Design Choices

## Input Structure

The current input structure is a choice between running a single video through the pipeline and analyzing that assuming a single action is perform or feeding in a list of videos for the pipeline to process. However, the pipeline doesn’t consider that certain segments of the given video may contain multiple actions that are required to be processed separately. To mitigate the issue of misclassification of video clips within a given video, we brainstormed two main solutions to the issue. One being the cropping of the clip, either through the pipeline or in the application, to a size that will likely result in lower rates of misclassifications (possibly 10 second clips). Or secondly retrieving the classification percentages and timecodes to internally extract the areas relate to activities. The first being an easy solution that will likely capture the required classifications on average but with will contain errors in data. With the second being the more accurate and precise manner, however requiring extensive knowledge of the model which our team doesn’t possess yet. Overall the second method would be the desired solution but would require more understanding of the model, so it will be left as an extension for now. ­­­­­

A method to break down the given videos into segments of a given length could be processed within the io\_data.py file, as it’s where the videos are formatted and processed.

## Output Structure