Meetings are a crucial component of any business’s day-to-day operations. However, it’s undeniable that meetings are often inefficient, unengaging, and sometimes even wasteful. For example, it’s not uncommon for people in a meeting to not be acquainted with everyone else leading to confusion and miscommunication. This problem can be eliminated with the use of voice recognition to identify who’s speaking and displaying it in the video conferencing software. In addition, it’s difficult for workers that aren’t particularly tech-savvy to utilize all the different possible features of video-conferencing softwares. By using gesture control to interact with the software, any layperson would be able to leverage the features included in the software. In this way, our project will streamline meetings so that they’re as efficient and accessible as possible.

The goal of this project is to use new and advanced machine learning technologies to create a platform that will be able to make meetings more informative, efficient, and helpful by doing the following:

- Recognizing certain gestures and performing the associated actions (Ex: taking a snapshot of the screen when someone waves)
- Detecting who’s currently speaking by using voice recognition
- Detecting who’s in the meeting by using face detection
- Counting the number of people in the meeting
- Identifying specific objects in the meeting room
MILESTONES

The MVP for this project is going to be a web application that will analyze real-time video footage and provide dynamic data about the meeting.

Goals:
- A web interface
- Pass video/audio from webcam to server
- Decouple video and audio
- Create a data set to train the gestures on
- Object/Face/Gesture Detection
- Voice/Speaker Recognition
- Real Time Voice Transcription

- Stretch Goals:
  - Advanced Gesture recognition (chaining gestures together)
  - Integration with GoToMeeting
  - Voice commands

STRATEGY

To reach our milestones, we will implement and follow the following plan:
- Daily Scrum meetings
- Weekly on-site meetings with mentors at LogMeIn
- Online team collaboration using Discord
- Github version control
- Trello to track progress
- Demos at the end of each sprint

- To develop LogMyMotion, we will use a variety of the following:
  - **Platform Technologies**: Google Vision, Azure Face, Azure Speaker Recognition, Amazon Rekognition
  - **Machine Learning**: Google Datalab, Microsoft ML Studio, Amazon ML, TensorFlow, CNTK, SciKit, PyTorch, Python, Jupyter, Pandas
  - **Client**: Javascript/HTML, Tensorflow.js
  - **Server**: Node.js, Microservices