# Read Me

**File Structure Overview**

Functionality is separated primarily into four parts:

1. **App.js:**
   1. Loads node modules (Express, body parser, cookie parser, express session) and the Survey and Index controllers. Handles various routes and passes the control over to the relevant controllers.
2. **Controllers:** 
   1. Index.js – Gets the index page and logs in a user.
   2. Survey.js – Displays the survey questions and options. Routes users to next/prev survey questions. Handles survey completion successes and errors. Writes answers to the answers JSON file. Counts the survey matches too.
3. **Views:**
   1. Various .ejs template files for the presentation layer.
4. **Files:** 
   1. surveyanswers.json – Answers for each user stored in this json file. Username is the key.
   2. surveyquestions.json – Questions for the survey stored here.

**General Information**

* *(Extra Credit)* Cookies were implemented successfully for rendering preferences.
* *(Extra Credit)* View layer has been implemented using EJS.
* *Timer –* A pure server side as well as a server+client side implementation of the timer has been performed.
  + Since using just Node, the timer can’t immediately shut down the survey, the server side implementation checks if 30 seconds have passed on every next/prev request to the survey when an answer is submitted
  + This has been combined with client side JavaScript and setTimeout timer is used which redirects the user to “/expired” once 30 secs have been passed. Both implementations use the server side cookie “starttime” which allows tracking of time spent on the survey across pages and thus maintains the conversational state.