

Audio system for group and private lessons:

Idea:

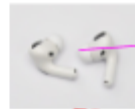
- Design, develop a distributed application for iPhone and AirPods for personal and group lessons with music and instruction
- Create virtual local network over both LTE and WiFi
- Create audio streaming and control service to all participants
- Two roles - a teacher(s) and student(s)
 - Each role uses personal AirPods (Pro) and iPhones

Use case - cardio tennis:

- Audio playback/broadcast:
 - Teacher broadcasts class' audio - spotify service - to all students
 - Students can choose to:
 - Listen/Mute the teachers' audio stream
 - Listen/Mute personal audio
 - Note: Can this be done hands free: e.g. "Hey spintip play spotify, my cardio playlist"
- Instruction:
 - The teacher can address the students individually or as a group:
 - Use NLP to decide whether the audio is a broadcast to the group or unicast to a specific student:
 - Broadcast to the group - NLP detects no key words, or names:
 - Automatically lower music volume for all participants when system detects instruction from the teacher:
 - Instruction goes to all students
 - Unicast to a student - NLP detects a keyword like the name of the student
 - Instruction goes only to that student - music volume reduced only on the stream toward that student.
 - Student's response:
 - Student's airpods can establish a connection to the coach but not amongst each other
 - Coach can hear all students, but students can't hear each other.

Provide instruction

- Coach can talk and students can hear
- Student's mic disabled, or inactive



Register AirPods

- One Master - for the coach
- Up to 10 slaves - students

Listen to music

- One spotify account
- Listen to playlist on all devices

