CSE 3342

A15 Python Server JavaScript Client DUE: Thursday Nov 2 at noon

- Create a Web Page (with JS) that gets a phone number from a user and passes that number to a Python server program.
- The server program should validate the format of the phone number and the area code (based on a data file) and return the state of the area code.

HTML JS Client

Create a HTML page with JS that:

- Displays your name and id
- Displays two text boxes one for area code, the other for the eight digits of the number that may use '-' or '.' as separators
- Displays a button labeled VALIDATE PHONE
- Makes an AJAX call back to your server program sending the area code and number in any format you choose

Python Server Program

Based on the data sent to your Python server program, return JSON to your client. How you organize the JSON is up to you in terms of key-value pairs. The bottom line is that the browser must use the JSON to distinguish and report on three different situations:

- 1. Valid format and valid area code
- 2. Invalid number format (e.g. 222*3333)
- 3. Valid number format (2223333 or 222-3333 or 222.3333) Invalid Area Code

How to Validate the State

Download the file stateAreaCodes.csv, a CSV file with all the area codes and corresponding state names. Use this file on your server to validate incoming area codes. How you accomplish this is part of the assignment.

JS Client Display – three situations:

- 1. IF Valid Area Code and Valid phone number format.
 - a. Display a message in green that says "VALID" and display the phone number
 - b. Display the state of the area code
- 2. IF Invalid phone number format
 - a. Display in RED "INVALID Phone Number" and display number

- 3. IF Valid phone number format but INVALID Area Code
 - a. Display message in RED "INVALID AREA CODE" and display area code

Part B. DEPLOY

- Use WINSCP or the FTP program of your choice to login to one of the Lyle Servers.
- Navigate to your public html folder and create a subfolder called cse3342.
- Set permissions on the folder to 755. Move your .py file to your cse3342 directory.
- Set permission on the file to 755. Your python program may be named anything you choose.
- Submit the URL of the web page to Canvas don't use the same URL you used for previous assignment.

Extra Credit – JS Client Side Area Code Checking (5 pts)

- Write JS code so that <u>area code validation occurs on your JS client</u>. Your solution must be such that if a new area code is added to the list of valid area codes, the source code of your JavaScript does not change. This means that it is not permitted to hard code a list of area codes in your JS code.
- If the user enters an invalid area code, display a message or show an alert (up to you) but do not allow an invalid area code to be sent to the server.
- If your HTML/JS implements this feature, display the phrase "Client Side Area Code Checking" as part of your HTML

If you choose the extra credit option, it must be submitted by the deadline for the assignment.