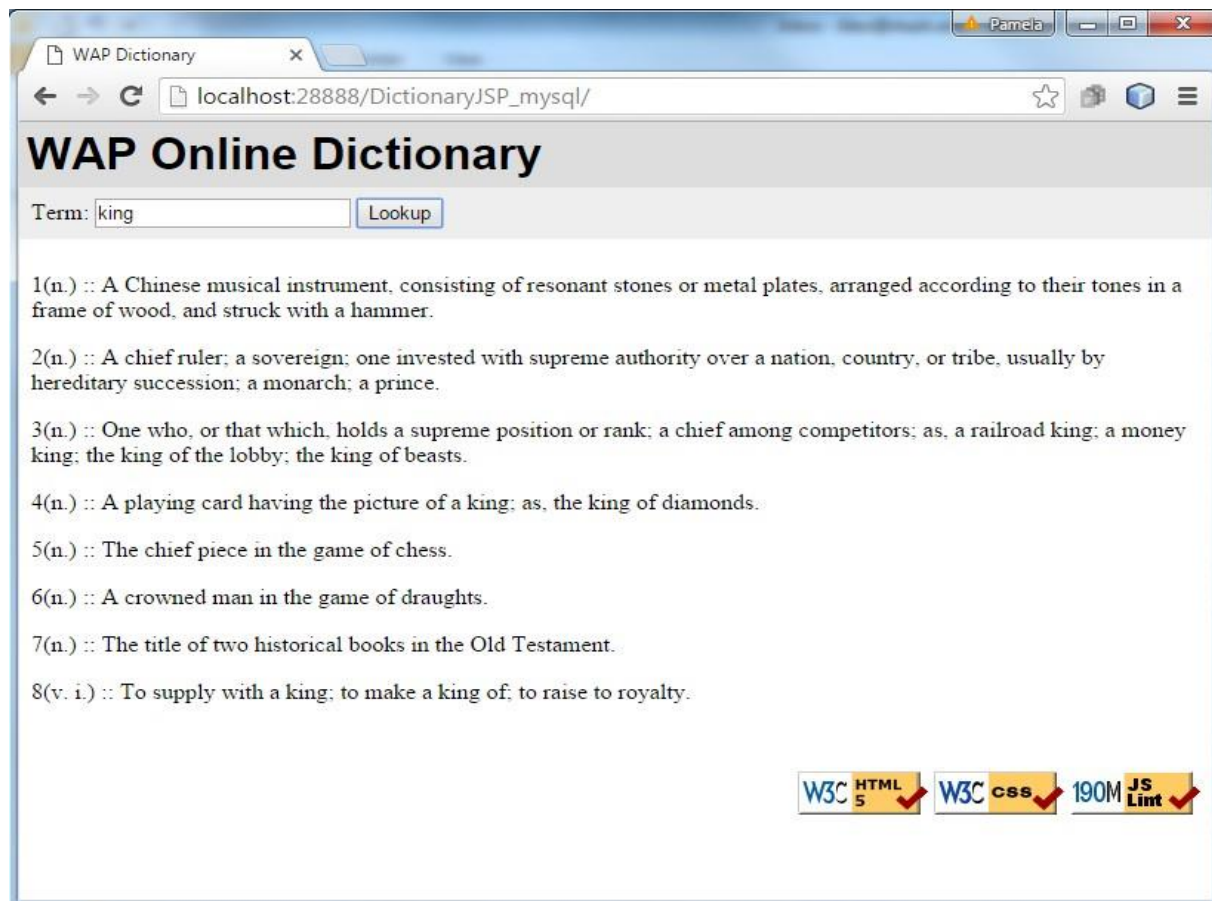


Online Dictionary Project

The purpose of this project is to review and integrate all of the tools and techniques you have learned in this course. In this project, you will create a website that uses all of the following technologies: HTML, CSS, JavaScript, jQuery, Node.js, AJAX, SQL, and JSON.

Your goal is to create a simple website that functions as an Online English Dictionary. The Dictionary is stored on the web server as a SQL table with three fields: word, word type, and definition. Your website is created using the following files:

dict.html	displays the webpage containing the User Interface
dict.css	styling for dict.html
dict.js	JavaScript event handlers for dict.html
jQuery.js	Standard jQuery library
Dictionary.js	Node.js web server for this web site
word.js	Node.js program to lookup the term in the database, collect the meanings, and send JSON to Browser



The main webpage (User Interface) has a text field for the User to enter a word and a Lookup Button to request the definition of the word. When the User clicks the Lookup Button, a JavaScript event handler (in file dict.js) is invoked that contains a jQuery Ajax call. The Ajax call picks up the word from the text field and sends it to the Web Server (Dictionary.js). Then the Server calls word.js to find the definition(s) of the word in the SQL Dictionary, and then converts the definition(s) into JSON format and transmits it back to the JavaScript in dict.js, where jQuery is used to display the definition(s) on the website. If there are multiple definitions, then all should be displayed. The above picture is a simple example of a display. You can style it to make it more visually appealing.

MySQL Dictionary

The file [englishdictionary.sql](#) contains a full English Dictionary, and can be downloaded from the course website. You will need a database on your machine that can host a large set of records. You can download MySQL from <http://dev.mysql.com/downloads/mysql/>

- Use the MySQL Installer 8.0.24 for Windows
- If XAMPP or WAMP is installed on your computer, uninstall them before installing MySQL
- The following settings should work for the MySQL installation
 - root password: root //or your choice
 - add yourself as user
 - username: [your name]
 - host <All Hosts(> //this is default
 - role: DB Admin //this is default
 - authentication: MySQL //this is default
 - password: [mysql] //or your choice
 - then do Execute on the config steps

MySQL Workbench

- Open [englishdictionary.sql](#) file, copy all, paste it on MySQL Workbench and run it.
- It will create entries database and entries(word, wordtype, definition) table.
- Now you should be able to find the entries tables and view the data similar to the following screenshot

Local instance MySQL80 (dognition)x unconnected x Local instance MySQL80 (dog... x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

- cs544
- dognition**
 - entries**
 - Tables**
 - entries**
 - login
 - userdetails
 - Views
 - Stored Procedures
 - Functions
 - kpmg
 - sakila
 - sys
 - wind

Query 1 **entries**

Limit to 50000 rows

1 • `SELECT * FROM entries.entries;`

Result Grid

	word	wordtype	definition
▶	A		The first letter of the English and of many other...
	A		The name of the sixth tone in the model major s...
	A		An adjective, commonly called the indefinite arti...
	A		In each; to or for each; as, "twenty leagues a d...
	A	prep.	In; on; at; by.
	A	prep.	In process of; in the act of; into; to; -- used wit...
	A		Of.
	A		A barbarous corruption of have, of he, and som...
	A		An expletive, void of sense, to fill up the meter
	A-		A, as a prefix to English words, is derived from ...
	A 1		A registry mark given by underwriters (as at Llo...
	Aam	n.	A Dutch and German measure of liquids, varyin...