Project 4

CIS 408 Internet Computing

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HTTP File Request with AJAX to Process JSON and XML data

Write AJAX calls to request two input files: a JSON file (YelpOneBusinessJsonData.json) and XML data file (menu.xml) from the CIS408 Class Webpage in http://eecs.csuohio.edu/~sschung/CIS408/CIS408.html where the eecs webserver is running.

The JSON data file and the XML data file are in the Project 4 section in the Lab Section. You can request those files on the class webpage. You have to request and get the files directly from the CIS408 site using AJAX or JQuery.

For this Project, we assume that you requested a file for a restaurant named "Mr Hoagie" that your customer requested in your website and you received a JSON file (YelpOneBusinessJsonData.json) from a Yelp web server (we assume that our eecs webserver is the Yelp server) that contains business information for the restaurant. The JSON data file and the XML data file are in the Project 4 section in the Lab Section on http://eecs.csuohio.edu/~sschung/CIS408/

Do the same data processing as instructed in Project 3 to generate the same outputs for YelpOneBusinessJsonData.json. As in Project3, you have to extract information from the JSON file and display the information about the restaurant in your webpage for your customer in the specified format as below.

Write a JS script to display the following information in your webpage to provide the information for your customer as follow:

Extract the following information per Event in your Drop Down list to display it in your web page:

- Name of Restaurant : extract from "name" of "Restaurants"
- Address of Restaurant: extract from "full_address"
- Business Hours of Restaurant: "hours" in a format below (for example)

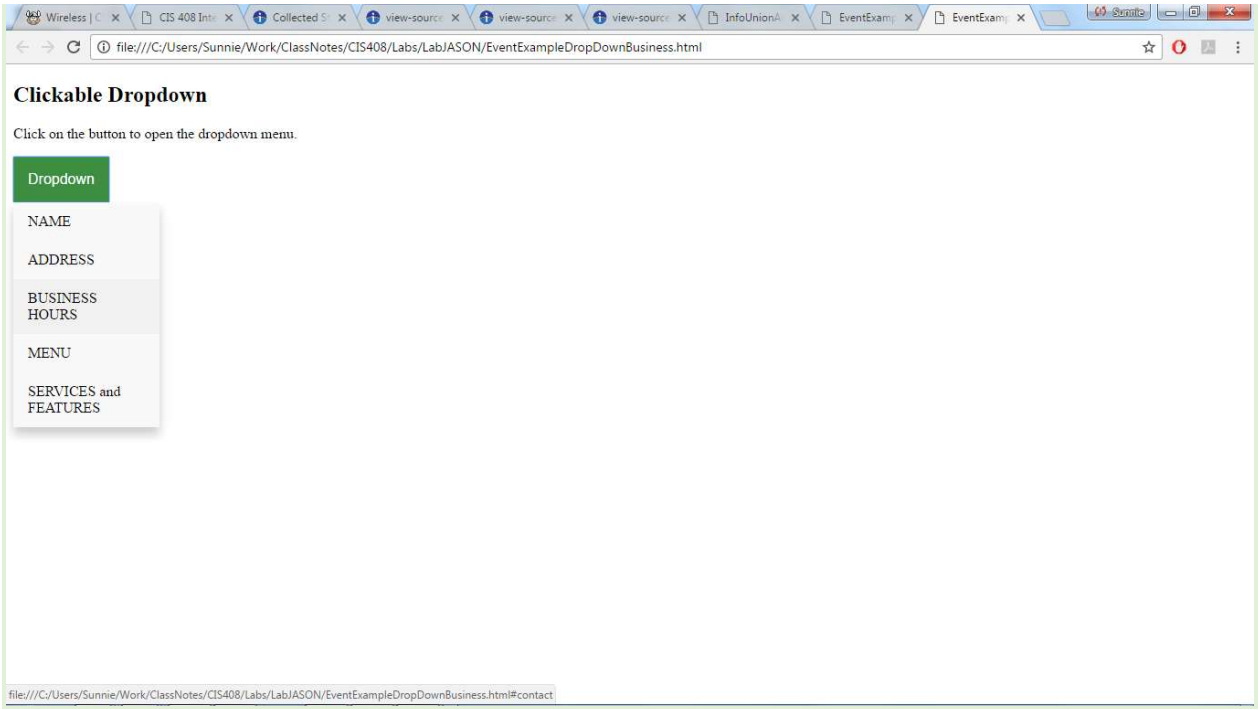
Hours

Monday	7:00 am - 10:00 pm
Tuesday	7:00 am - 10:00 pm
Wednesday	7:00 am - 10:00 pm
Thursday	7:00 am - 10:00 pm
Friday	7:00 am - 11:00 pm
Saturday	11:00 am - 11:00 pm
Sunday	5:00 pm - 10:00 pm

- Available Service of Restaurant: extract from each key name of "attributes" whose value is marked as "true" in a table format

Display these info in your webpage as follow:

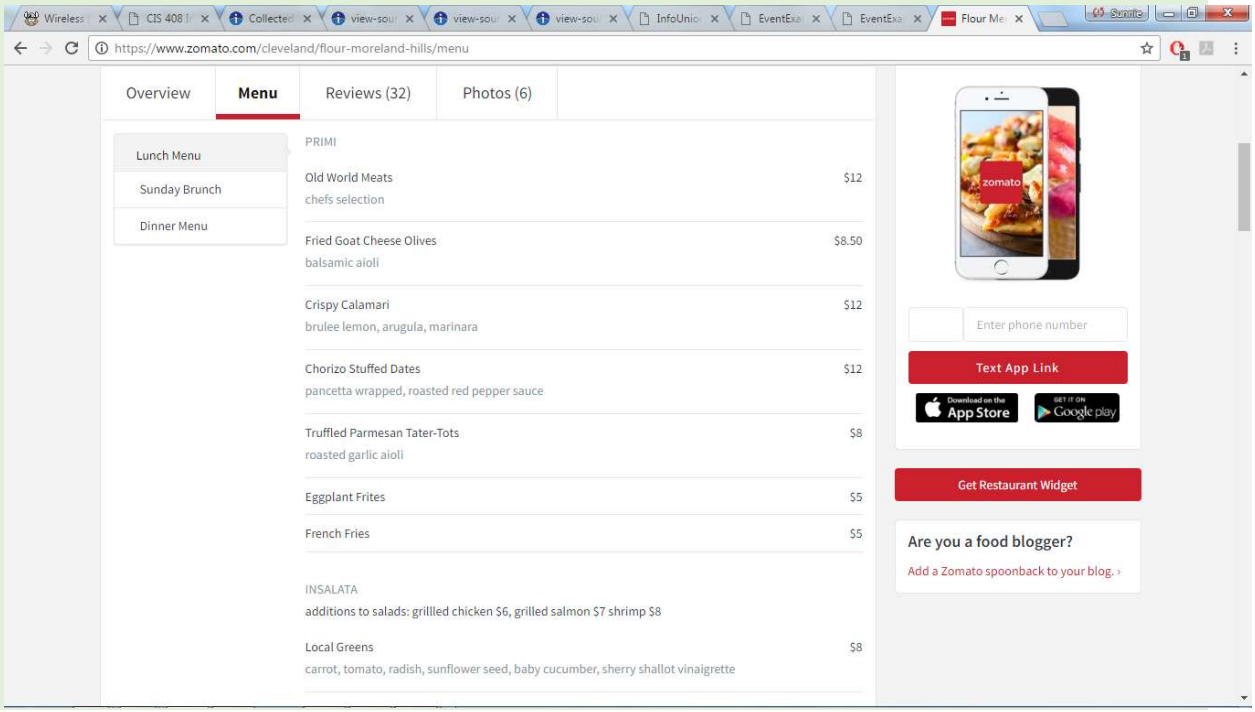
- Implement the DropDown list as shown below.



1. Whenever each item in your drop down list is hoovered by mouse, the item background color gets darkened.
2. Get the button, and when the user clicks on it, execute each Function to display info as specified.
3. Each Function toggles between adding and removing the show class, which is used to hide and show the dropdown content.
4. Whenever each item in your drop down is clicked by mouse, the information (extracted from the json file, "YelpOneBusinessJsonData.json") for the list item gets displayed in each corresponding section of your webpage. If multiple items of the drop list are

clicked in a sequence, multiple sections for the information will be displayed in the mouse click sequence.

5. The Menu is clicked, extract and display the menu information as below from the file restaurant_menu.xml with another drop down list for BREAKFAST, BRUNCH, LUNCH, DINNER, DRINKS. Create the same drop down list for each item as specified in the main drop down list above. Use XPATH for this task to select elements in the XML DOM Tree.
6. The menu in your html page would look like below for example (Ignore the buttons for Overview, Menu, Review, Photo) at the top, each description under each menu item and the ad in the right pane of this example page).



You need to create the following CSS as in the sample. You can create your own CSS as well:

```
<style>
.dropbtn {
    background-color: #4CAF50;
    color: white;
    padding: 16px;
    font-size: 16px;
    border: none;
    cursor: pointer;
}
```

```
.dropbtn:hover, .dropbtn:focus {
    …
}

.dropdown {
…
}

.dropdown-content {
    display: none;
    position: absolute;
    background-color: #f9f9f9;
    min-width: 160px;
    overflow: auto;
    box-shadow: 0px 8px 16px 0px rgba(0,0,0,0.2);
}

.dropdown-content a {
…
}

.dropdown-content a:hover {
… }

.show {display:block;}
</style>
```

To see the Yelp Business Data Format in Jason, you can open the file "OnebusinessDataFormat_yelp.json" using NotePad++.

Notes:

1. Use FireFox for Project 4 if you have a problem with Google Chrome

2. Correct $$ to 2 for Price in the JSON input then use it.

3. Not every elements has NAME elements in XML data, which is Intended for irregular data. Text data (Whether with/without NAME element) is the name for the menu.

4. If there is a misspelled tag: Correct it first then use it. -- Always do XML data validation first before processing it !

5. If you can't get input as a file in your Java Script, you can directly use each JSON and XML text as text string in your codes ONLY for this project.

Note that when you use AJAX/JQUERY to request and receive your input files from the EECS Webserver for Project 4, read the following Same Domain Policy to follow for Web Security and Intellectual Property.

Same Domain Policy: You can only access (Request) a file or resource in your Java Script ONLY When the file is located on the same domain where your Html file with Java Script is.

This means that you have to put your Java Script with your Html file under your webpage directory on our eecs webserver domain (eecs.csuohio.edu) where the CIS408 Class webpage is.

Submit the followings:

On Blackboard:

1. Lab Report should include your set up/platform procedure, screen captures to show all the execution to generate the output file in HTML page and (copy and paste) of your source codes.
2. All your codes/scripts, input and all the output files in one zip file.

In Class: A printout of your report.