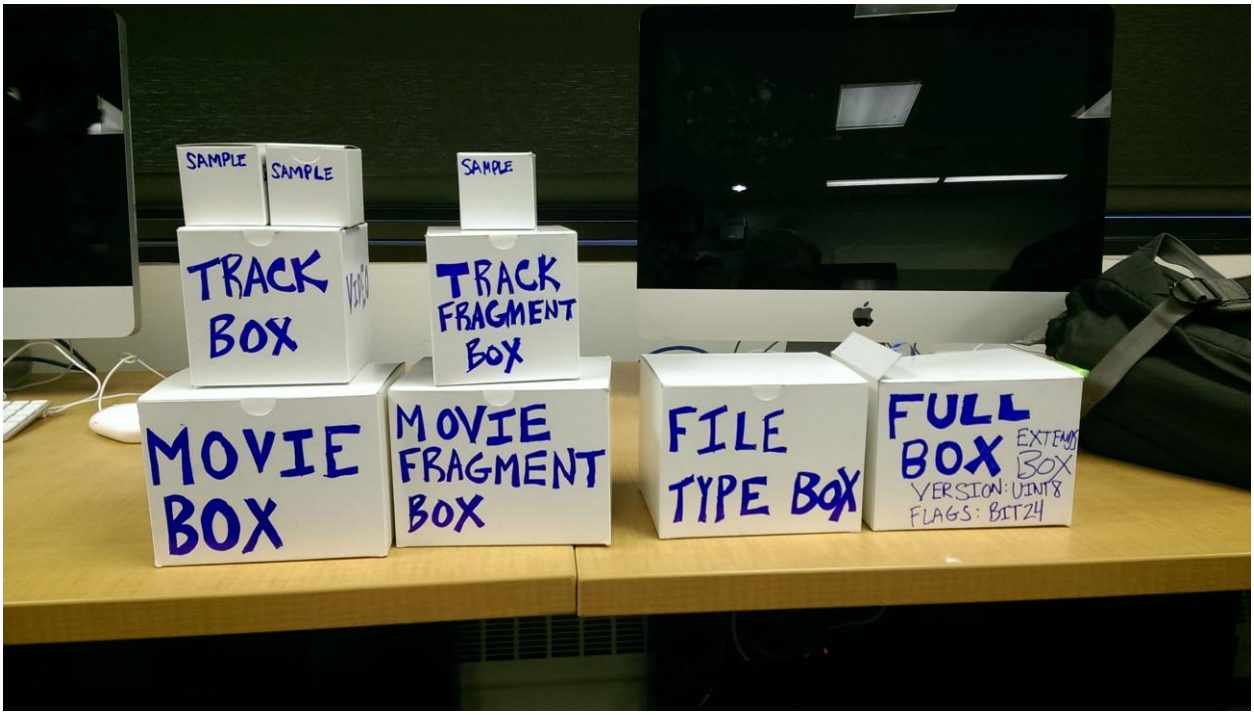
Presentation Outline

1. Intro – Logan
    a. Presentation overview
        i. First we talk about TS file structure (Adam, Chris)
        ii. Second we talk about MP4 File structure (Dave, Andrew)
        iii. Demo of how it works (Matt, Logan)
    b. Mention that this is an unconventional presentation and we will not be using any slides, so please ask questions as we go.
2. TS File structure
    a. Use the tape as a representation of a transport stream. Cut the tape in intervals that will represent 188 byte packets. Place the cut tape on the white board and talk about each different packet.
    b. TS file is one or more program streams multiplexed together. Usually a program stream for audio and a program stream for video.
        i. A program is the coded video or audio data.
        ii. PAT- Program Association Table
            1. Provides a list of all programs within the transport stream.
            2. Associates program number (numeric label assigned to a program) and the packet identifier (PID) value of the transport stream packets which carry the program definition.
        iii. PMT – Program Mapping Table
            1. Specifies PID values for components of one or more programs.
        iv. Unit start indicator in TS packet header signifies that the payload carries the first byte of the Packetized Elementary Stream (PES).
            1. PES Packets
                a. Transport Streams and Program Streams are each logically constructed from PES Packets.
                b. PES packets are used to convert between transport streams and program streams.
        v. Keep appending these PES packets until we reach the next unit start which signifies the end of the PES packet and the start of a new PES packet.
        vi. We keep collecting these PES packets until we reach a timestamp. Once a timestamp is reached, we stop, and gather up all PES packets that were analyzed. This collection of PES packets will form a single sample/frame of audio and video data.
    c. Speech(Adam)
3. MP4 File Structure (David, Andrew)
4. Demo of data going into boxes. (Matt)


SAMPLE
SAMPLE
SAMPLE
TRACK BOX
TRACK FRAGMENT BOX
MOVIE BOX
MOVIE FRAGMENT BOX
FILE TYPE BOX
FULL BOX
EXTENDS BOX
VERSION: UINT8
FLAGS: BIT24