# Editing Videos in Video Visual Scene Display Android Application

**PennState** College of Engineering

**Invotek** Compassion Driven Innovations

**RERC on AAC**

## Christopher Kramer | Edwin Pimentel | Kate Smeltzer | Kun Wang | Mingzuo Dai

## PROBLEM STATEMENT

When it comes to individuals with developmental disabilities and complex communication needs, Visual Scene Displays, also known as VSDs, have been shown to be a tremendous asset with regard to supporting communication for them. The application that we modified, EasyVSD, developed by Invotek, works with VSDs. Within EasyVSD, the user is able to capture important life events of the individual's life as well as apply relevant language concepts embedded as "hotspots" on the video. These video VSDs effectively serve as an instructional guide to perform tasks and aid an individual through tasks, providing verbal queues at the tap of the "hotspots."

## OBJECTIVES

As it stands right now, the application EasyVSD does not support the editing of videos taken for length. The user is left to use the clip taken or to retake the video, only capturing the desired portion. We plan to fix this problem by allowing the user to edit the length of the video taken and select only the portion they wish to capture, removing any unnecessary footage.

## SOLUTIONS

For this project, there is one overall solution with two parts. The overarching solution is an application to trim the length of a given video. This main solution could then be split into two parts. The first part was the method of editing the video length itself along with an accompanying interface. The second part was to save the snippet you had just created to the device.
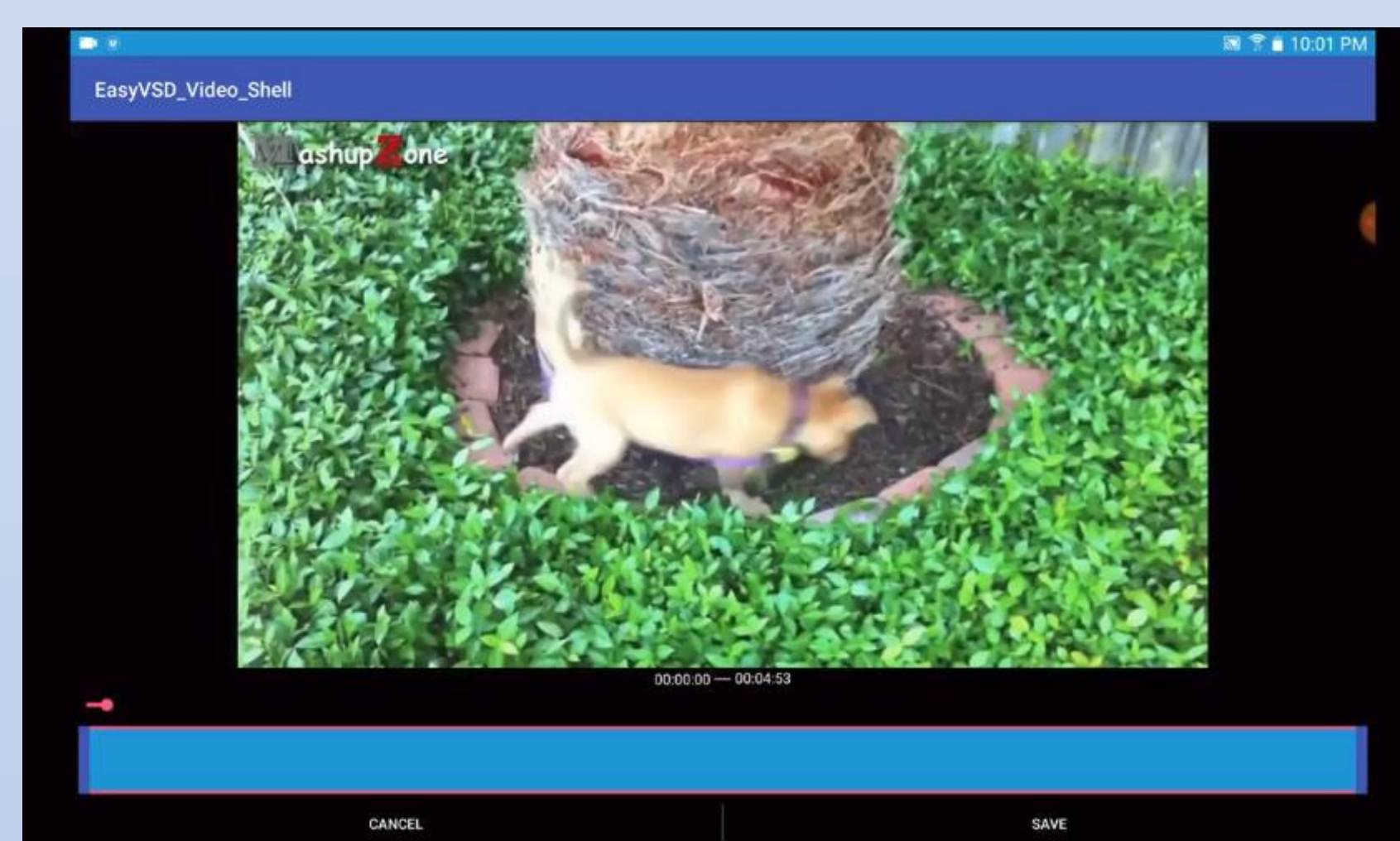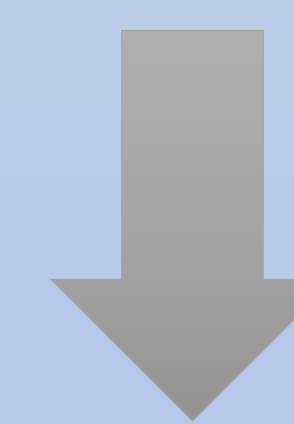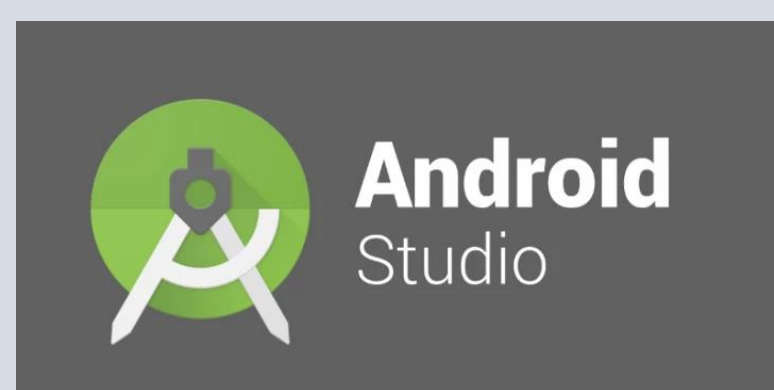

**Original Video**
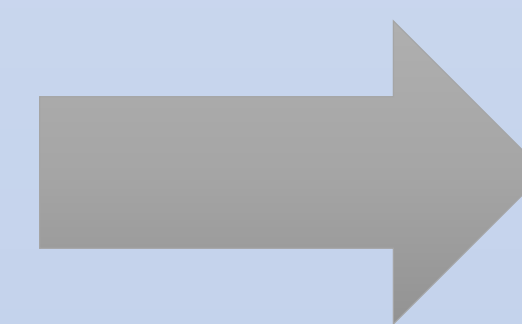
The user can trim the video by using the range bar
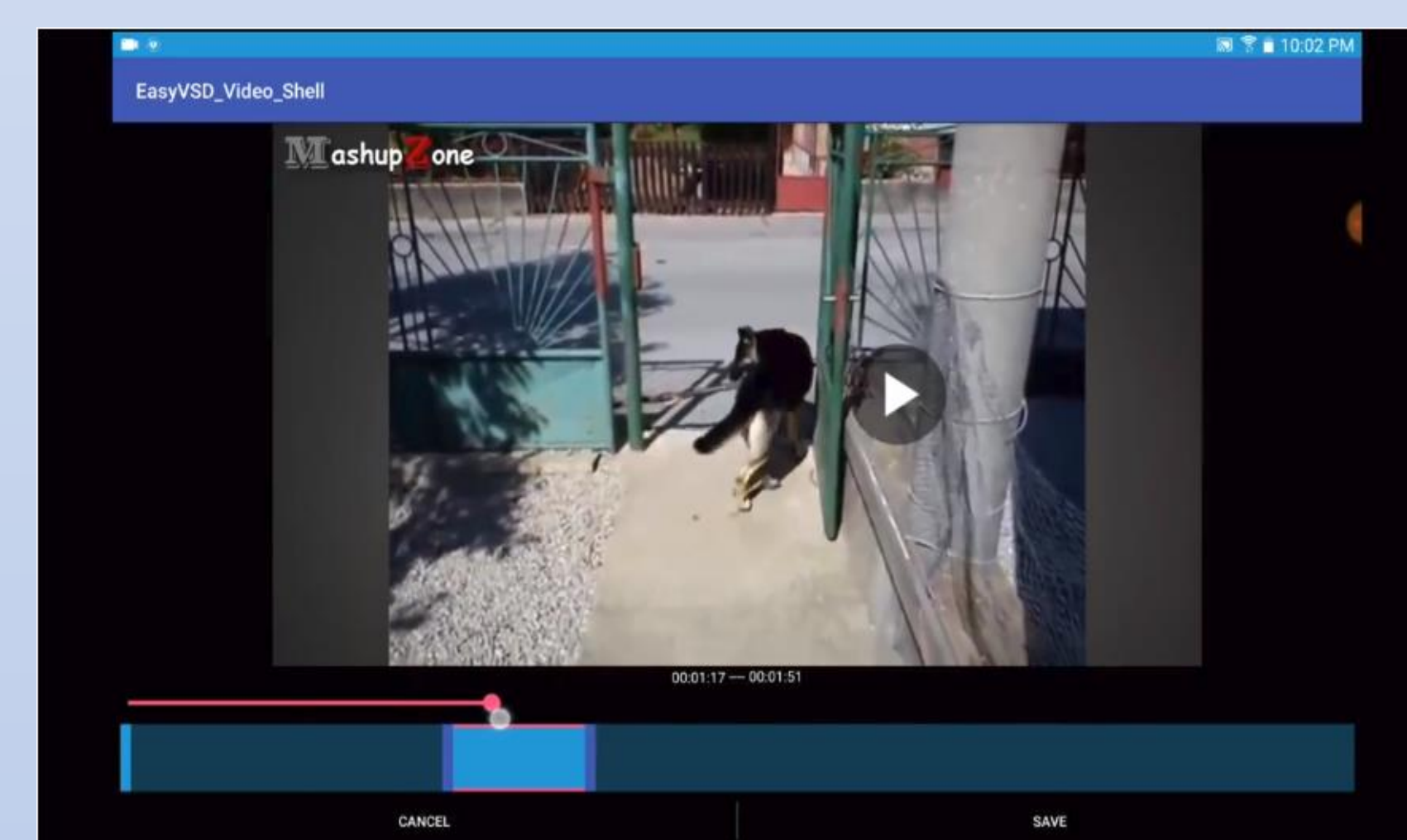

**Trimmed Video**

### DEVELOPMENT TOOL


Android Studio

## DESIGN DETAILS

We were able to find a toolkit that suited our purposes, the Knowledge4 Video Trimmer, and integrated the toolkit into the shell. After that, we had to design an interface that matched with the rest of the application. We were able to incorporate not only the original bar that would control the start and stop points of the snippet but a second slider bar that showed the user's progress through the video. The original bar was kept thick to allow the potential of added images later on. When the user clicked on the 'Save' button, the snippet chosen would be saved separately, and the original video would still be kept in the local storage.
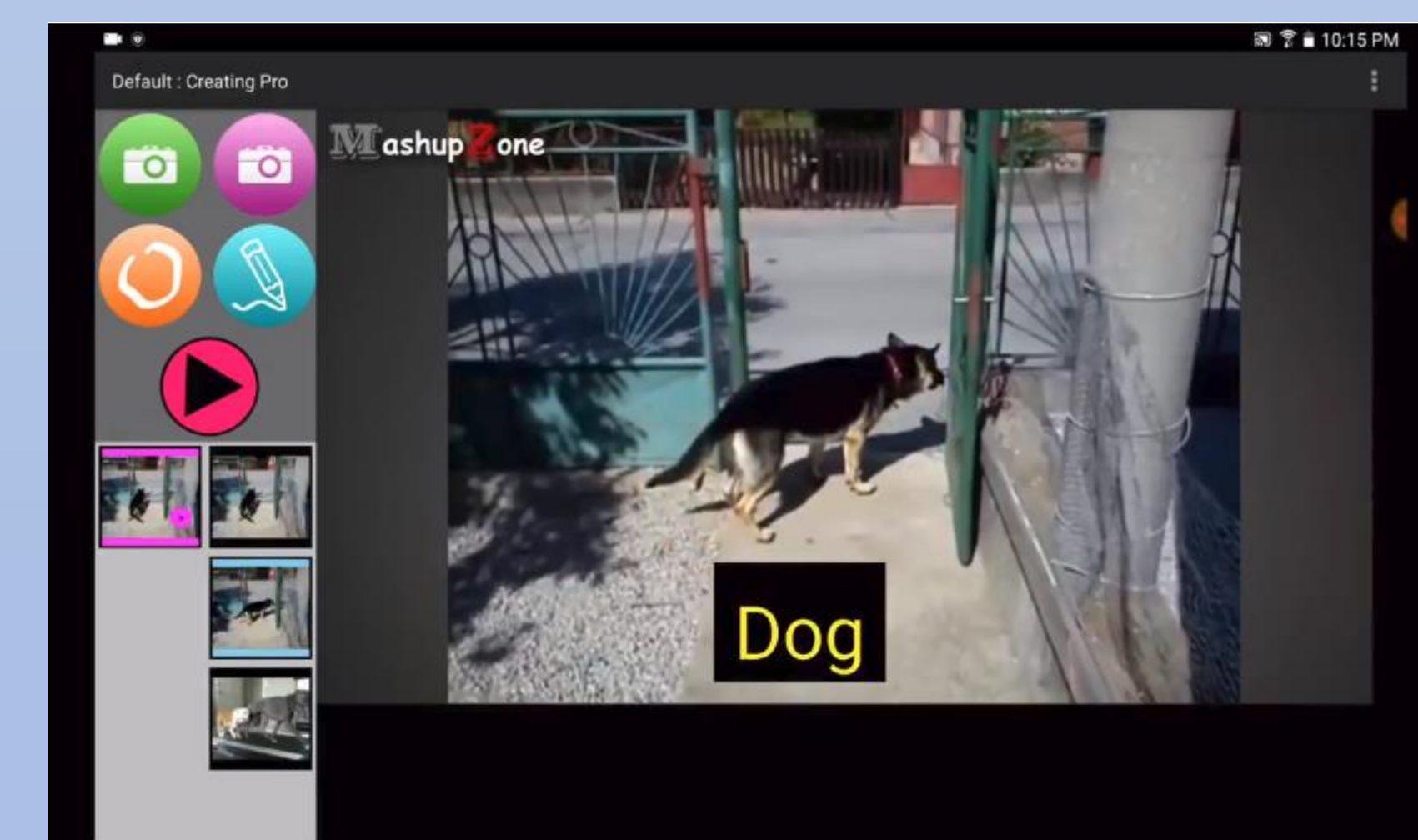

**Inputting the Trimmed Video to EasyVSD**