Requirement: Encode the mp4 to an HLS stream that can be played back on a mobile device.

The design is to have event driven process to generate HLS stream. AWS have application service called Elastic Transcoder. However, At the moment, there is no way to automatically run an Elastic Transcoder job by uploading a file to a bucket. The key is to use Lambda and SNS.

The work flow looks like following.



When video file uploaded to S3 bucket from Java Application, it will publish pre-configured event and event will associated SNS topic. Lambda function subscribed to that specific topic will get invoked.