**Objective of Research**

To investigate a couple third party libraries that initially would allow us to extract data from images and video files, but may also be able to be used to add a lot of additional functionality that popular social media websites use. One of these third party libraries is ImageMagick. The other library is FFmpeg.

**Findings of Research**

ImageMagick is supported for many languages. Since our project is a C# ASP.NET project, ImageMagick has a package called Magick.Net. There is also a fair amount of documentation as well as a detailed info writeup on Magick.net’s github. As stated on this github, ImageMagick is a power image manipulation library that supports over 100 major file formats.

FFmpeg is the largest cross platform multimedia framework that can decode, encode, stream, filer, and play any video format. It does not contain any direct C# or .Net libraries that will be simple to drag and drop into our asp.net project. FFmpeg is a command line tool that will allows one to convert multimedia files between formats. It’s possible we will be able to use it externally to grab metadata from the video files. There is also ffplay, which is a media player, however I don’t think it will allow us to integrate it into our website, so an alternative may need to be found if we wish to allow users to play the video files they upload.

**Research conclusion**

ImageMagick will prove to be useful in the coming sprints as we add the functionality to upload memories. If time permits, it will be additionally useful as we can allow users to edit their images within the web app. FFmpeg might be useful in the future, but our group’s main focus right now is to get just image uploading to work, because after that it should be easier to get other formats uploaded too.