Advanced JavaScript

Restaurant Guide

Project

Requirements

Web Age Solutions

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# Introduction

## Purpose

This *Functional Specification* is used as a guide for the Advanced JavaScript Class *Restaurant Guide* project. The Restaurant Guide is used to list restaurants by cuisine type and display address information and reviews.

## Scope

This document describes the specification of the Restaurant Guide project. The project will provide a web application that allows a user to select a cuisine type and view associated restaurants and reviews.

The project will utilize a NodeJS server to read cuisine types and restaurant info from files and deliver them to the application as RESTful Web services.

# General Description

## Functionality

The Restaurant Guide application is a single page Web application used to display restaurants and reviews by cuisine type. It provides the following functionality:

### 2.1.1 Server Functionality

* Reads cuisine types (e.g. sushi, tapas, pho) from file
* Reads restaurant information from files
* Serves static (HTML, CSS, JavaScript) files to client

### 2.1.2 Client Functionality

* Retrieves cuisine types from server
* Allows user to select a cuisine type
* Displays restaurant information for the selected cuisine type

## Assumptions and dependencies

* Users will have an HTML5 compliant browser (Google Chrome preferred)
* Users will be able to install NodeJS and Node Package Manager from the Internet

# Restaurant Guide Application Requirements

## Data File Requirements

* Cuisine names shall be stored in a file named *cuisines.json*
* Cuisine names shall be stored in a JSON array
* There shall be at least one cuisine type
* Restaurant information shall be stored in files
* There shall be one restaurant information file for each cuisine name
* Each restaurant information file shall be named *cuisine-name*.json (i.e. sushi.json)
* Restaurant information files shall contain information for at least one restaurant
* Restaurant information shall in JSON format
* Restaurant information files shall contain an array of restaurant information
* Restaurant information shall contain only the following fields:
  + name
  + address
  + city
  + state
  + zip
  + review (the review field shall be an array of review paragraphs)
  + rating (1-5)

## Server Requirements

* The server shall read the list of cuisines from the cuisines file
* The server shall store the list of cuisines in an array
* The server shall read each type of restaurant information form its respective file
* The server shall add a field to each restaurant information object indicating its associated cuisine
* The server shall create an array of all restaurant information objects
* The server shall expose a RESTful Web service to return all cuisines in JSON format
* The server shall expose a RESTful Web service to return all restaurant information objects in JSON format
* The server shall expose a RESTful Web service to return all restaurant information objects for a specific cuisine type
* The server shall act as a web server and serve *static files* from a specified directory

## Web Application Requirements

* The web application shall retrieve the list of cuisines via a RESTful Web service
* The web application shall display a list of cuisine
* The web application shall allow *exactly one* cuisine to be selected
* The user shall be able to select a cuisine in the web application
* The web application shall display the name and address of each restaurant with the selected cuisine
* The web application shall display a link or badge to allow the user to display or hide the review for each restaurant