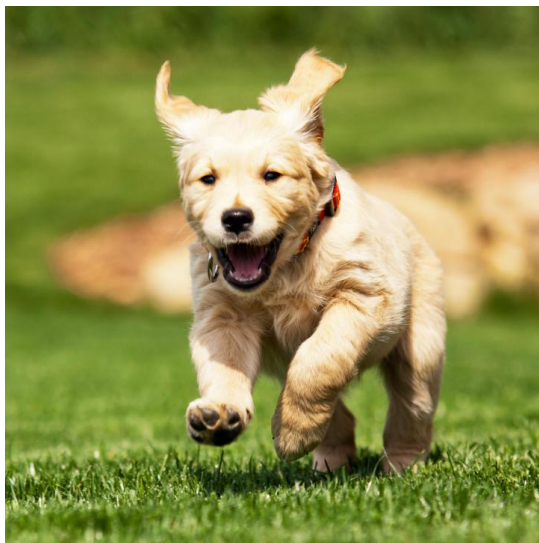# Presentalk

By Graham, Chanan, Drew, Ryan, and Kyle

Overview

- Web-based, voice-controlled presentations
- Allows upload of a PDF file of your presentation
- Gives mic access and uses voice commands to control the presentation

Voice Control

- Uses the Python SpeechRecognition library
    - Defaults to Google Speech Recognition API
    - Backup is IBM Watson Speech to Text
- Thanks to multithreading, microphone is always active in the background
- Commands require the trigger "slide" to avoid accidentally changing slides
- Can go forward, back, or to a specific slide number
- Examples:
    - "Go back a slide"
    - "Go to the next slide"
    - "Go to slide number 4"

More Advanced Functionality

- We implemented computer vision using the Google Cloud Vision API so that we can jump to slides with certain pictures on them. Remember the dog on the Overview slide? Let's **go to the slide with the dog**.

Other technologies

- The PDFMiner package scrapes text and images from the slides to power the ML image search and text search, e.g. **go to the Voice Control slide**
- Flask framework controls web infrastructure for the Python back-end
- Commands are parsed using regular expressions