# **6 Sub-Project – Video Instruction Development**

# **[Krystian Trzcionkowski]**

In this chapter I will discuss the following topics:

* Introduction
* Overview
* Development
* Aims

## **6.1 Introduction**

In the following I am going to explain subproject I was required to complete. I am responsible for creating instructional videos on how to use the software distributed by our company. I will go over the objectives of the videos, give an in-depth look at how I approached designing every single video, discuss the recording and editing process as well as try to identify the issues that need to be solved to improve future development.

## **6.2 Overview**

Our company distributes a wide range of different anti forensics software. There are some of them that are quite easy to use with very instinctive UI and not too many features which could possibly confuse someone. On the other hand, we also have a several programs who can be a little more complicated and could be slightly overwhelming to some of our less experienced customers. To make it easier for them, our company have decided to produce a series of video tutorials on how to use the software we provide.

The point of the video instructions I made is not to explain every little detail of what certain software can offer. Some of the programs in our packages can be fairly complex. Videos that go over every single feature of the program would be incredibly long and probably not very interesting to majority of our customers. Besides, our company doesn’t develop any of the software we distribute – few those programs were available for some time now and there are many online resources available for free that document all the details of the programs we provide (some even written by the developers themselves). Our instructional videos were created to help our customers take the first step, help them familiarise themselves with the user interface and show them how they can use main features of the software.

## **6.3 Development**

### **6.3.1 Designing and recording**

Before I could start recording videos, I had to pre-plan exactly what I am going to demonstrate in every single video. That required me to learn a little bit about the programs myself, because I never used most of that software before I started making those videos. Few programs in our packages can be used to do more than one thing, but I have decided that I will only demonstrate one feature in a single video. I tried to determine what would an average user need to use a certain program for the most and make a video exactly about that. I have also decided to not make videos about the software that is very simple to use and don’t really require any further explaining; an example of the software like that would be HWMonitor which only displays the detailed information about different components of the PC or WinAudit which, as the name indicates, displays an audit of your machine, both hardware and software. There are also few other programs in our packages that fit into this category. I figured that making videos about them is a waste of resources, because I don’t believe that any of our customers would have any problems understanding how to use them.

I wanted to make every video look nice and professional. For that reason, I made a few simple guidelines for myself to follow when recording the videos. First of all, every video starts from desktop window. At the desktop, there should be no other icons or folders for any software not directly related to the video I am making. Desktop wallpaper should also stay the same throughout every video, I figured the default Windows wallpaper would be suitable. I did not want the videos to appear casual and amateurish, after all those videos do in a way represent our company, that is why I had to do everything possible to make them look presentable.

I wanted the videos to be as short as possible. A lot of the times people who make video tutorials get distracted and start discussing things that are not very relevant to what they are trying to demonstrate. I wanted to avoid that and focus only on clearly showing every step, from start to finish, on how to use the program to achieve a desired effect. It resulted in every video being under 2 minutes, which I am very satisfied with.

Here’s a short overview of how I approached making every video:

**JPasswordRecoveryTool**

This video was fairly simple to make. This software can be used to do only one thing, so I didn’t have to think about what exactly I want to demonstrate. I prepared a password protected .rar archive, with a very simple password so that program will not take too long to crack it, reducing a time I need to make a video and making it easier for me later in editing phase.

**PCMark 8**

Even though PCMark 8 is a simply a benchmarking software, it actually took me the longest to record it. As I mentioned before, I wanted to showcase every single step, start to finish. To do that I had to actually benchmark my own PC. That doesn’t seem like a big issue, but running a recording software, which is very CPU intensive, and the benchmarking software that is supposed to put your PC components to a test to rate how well it’s a performing, made recording software crash a couple of times. Obviously I could have just pause recording for the time of the benchmark and resume afterwards to show the results, but I did actually want to show how PCMark is benchmarking the computer.

**HashSuite**

HashSuite is a software that have many features which can test the security of the password hashes, but I have figured the majority of our customers would be interested in its main feature which is cracking hashes. To make a video about it, I have prepared a fairly short list of LM hashes that I would use in my demonstration. I particularly have chosen the LM hashes because they are one of the easiest to crack, which means it wouldn’t take long to crack them and it wouldn’t tax my CPU as much during the recording, making it less probable to crash.

**Recuva**

File recovery with Recuva can be a little bit tricky, which is why I decided to make video about it. Obviously, to demonstrate how to recover files, firstly I had to prepare files that I would recover. Again, to not make it too hard for my CPU during the recording, I have decided to delete files from a brand new external hard drive. This way, when I scan the hard drive it will only show those few removed files, instead of digging through a ton of other files that I have removed during the years I have used my PC.

**NMAP**

NMAP is really complex software with a lot of different options and it’s definitely not a software for our less experienced customers. It is a network monitor, so I decided to demonstrate how I scan, in this example, Google’s public DNS and where to access the particular results from the scan. This video is slightly different from others because it involves a little bit more user interface presentation, simply because this software is quite a hard to operate compared to others I worked with during this subproject.

**Little Disk Cleaner**

I consider this program a very simple to use, but I thought I would make an instructional video for it because I expect that some of the less computer savvy users could be a bit hesitant to delete files from their computers in fear of removing wrong files which potentially could be damaging to their machines. The video should make it easier for them to remove the “junk” files from their computers without any problems.

**BleachBit**

Same as Little Disk Cleaner, this program is meant to delete files from your computer, though in this example instead of removing “junk” files, it removes cache, cookies and internet history to protect user’s privacy. It is very straight-forward to use, but because it involves deleting files I wanted to demonstrate how the process looks like, to avoid any confusion to our less experienced users.

### **6.3.2 Editing**

Before I actually started working on the editing the recorded clips, I had to decide which video editing software I would use. Initially, I thought that Windows Movie Maker would be a good enough choice. After using it for a little bit and running into multiple problems, such as downgrading quality of recorded clips for no apparent reason or working with only very few limited file formats, I have reached a conclusion that it does not satisfy my needs and started looking for suitable alternative. My choice was Camtasia Studio.

Camtasia Studio provided me with a lot of great tools that I could use to make the videos look really nice and professional. I needed a way to actually edit in instructions into the video since I didn’t record the voice-over for them. At first I was worried that doing this would make videos look bad and amateurish, but Camtasia Studio’s callout tool allowed me to that while making the videos appear really good and what’s the most important – professional. Also, callout tool allowed me to easily add arrows and spotlight effect, which are incredibly useful in properly guiding the viewer through the video instructions.

Just as with the recording process, I have decided to set few rules for my videos which would ensure that they will stay visually consistent and look clean and professional. First of all, all the object I edited in such as textboxes and arrows use the exact same colour throughout every video (dark red arrows and textboxes with white text inside them). I would also always follow the same pattern with their placement. Main instructions would always appear in a textbox in the bottom of the screen. When working with a program in a windowed mode, I would always slightly zoom in on the window to make video easier to watch and not waste too much screen space with empty desktop background. And whenever program is processing something for extended period of time, I would speed up the clip to not waste our viewers time on watching pointless loading screens.

Since there are no voice-overs for the instructions, I decided to add a background music just to make the videos more enjoyable to watch. After doing a little research I found a copyright free song that was suitable for the type of instructional videos I was making.

## **6.4 Aims**

The objective of instructional videos is to help our less experienced customers feel more confident about using the programs we provide, by demonstrating how to use them, step by step, to attain a desired result. Overall, the videos in its current state definitely achieve that goal, but there is still a big room for improvement.

### **6.4.1 What could be improved?**

First thing that needs to change is the number of videos produced. I believe that concept of short videos focusing on a single feature is the right approach, but I also think that there should be a lot more of those short videos. It’s actually an easy improvement that can be gradually made as the company operates. Ideally at one point there would be a large database of videos that cover all the major features of every software we provide.

Another thing that would improve the videos in my opinion is adding a well animated intro and outro to the videos. Right now videos start with a single panel with the title of the video, which does serves its purpose, but I believe that a unique intro, with our logo and maybe a short music instrumental created specifically for this animation would make our instructional videos look nice, distinctive and memorable to our viewers. This intro wouldn’t have to be used only for video tutorials we provide, we could also use it for any other sorts of videos we want to publish, like announcements or TV commercials.

Currently the videos don’t have a voice narration and do require a viewer to read the instructions displayed in the video. I don’t consider this a high priority, but I believe that voice-over, as an addition to written instructions would be ideal. It would make video more comfortable to watch for some of the people, but I don’t think the voice-over should replace the written instructions entirely though, as we could have customers with hearing impairment that would not be able to watch the videos we provide.

**In the Next Chapter…**

In the next chapter, Anti-Forensic Solutions’ website developer Adam Morrison will discuss the design and development process of our company website, as well as provide a justification of resources used to host it.