

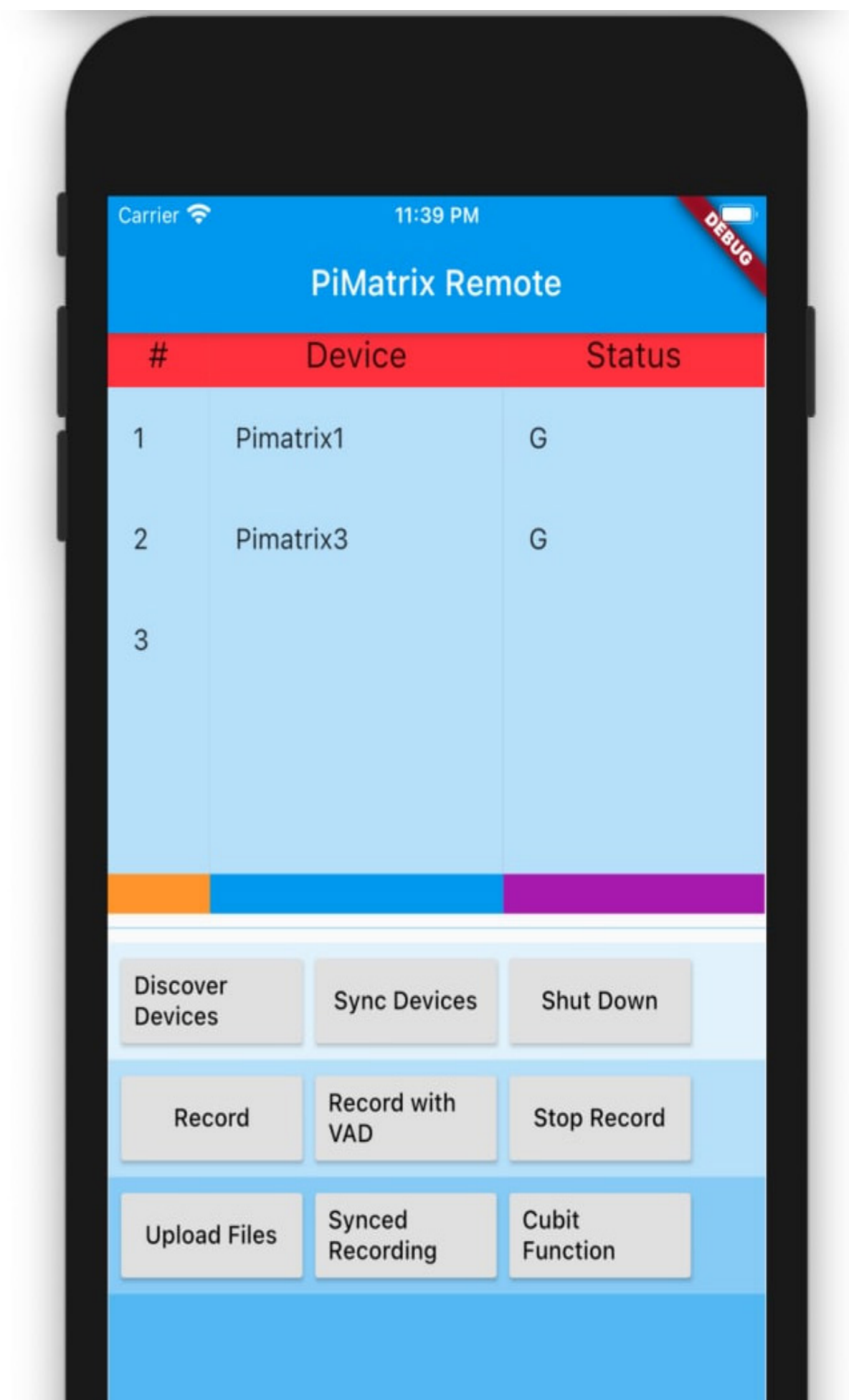
Multipurpose Microphone Array

Using Raspberry Pi and MATRIX Creator

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Mobile Application Interface



Project objectives:

This project aims to develop a microphone array system that is easy to deploy and customize to support further research and development in using microphone arrays for speech related applications. By using the hardware features of the MATRIX Creator and Raspberry Pi, the end goal of the project is to develop a product that has various speech processing features that can be enabled or disabled to fit a wide array of use cases such as a recorder for meetings and events.

System Features:

- Hot Word Activation
- Synchronized Multichannel Recording
- Mobile Application Controller
- Beamforming with DOA
- Voice Activity Detection
- Wireless Connection and File Upload

