David Gamez

Video Demonstrations

Talk Overview

▸ Introduction.

▸ Contents of a Video Demonstration.

▸ Recording a Video Demonstration.

▸ Example.

▸ Submitting a Video Demonstration.

INTRODUCTION

Video Demonstrations – David Gamez

Marking Web Applications

▸ In my modules you develop complex web applications with a front end, server, and data storage.

▸ To mark web applications, teachers have to see them running.

▸ Staff do not have time to try to get each student's project working.

▸ In many cases, the web application cannot be run – for example, if the student does not submit the database dump.

▸ Prototype code often only works under highly specific conditions, which staff do not know about.

▸ Even if staff could get the web applications running, their functionality is unlikely to be shown to best advantage.

Demonstrations

▸ For these reasons, prior to the pandemic, demonstrations were a mandatory part of the assessment process.

▸ During the demonstration:

  ▸ Students showed the functionality of their web application.

  ▸ Staff marked the functionality as it was demonstrated.

  ▸ Staff asked questions – for example, raising plagiarism issues, checking that students understood their own code.

  ▸ Immediate feedback was given to students.

Video Demonstrations during Pandemic

▸ It is not practical to do online demonstrations for 20-25 students in a single laboratory session over Zoom.

▸ So for **individual** coursework the live demonstration has been replaced by a video demonstration.

▸ Group coursework will still have a live online demonstration via Zoom at which all group members are expected to be present.

Video Demonstrations

▸ Coursework cannot be accurately marked without a demonstration.

▸ So video demonstrations are **mandatory** for **final submissions** of individual coursework.

▸ **Your final submissions of individual coursework will receive zero marks if you do not upload a video demonstration.**

Technology Demonstrations

▸ If you work in technology, you will often give demonstrations to your manager or clients.

▸ A promotions or the success of the company could depend on a successful demonstration.

▸ Demonstrations are a useful skill – a good idea to practice now!

CONTENTS OF A
VIDEO DEMONSTRATION

Video Demonstrations – David Gamez

Contents of a Video Demonstration

▸ The aim of a video demonstration is to show the teacher how your project fulfils the marking criteria.

▸ If you don't show a particular feature working, the teacher cannot give you credit for that feature – at most they can give you marks for an attempt.

▸ Staff have a lot of marking: If your video is too long, they will not have time to watch all of it.

Contents of a Video Demonstration

‣ The teacher has your code and your report.

‣ **There is no need to discuss code or your report in the video demonstration.**

‣ Focus on the working functionality of your website – the parts that the teacher cannot see for themselves without running your web application.

Contents of a Video Demonstration

▸ Your video demonstration should be:

  ▸ As short as possible (but not too short).

  ▸ As clear as possible.

  ▸ Completely focused on explaining to the teacher why your project should get marks for particular features.

Bugs

▸ Your code will have bugs

▸ For example, it might not trigger the password validation if you forget to enter the email address.

▸ I strongly recommend that you **practice** your demonstration before you record it so that your system is shown to its best advantage.

▸ Of course, we will still check your code and may run it!

Recommended Structure

▸ Introduce yourself by clearly stating your name.

▸ (Don't include your student email address or ID in videos that you upload to YouTube).

▸ State what you are demonstrating.

▸ Go through each marking criteria that is concerned with working functionality – for example, registration, login, game, etc.

▸ Clearly demonstrate the functionality – for example, register a user and demonstrate that the data is stored (in local storage or database).

▸ Use the marking criteria as a guide for your demonstration.

▸ An example is given later in this talk.

Video Demonstrations – David Gamez

Recommended Structure

▸ Don't make claims about how many marks you should receive – we will make our own minds up about this!

▸ Do not discuss:

  ▸ Code.

  ▸ Attractiveness of front end.

  ▸ Report.

Recommended Length

▸ Your video demonstration should be approximately 5 minutes long.

▸ This is plenty of time if you practice your demonstration and only show working functionality.

▸ The staff marking your project will not spend more than 5 minutes watching your video.

▸ Longer videos are likely to be longer than 100mb, so you will have to mess around uploading them to YouTube.

Practice Before Recording

▸ You must practice your demonstration before recording it.

▸ You need to learn how to work around the limitations of your system and show it to best advantage.

▸ This will enable you to present your project in a professional manner.

▸ Will help you to keep your presentation within the time limit.

▸ You should also watch your presentation before you submit it to check that the video works and that you are happy with it.

▸ **Don't record demonstration 5 minutes before the deadline!**

RECORDING A VIDEO DEMONSTRATION

Video Demonstrations – David Gamez

Recording a Video Demonstration

▸ Record your video demonstration with a desktop screen recorder. (Don't point your phone at the screen!)

▸ A desktop screen recorder records your screen and audio and saves them to a video file.

▸ I recommend that you use OBS Studio:

  ▸ Free

  ▸ Stable

  ▸ Flexible

  ▸ Works on all operating systems.

▸ Available at: https://obsproject.com/

▸ I use OBS Studio to record all of my lectures.

Video File Size

‣ The size of a video file is a combination of two factors:

  ‣ **Resolution**. Number of pixels in each frame of video.

  ‣ **Bitrate**. Amount of compression.

‣ When I record my lectures I use:

  ‣ **Resolution**: 1280 x 1024.

  ‣ **Bitrate**: 2500 Kbps.

‣ This provides decent quality and a reasonable file size (approximately 20mb for 5 minutes).

Video Format

▶ Your video demonstration must be playable on the VLC player: https://www.videolan.org/vlc/index.en-GB.html.

▶ Zero marks will be given to videos that do not play on this player.

▶ **To ensure that your video demonstration can be played, I strongly recommend that you record it in MP4 format.**

Reduce Screen Resolution

▸ If you are working on a high resolution display, you can reduce the screen resolution to reduce the file size of your video demonstration.

▸ Alternatively, you can scale down the video resolution in OBS studio.

▸ In Windows, right click the desktop and select Display Settings.

Video Demonstrations – David Gamez

Set Screen Resolution

Video Demonstrations – David Gamez
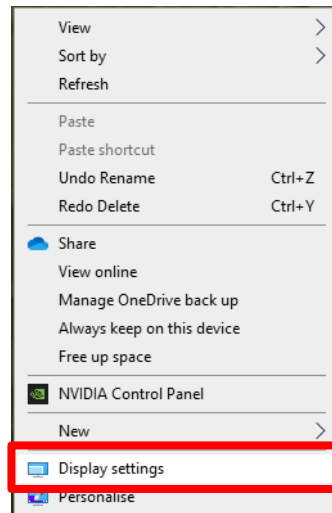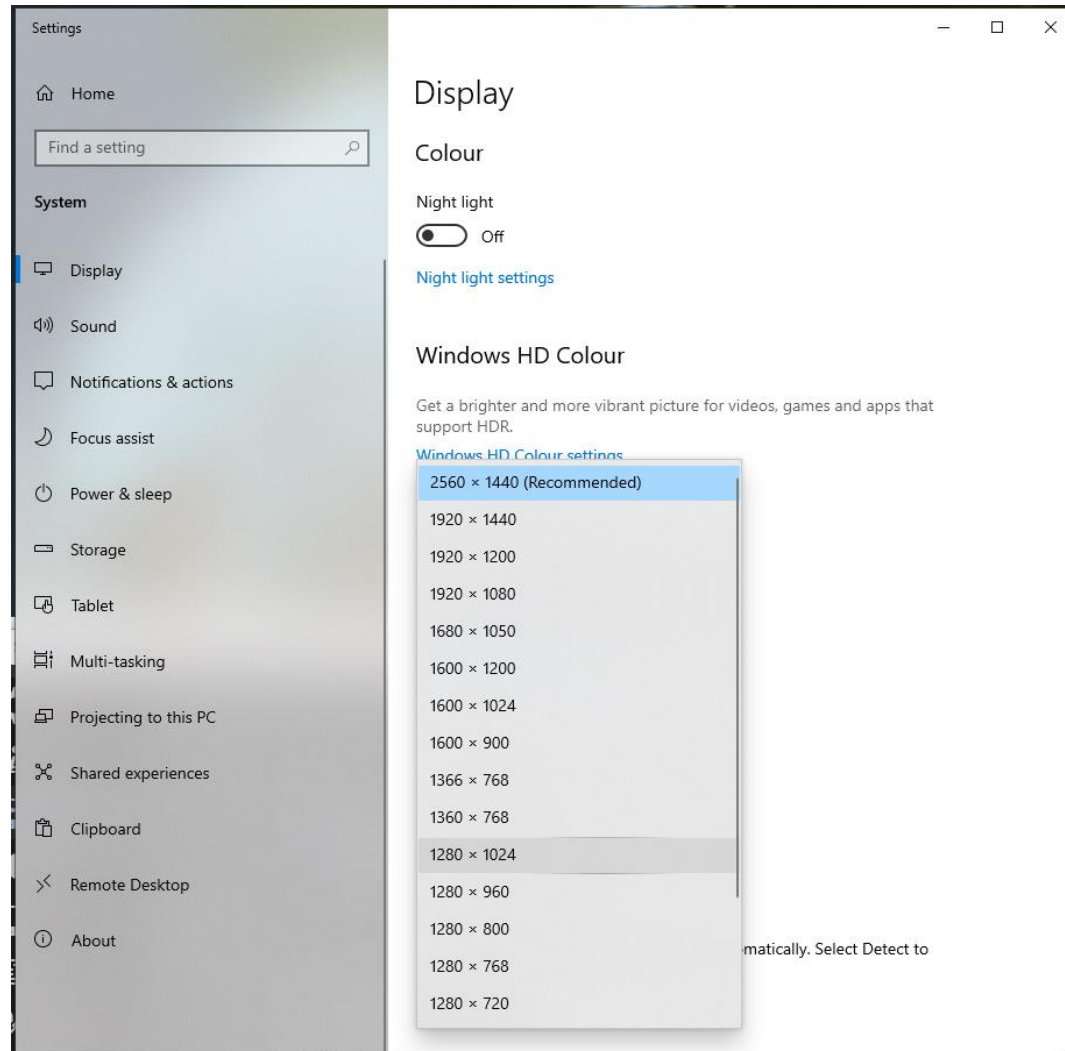
Adding Sources to OBS Studio

▸ Before you record, you need to configure the sources in OBS Studio.

▸ Right click on **Sources** and select **Add->Display Capture**.

▸ You can then configure OBS Studio to record from your monitor or laptop display.

▸ Right click on **Sources** and select **Add->Audio Input Capture**.

▸ You can then configure the audio input source for your demonstration.
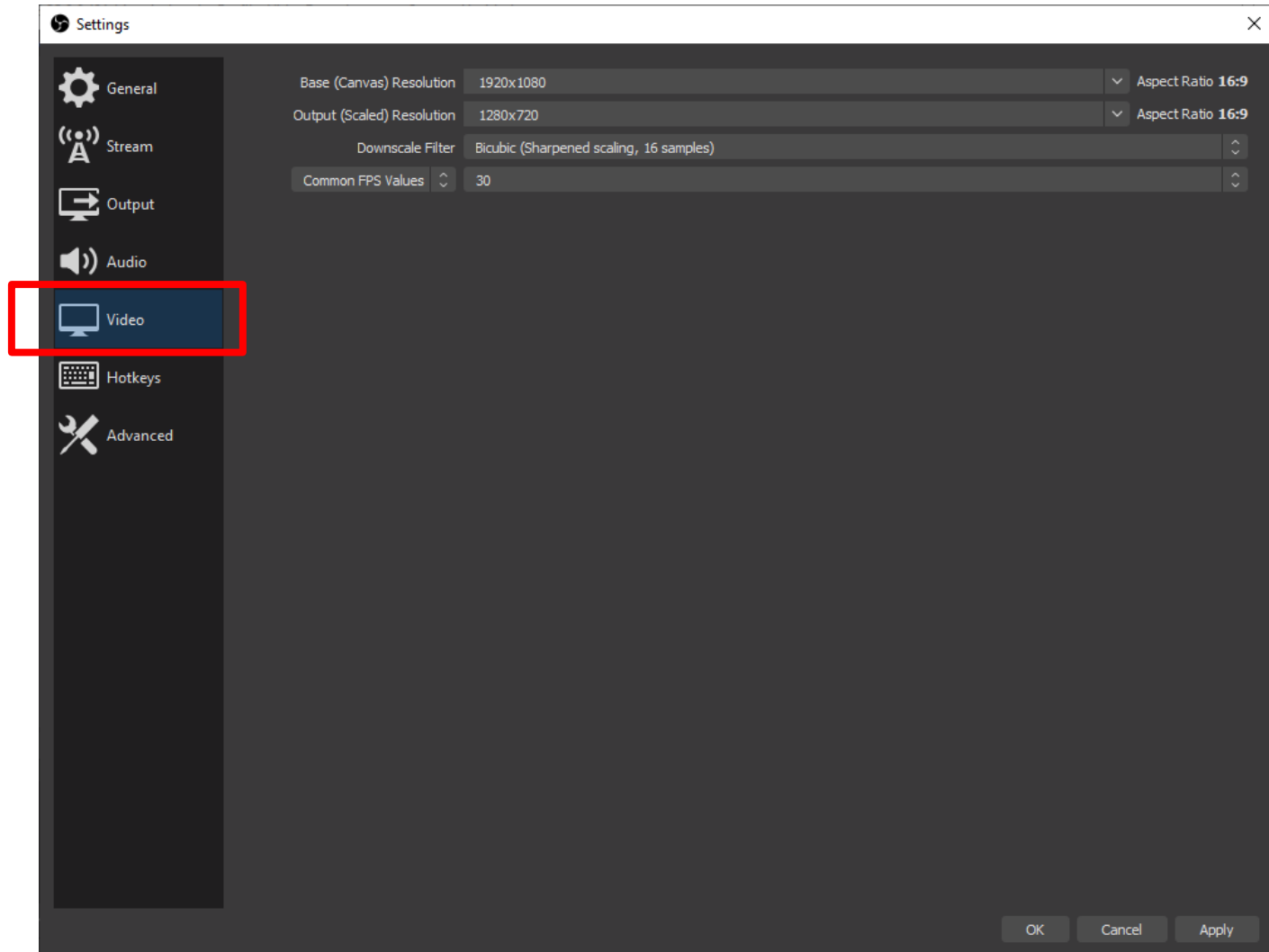
Adding Display Capture to OBS Studio

Video Demonstrations – David Gamez
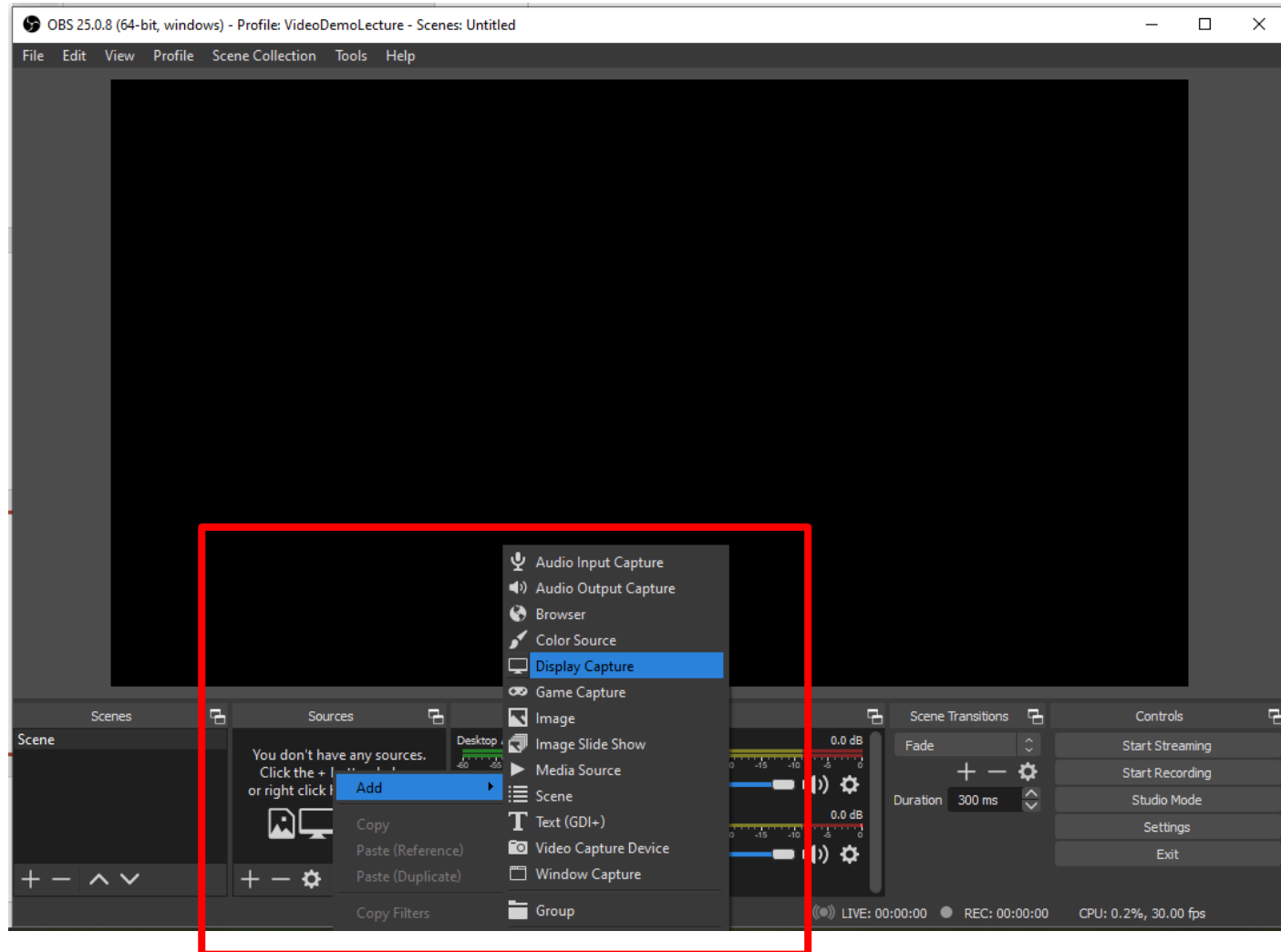
Adding Audio Source to OBS Studio
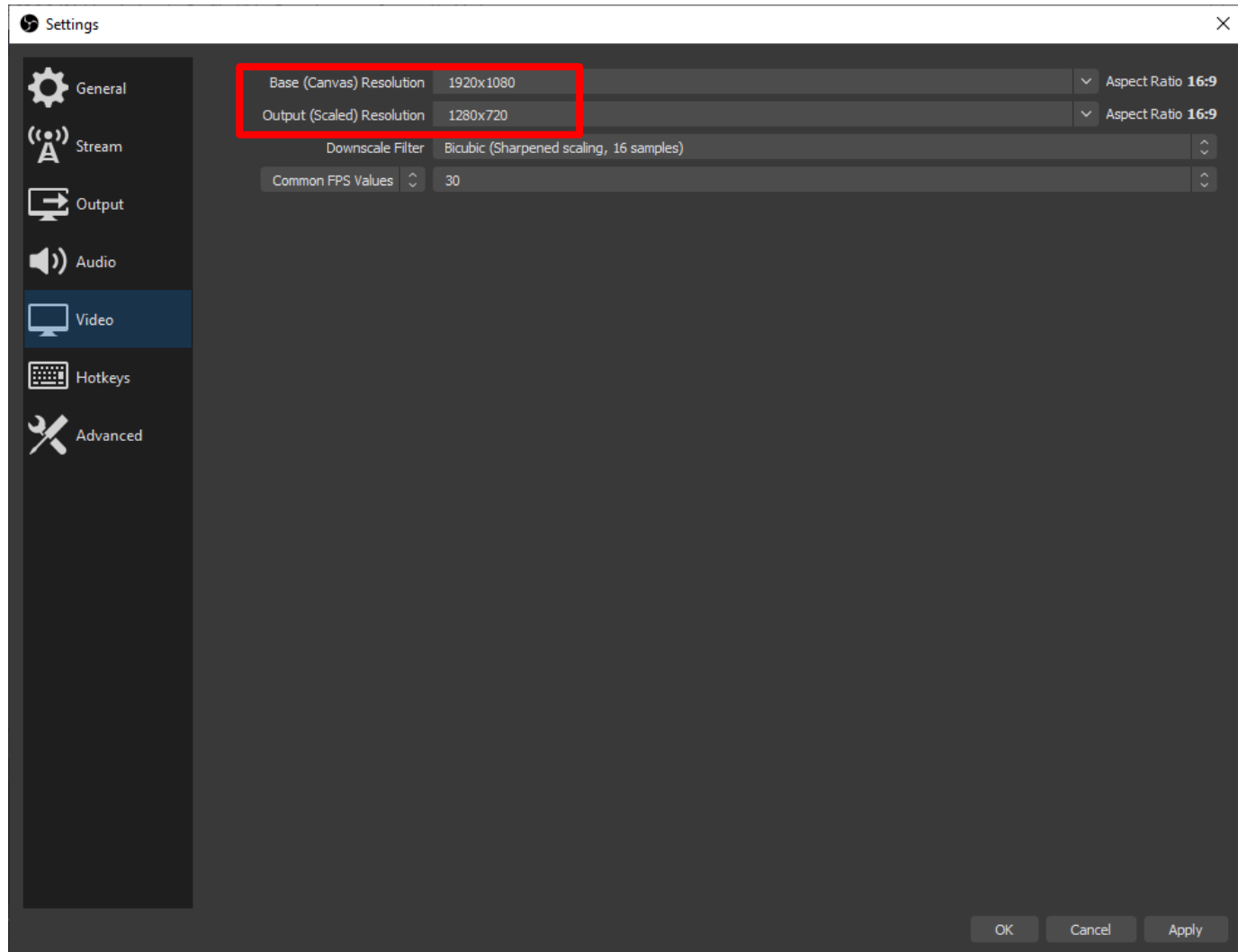
Video Demonstrations – David Gamez
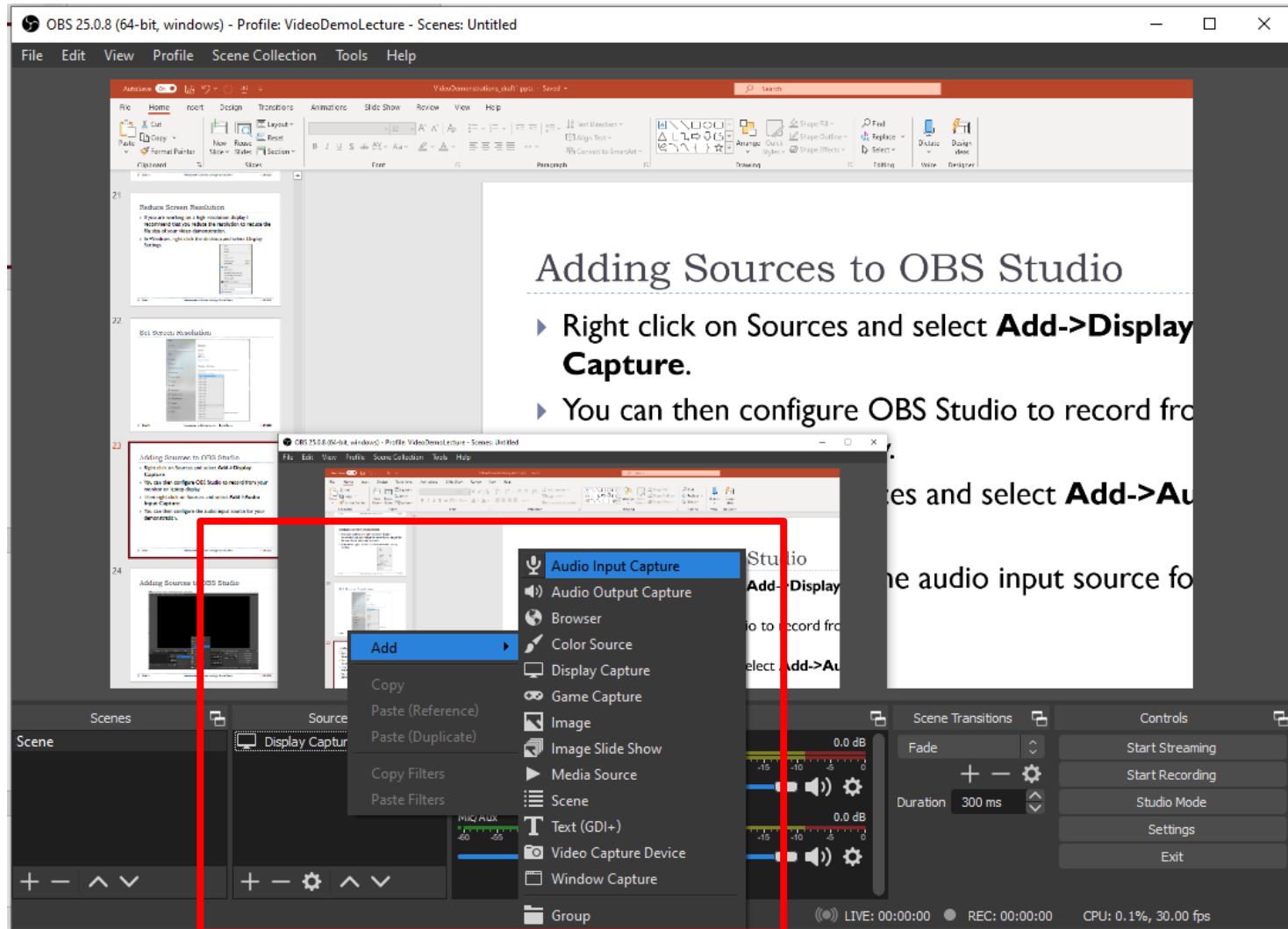
Configuration

▸ Click on Settings to set:

  ▸ Location where video is stored.

  ▸ Video resolution.
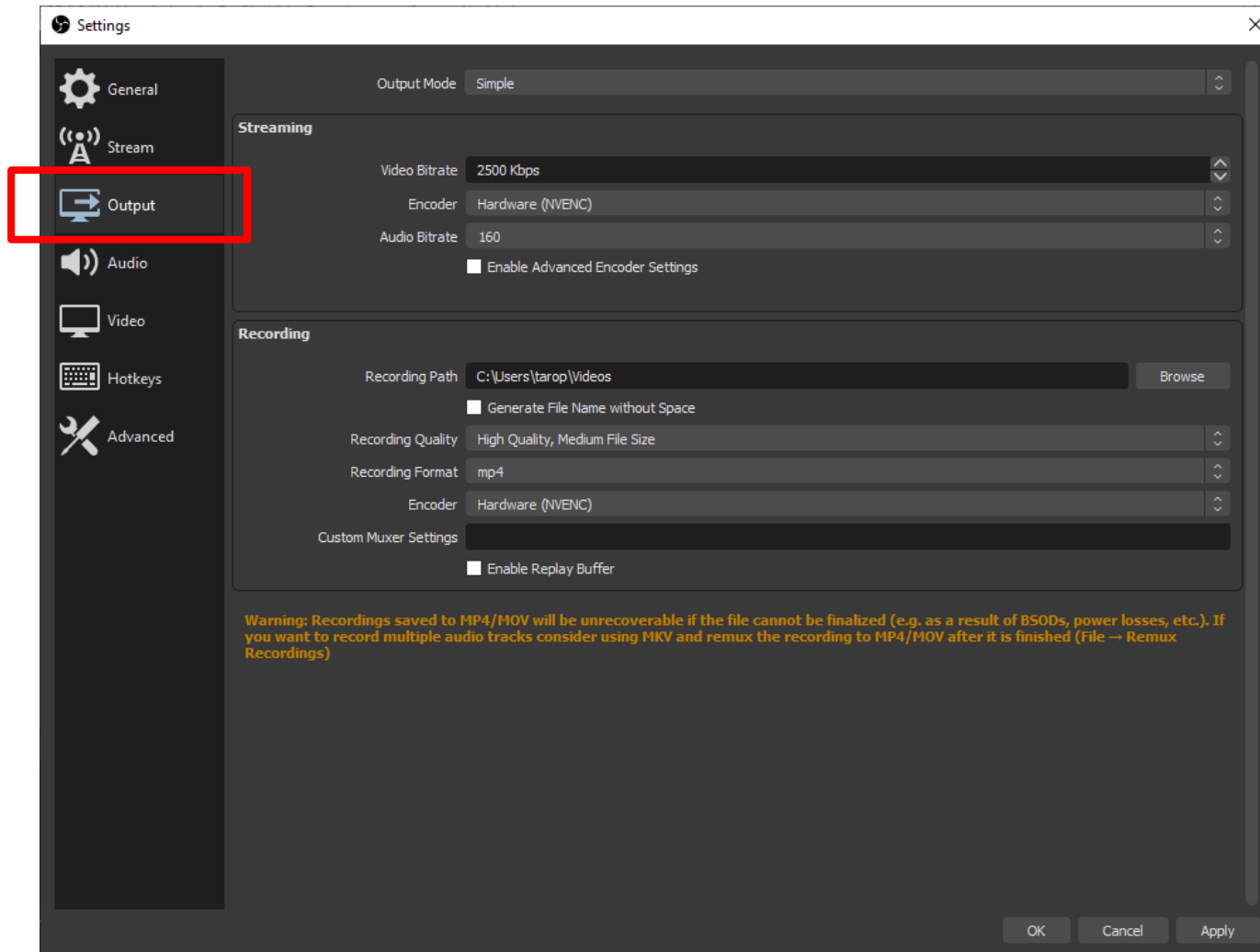
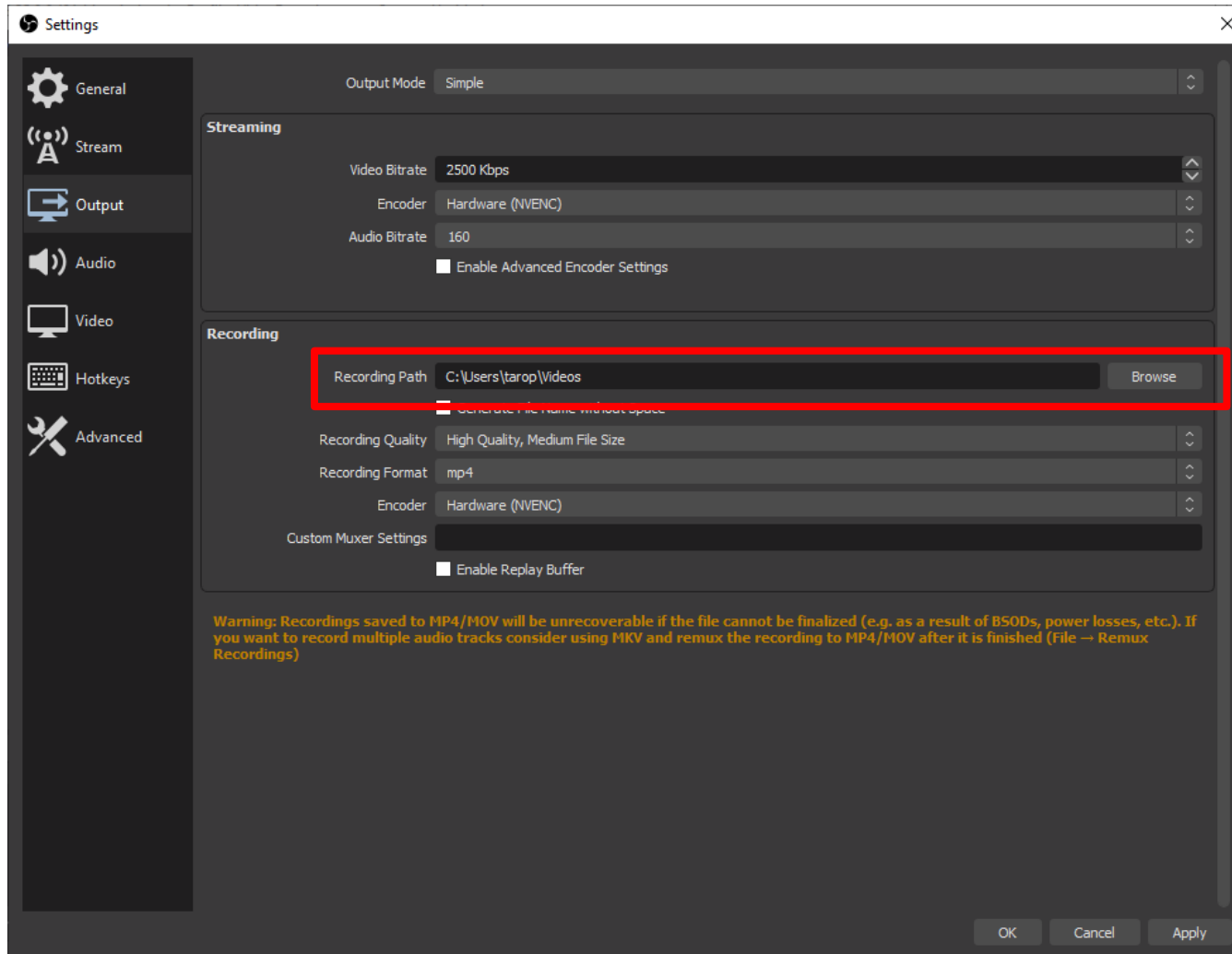 ▸ Video quality and bitrate.
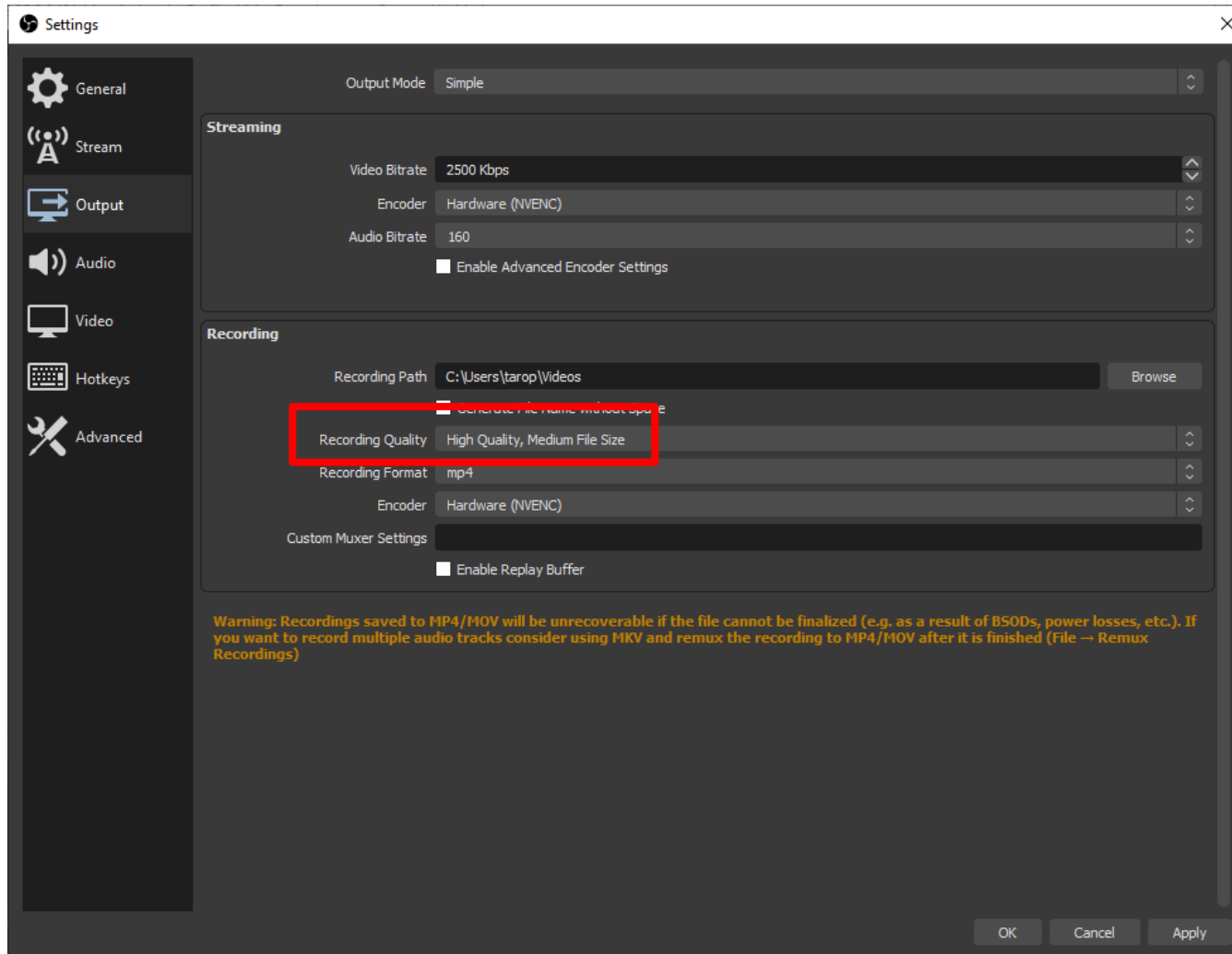
  ▸ Video format.

Video Setting

Video Demonstrations – David Gamez

Video Setting

Output Settings

Video Demonstrations – David Gamez

Output Settings

Video Demonstrations – David Gamez

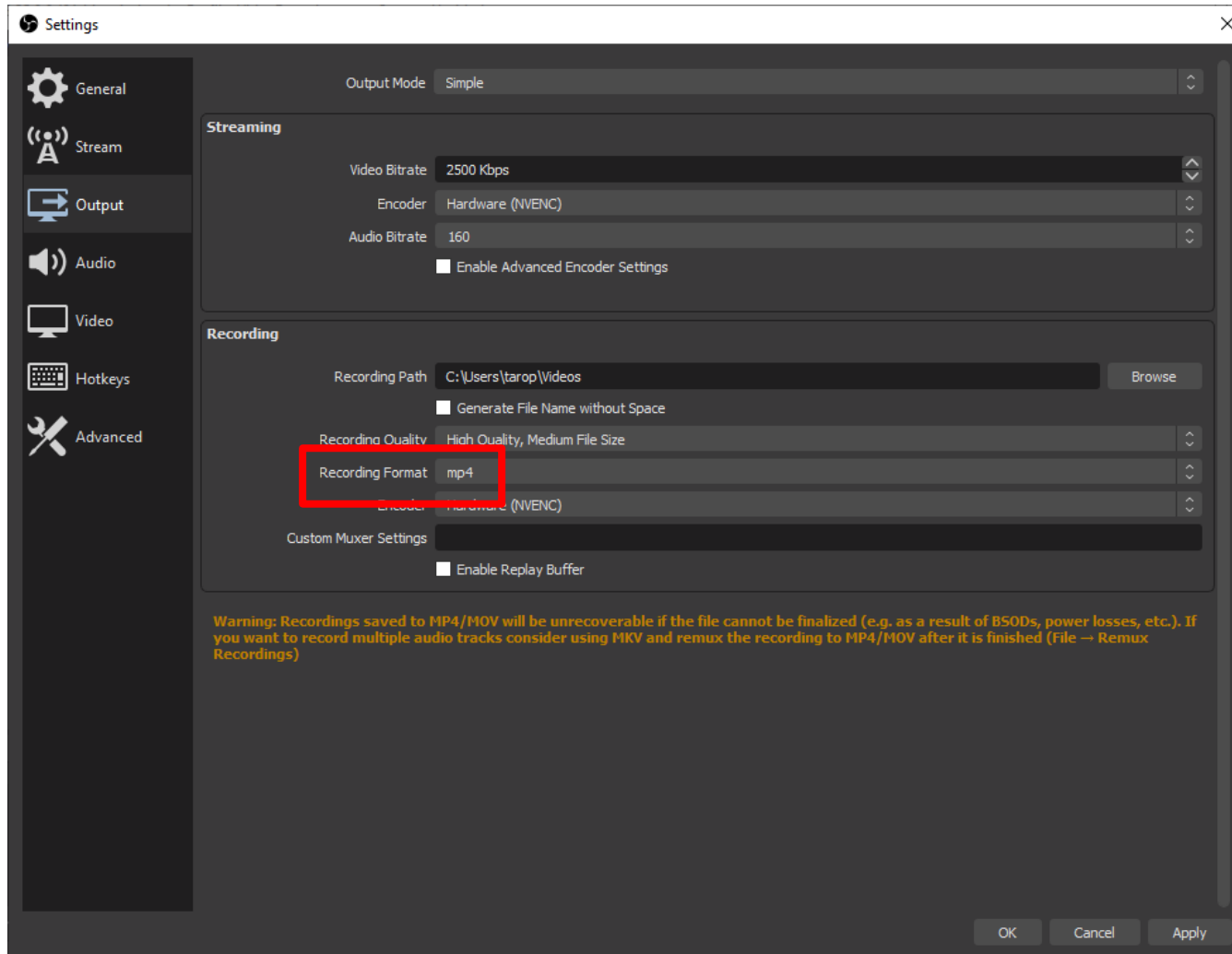# Output Settings

Output Settings

Recording

▸ Click 'Start Recording' to record your video.

▸ Do a test run to make sure that the sound is audible and the video is ok.

▸ Then you are ready to record your video demonstration.

EXAMPLE

Video Demonstrations – David Gamez

Example

▸ I will now show you an example video demonstration.

▸ This was recorded for the first piece of coursework on my second year module.

▸ Same principles apply to all video demonstrations.

Video Demonstrations – David Gamez

SUBMITTING A
VIDEO DEMONSTRATION

Video Demonstrations – David Gamez

Submitting a Video Demonstration

▸ The maximum size for a submission on MyLearning is 100mb.

▸ If your total file size (code, report, video demonstration, database dump) is less than 100mb, zip up the video with the rest of your submission and upload it.

▸ (Make sure that you remove third party libraries, such as node_modules folder and jar files).

▸ If your total file size is greater than 100mb, upload the video to YouTube and include a link to the video in your project report.

Video Demonstrations – David Gamez

SUMMARY

Video Demonstrations – David Gamez

Summary

▸ Video demonstrations are mandatory for final submissions of individual coursework: **No video demonstration, no mark**.

▸ This video has explained how to record video demonstrations for my modules.

▸ Technology demonstrations are a useful skill because they are common practice in most technology jobs.