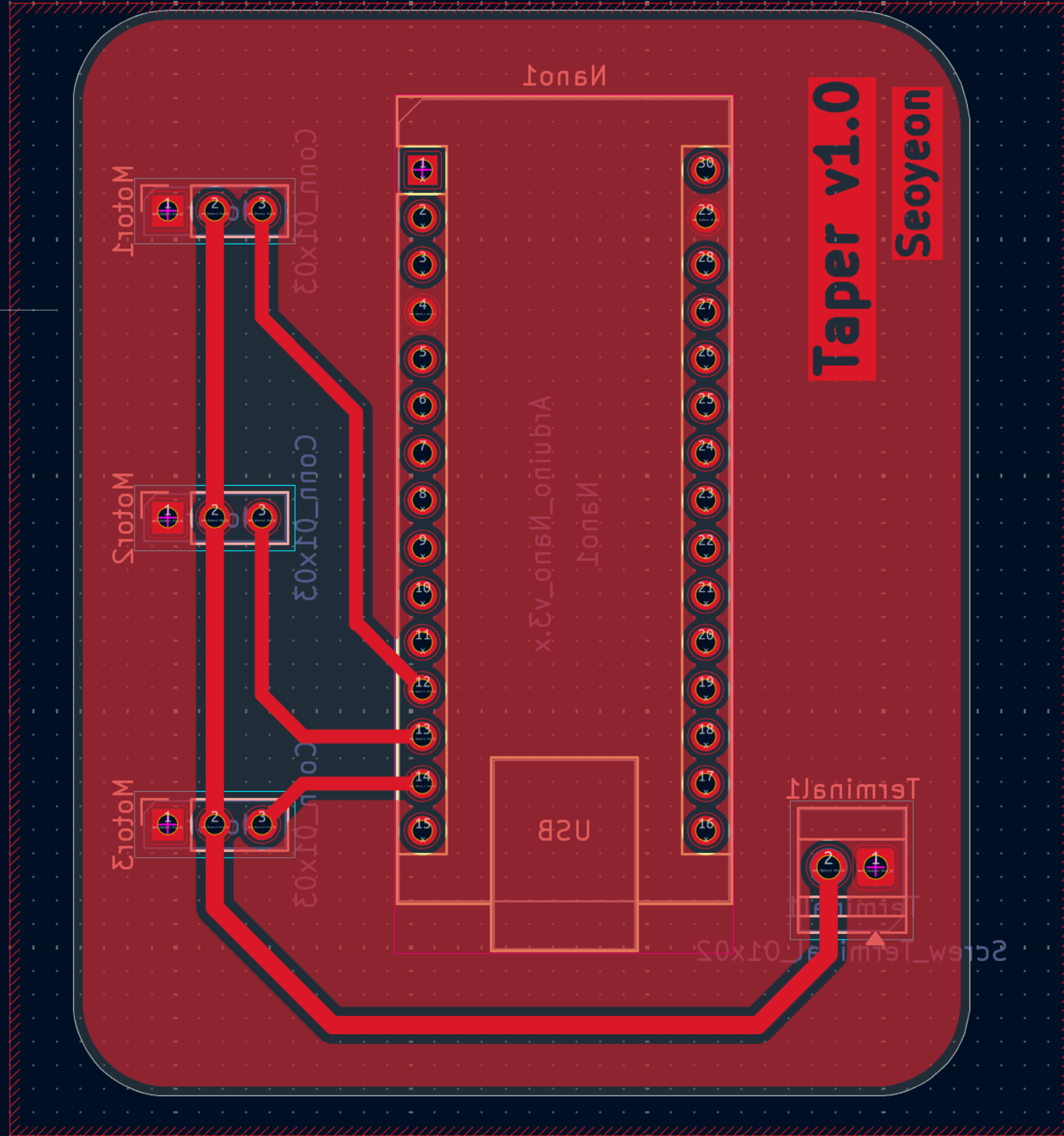
Convert to Text

XTTS

RVC

Generated Voice Files

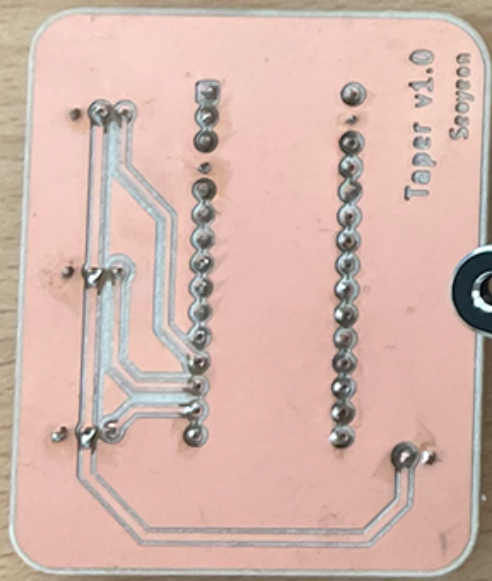




PCB Design

System Components

Arduino Nano



PCB



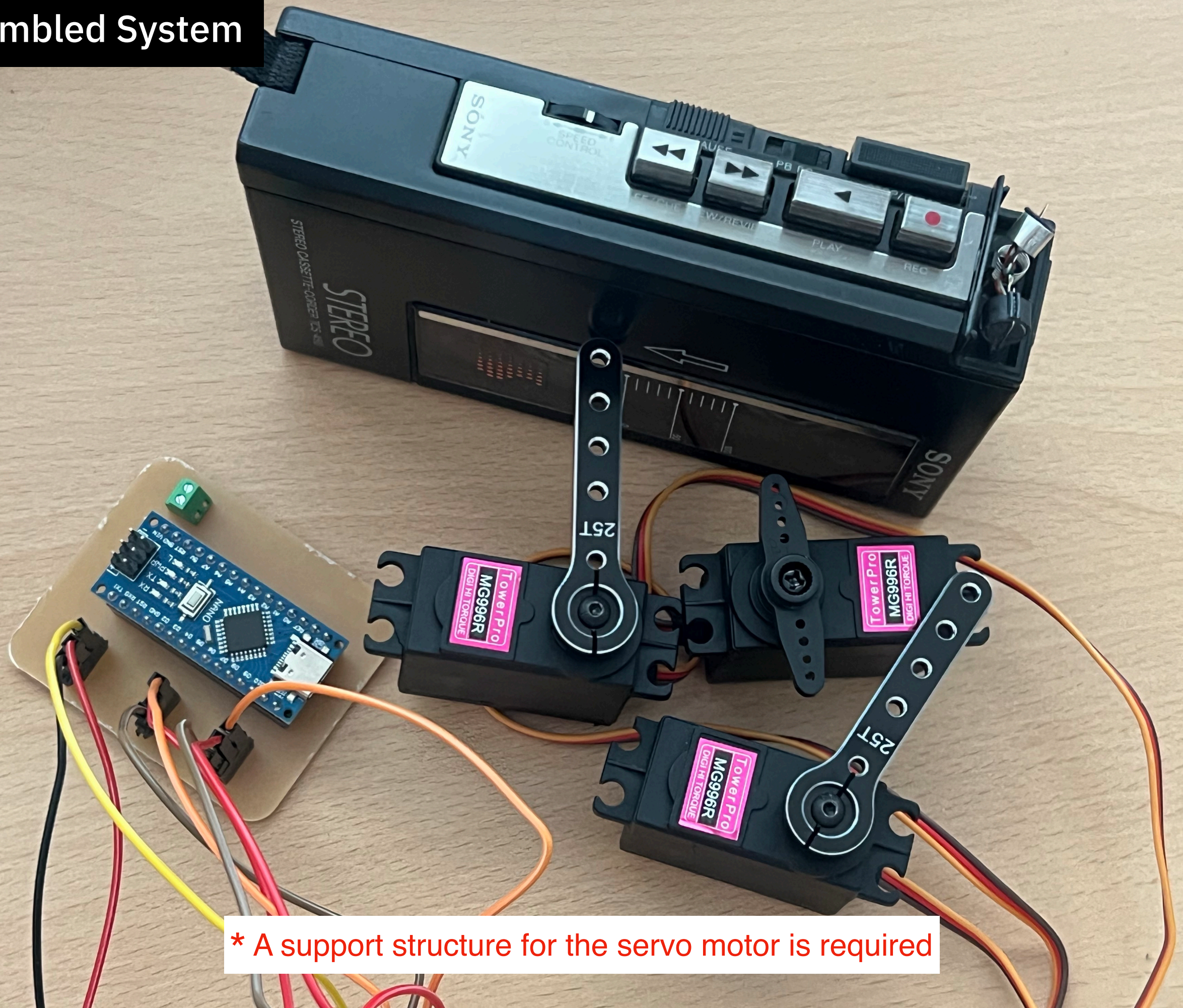
Servo Motor * 3

25T Servo Horn * 2

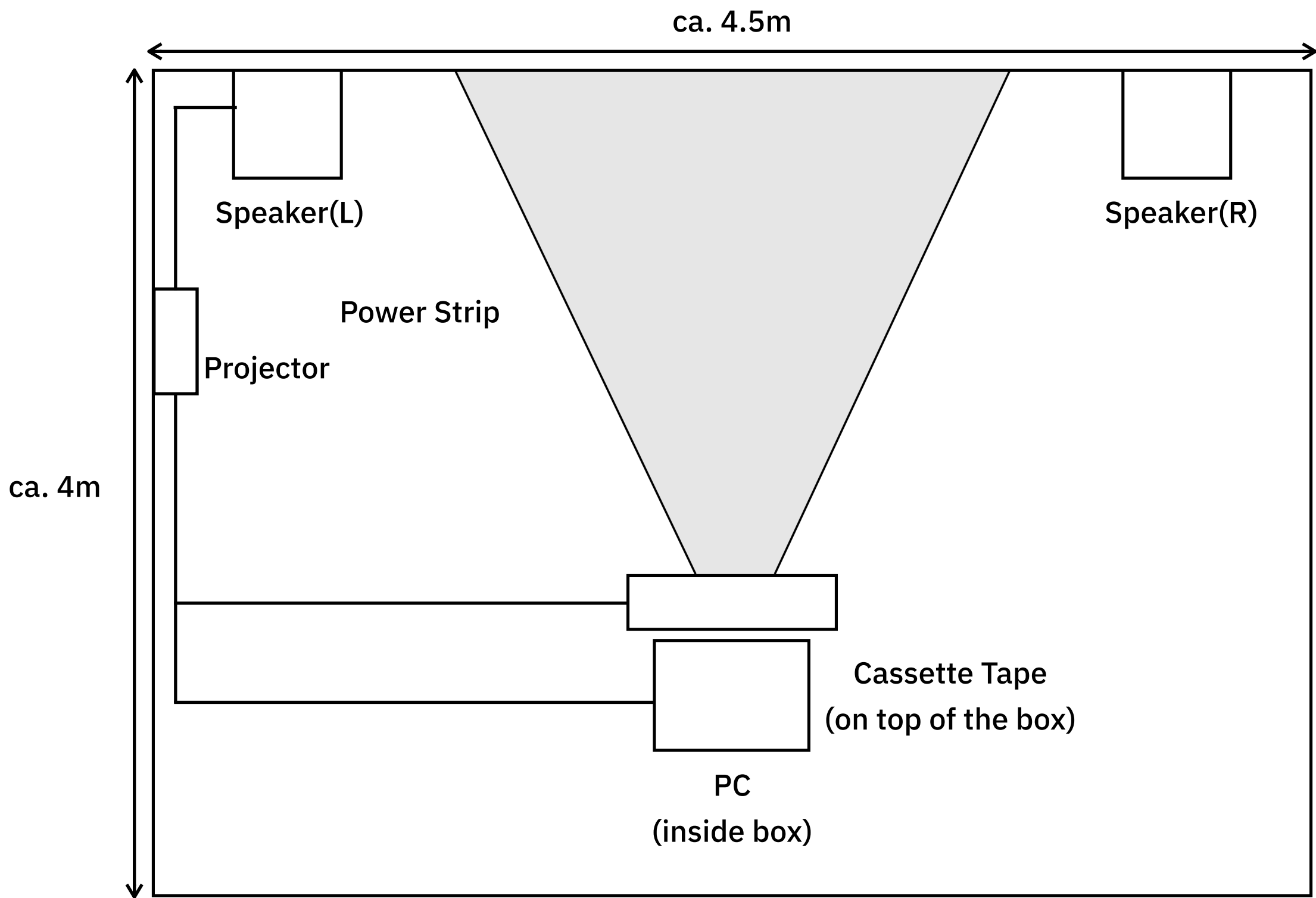


DC Power Supply (5V, 10A, 50W)

Assembled System



* A support structure for the servo motor is required



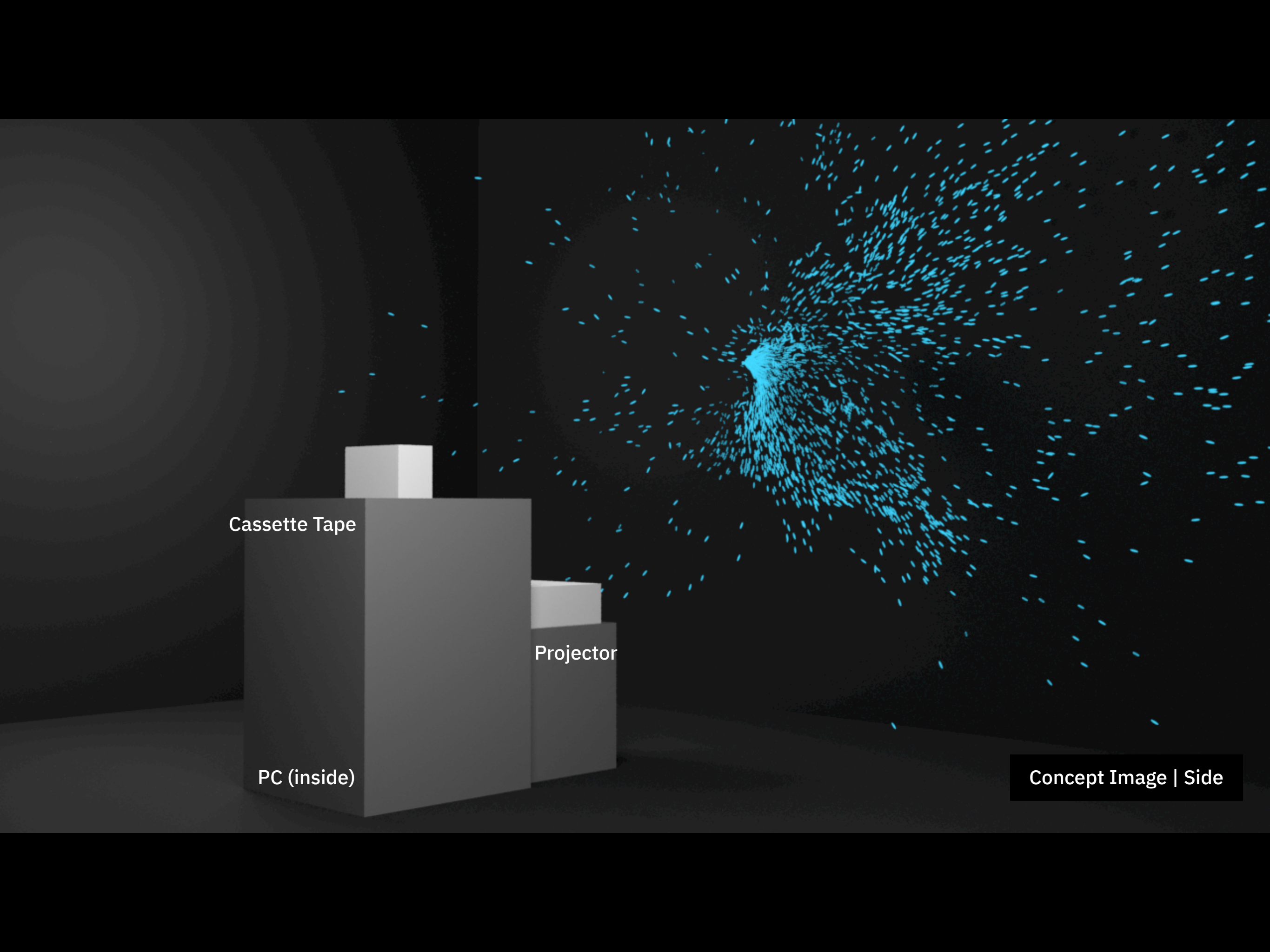
● Dark Environment Required

* If possible, the projector should be ceiling-mounted. Otherwise, it will be positioned as shown in the installation plan.

Installation Plan

Equipment List

Type	Model	Source	Qty.	Status
PC	Mac M2	own	1	O
Cassette Player	Sony	own	1	O
projecter	NEC PA500-U	Media Point	1	O
Speaker	Sony SMS1P	Media Point	1	O
Hollow Box	Color: white / W * D * H [1]: ca. 60*40*100 (cm) [2]: ca. 60*40*60(cm)	-	2	Required
Power Strip	min. 4 outlets / ca. 5m	-	1	Required

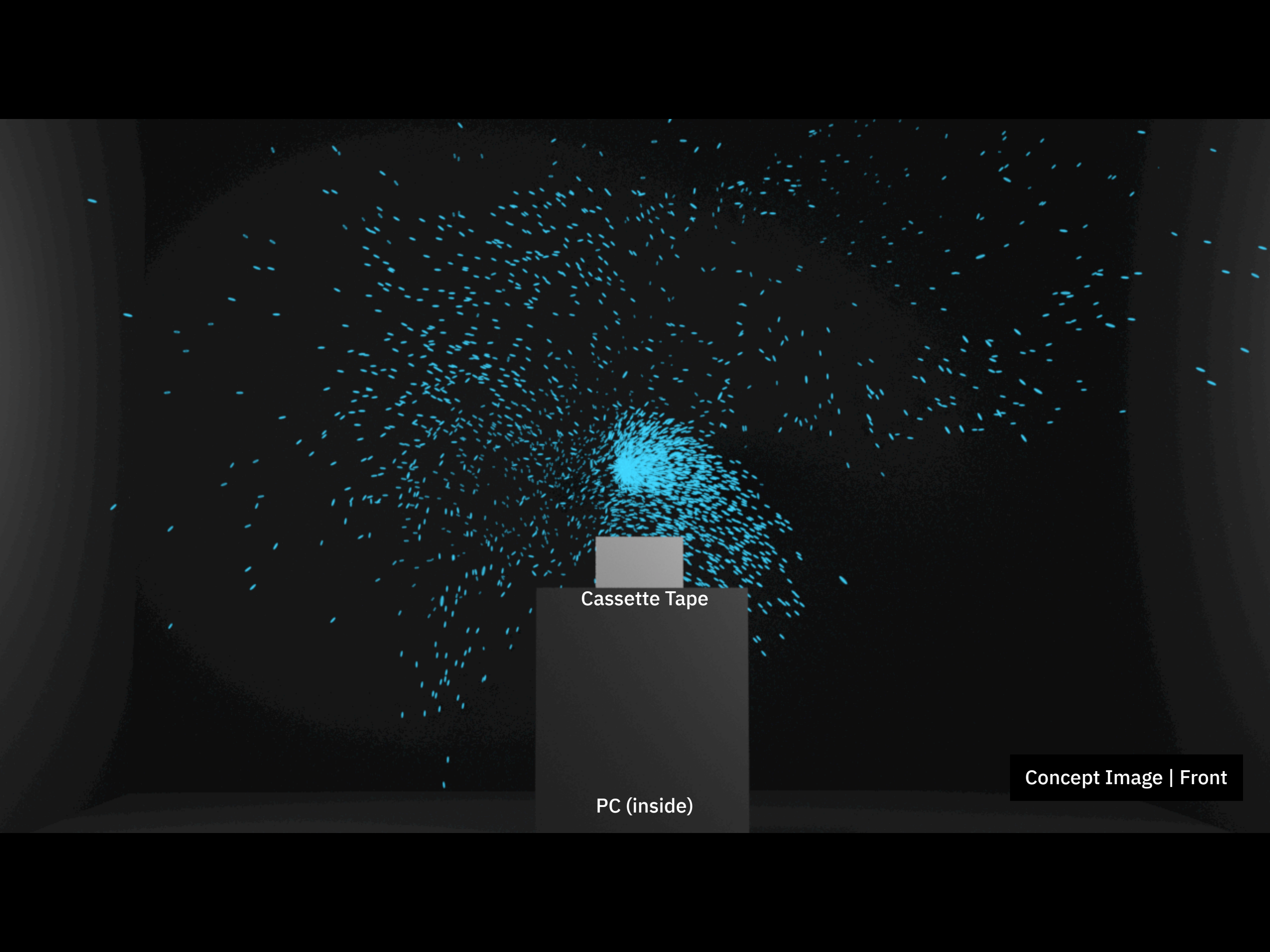


Cassette Tape

PC (inside)

Projector

Concept Image | Side



Cassette Tape

PC (inside)

Concept Image | Front

Control Cassette Tape via PCB

Visualize Voice Vectors

Setup

Create Audio Feedback Loop

Debug

Development Timeline