Lab 10 jQuery, JSON, and XML

Given October 24, 2018 Due November 1, 2018

Lab 10 jQuery, JSON, and XML

What you need to have done within lab hours

Problem 1. Getting JSON Data

Problem 2. Getting XML Data

Problem 3. Retrieving information via Google Geocoding

What you need to have done within lab hours

Problem 1. Getting JSON Data (3 points)

With the input JSON file which is called nations ison as shown in Figure 1.

```
© ■ Secure | https://fb.kku.ac.th/krunapon/json/nations.js
1
      // 20171005181757
2
      // https://fb.kku.ac.th/krunapon/json/nations.json
3
4 ▼ {
5 🔻
        "nations": [
6 ▼
7
             "name": "Thailand",
             "location": "Southeast Asia"
8
9
10 •
11
             "name": "USA",
12
             "location": "North America"
13
14
        15
```

Figure 1: Input file nations.json

Create the web page which is called **getnations.html** that uses jQuery such that it displays each nation name and location as shown in the figure below. Note that the values "Thailand", "Southeast "Asia", "USA", and "North America" is not written in the web page but it is obtained from retrieving content at the above URL

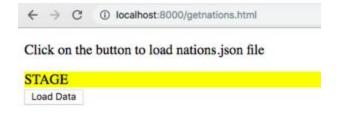


Figure 2: The interface of the web page getnations.html

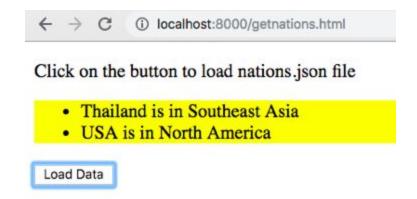


Figure 3: The web page getnations.html after clicking the button "Load Data"

Problem 2. Getting XML Data (3 points)

With the input XML file which is called nations.xml as shown in Figure 4.

Figure 4: Input file nations.xml

Create the web page which is called **parse-nations.html** that uses jQuery such that it displays each nation name and location as shown in the figure below. Note that the values "Thailand", "Southeast "Asia", "USA", and "North America" is not written in the web page but it is obtained from retrieving content at the above URL

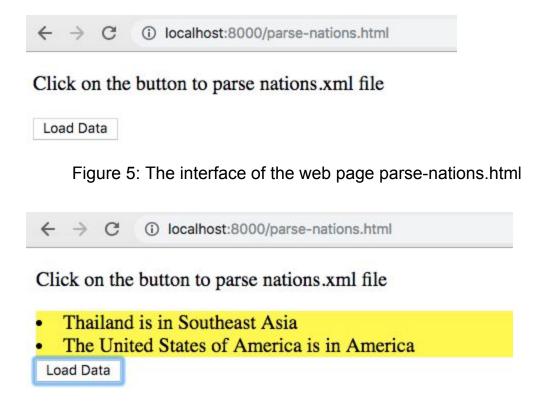


Figure 6: The web page getnations.html after clicking the button "Load Data"

Problem 3. Retrieving information via Google Geocoding (4 points)

Call Google Geocoding at

https://maps.googleapis.com/maps/api/geocode/xml?address=Khon%20Kaen%2 OUniversity&key=<key> in order to get the result as shown in the input in Figure 7 and the output in Figure 8.

```
← → C â https://maps.googleapis.com/maps/api/geocode/xml?address=Khon%20Kaen%20University&... Q ☆ ⑤ ⑥ ⑥
                                                                                                 Search by name or XPath
<GeocodeResponse>
   <status> OK </status>
 ▼ <result>
     <type> establishment </type>
     <type> point of interest </type>
     <type> university </type>
     <formatted_address> 23 Moo 16 Mitrapha Rd Ran Amphoe Mueang Khon Kaen, Chang Wat Khon Kaen 40002, Thailand /formatted_address>
   ▼ <address_component>
       <long name> 23 Moo 16 Mitrapha Rd </long name>
       <short_name> 23 Moo 16 Mitrapha Rd </short_name>
        <type> route </type>
     </address_component>
   <address_component>
   <address_component>
   <address_component>
   <address_component>
   <address_component>
     <geometry>
        <location>
         <lat> 16.4775510 </lat>
          <lng> 102.8231050 </lng>
        </location>
        <location_type> GEOMETRIC_CENTER </location_type>
```

Figure 7: Google Geocoding with requested address = "Khon Kaen University"

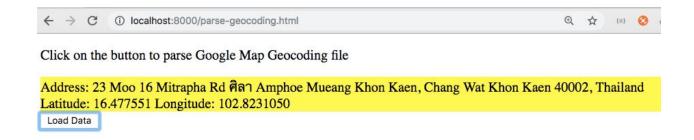


Figure 8: The web page displaying the information via Google Map Geocoding