

1. Go to Package-JSON and look at the dependencies to find out what the app may be doing

- a. **Look at Dependencies:**

- i. Bcrypt-nodejs:
 1. Using hash to store passwords in DB
- ii. Body-parser
 1. Allows for sending of form data as "req.body"
- iii. Express
 1. Node Framework
- iv. Mysql2
 1. Database
- v. Passport
 1. Authentication middleware for Express. Authenticates requests using plugins (strategies). Solely for authentication.
- vi. Passport-local(Passport strategy)
 1. Authenticating username and password

- b. **Look at the initial package information**

- i. Tells us to the app "starts" at server.js. Go to this file to begin reverse engineering.

-After looking at the dependencies, we can tell that this will be some sort of an authentication app using passport and passport-local modules that will require an email and a password to authenticate.

2. Going to server.js

- a. A lot of familiar middleware, but some new stuff as well
 - i. Familiar stuff: express, bodyParser
 - ii. New stuff: session, passport
- b. See server.js file for detailed notes on the middlewares
 - i. Mostly new middleware is authenticating the user and storing the session data in a secure way that also allows us to identify the true user.
- c. Requiring the models folder to be used for the app
- d. Setting public as the root directory for static files (Making note to look into it in future)
- e. Requiring the html and api routes (Checkout Routes in future)

3. Going to Model folder

- a. Index.js:
 - i. Allows us to use the sequelize in our app
- b. User.js
 - i. Sets the model of the database to be used in the app

4. Going to Public Folder

- a. Separated with stylesheets and all the html pages
- b. JS
 - i. Login.js:

1. Taking login from user with email input and passport input and posting it to the server (both username and password is required)
 - ii. Member.js
 1. Displays the member name and email on the page
 - iii. Signup.js
 1. Posting the user information to the server
5. Going to Routes
 - a. Html-routes.js
 - i. **Requiring path, and “isAuthenticated” from config folder (Making note to visit afterwards)**
 - ii. Setting up the html routes based on whether the member is logging in, signing up and/or if the login was verified.
 - b. API-routes.js
 - i. Requiring Models and **Passport (in config folder)**
 - ii. Accepting and the post requests from public JS files, then sending back the appropriate information based on the requests
 - iii. **Post for signup is creating a new user in the database.**
 - iv. **Login is using “passport.authenticate” to authenticate the users**
 - v. **Get for logout is logging out the user and redirecting to the Root Directory**
6. Going to Config Folder
 - a. **Passport.js**
 - i. Requiring Passport, passport-local, and models
 - ii. Authenticating, serializing and deserializing information of the user.
 - iii. See comments for detailed info on each new
 - b. Config.json
 - i. Development files should match local information when downloading it to local drive to test
 - c. isAuthenticated.js