Block Project Proposal

1. Program will process video files (essentially a time-series of images and perhaps audio stream too) and apply some kind of effect/filter on them.

2. With a single thread/unnecessarily serial constraint, each frame would have to be done individually (and depending on the effect, each pixel within each frame), but with parallelism, the processing could be split up. I am interested to see what is faster – if each thread just has a shorter video segment or if each frame is looked at serially but the work for that frame is parallelized.

3. I intend to measure/analyze the performance with simple runtime-timing of a few (5 or 10) trials of the 3 approaches. I also may try multiple effects (increasing gamma is relatively simple, but perhaps another effect wouldn't be) to see how the task itself affects performance scaling.