

CSCI 421– Advanced Web Development

Lab 8 – Final Project

For this lab you will start with your Blogger application from Lab 7 as the basis and modify it to include a two-user interactive feature of your choice. Several possible two-user features you can add to your program include:

- Instant messaging that displays a message conversation thread
- A simple two-person game like Tic-Tac-Toe or Hangman
- A rating and comment feature allowing another user to add comments to some other user's blog posts
- ... other (if you can think of another send the instructor an email for discussion and approval before starting).

PUBLIC SERVICE ANNOUNCEMENT: The professor has not developed an example application for this lab due to the fact that the student is allowed to choose the exact feature of their application and therefore no “reference solution” is possible.

DUE DATE: *This lab is due to the instructor by Monday, April 22nd at 11:59pm.*

Instructions:

1. Using your Amazon Lightsail MEAN instance, make a copy of your previous Lab 7 application either using Linux copy commands or GIT commands to pull down the previous application to a new (different than previous) directory.
2. Your web application must adhere to the following specification:

Specification:

- i. **Port 80:** Your application must load from a browser via port 80, which is the standard HTTP port for a server.
- ii. **Update your Database Schema as Needed:** Depending on your new feature you may need to update your database schema, or even add in a whole new model.
- iii. **Update various parts of the Full Stack app:** Again, depending on your feature you will likely need to update and extend your REST API, possibly with whole new endpoints. In addition, updates to your Angular app including new and updated controllers, new templates/screens, etc., are likely and expected.
- iv. **** MUST REQUIRE TWO USERS **:** Your new feature must require two user accounts to be tested and depending on the feature those two users will likely need

to be logged in at the same different (different browser windows...not the same app different tabs) and interacting simultaneously.

- v. **** UX MUST WORK WITHOUT APP REFRESH ****: This means that your new feature and interactions within the user experience must occur automatically, without the need to hit the refresh button of the browser to take effect. For example, if your feature is a game, when the other player makes their move the active player's application screen will update automatically to show that move without the need for the user to initiate a refresh. If a blog comment/rating feature, a new comment will show up on the listing screen, if that screen is active, without the need to refresh.
 - vi. **Impress Your Friends**: You will likely be demoing your new feature to the class, so try to make it impressive.
 - vii. **Always Running**: Your application must be setup to run even with your MEAN instance is not connected.
3. Using your GitHub account and the repository created and used prior and save this lab as a new branch ("Lab 8").
 4. Once you have the application working and it is available via port 80 even when disconnected from your MEAN instance and you have your app uploaded to your GitHub repo, please send the full URL of your app AND your GitHub repo to the instructor via email with subject of "Lab8". Important:

<mailto:thomas.rogers@millersville.edu?subject=Lab8>