Capstone Paper Outline:

Intro/Purpose:

* Store data from eye tracker
* Visual representation of data

Background on Eye Tracking:

* What is it?
  + Provides a way for to tracker users eye movement on a screen
* Definitions:
  + Fixations
  + Saccades
  + Scan paths

Approach:

* Server side
  + Node
    - Framework:
      * Express
    - Libraries:
      * Xml2js
      * Async
      * Mysql
  + MySQL Database
  + Windows Azure
* Client side
  + Basic Structure
    - jQuery
    - Backbone/Underscore
    - Mustache templates
    - Twitter Bootstrap
  + APIs
    - HTML5 Video
    - Canvas
  + Libraries
    - Heatmap.js

Problems Encountered:

* Hosting
  + Windows Azure support
    - MySQL support
  + 3 Month Trial
  + Account disabled after reaching download limit
    - Virtual Machine was removed
  + SSH connection problems later on
* JS’s asynchronous style when uploading video/xml
* Syncing up video with canvas visualization

Lessons Learned:

* Hosting choices

Future Work:

* Converting AVI files to correct filetype
* Grab thumbnails from videos
* Hosted Live
* Link with eye tracker service