API Specifications

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Make a simple document containing the following for each route your app executes:
● Description of the functionality of the route
● Request path
● Request parameters, types, and descriptions
● Query Parameters
● Response parameters, types, and descriptions
Using (possibly updated) queries from Milestone 3, consolidate

An effective way to define an API spec will include, for each route, the following:
1. The request path (ex. /getUser) along with the method (i.e. GET, POST, DELETE, PUT) and a description of what the route is doing (ex. retrieves a user by username).
2. The request params, including the name (ex. username), param type (path or query), data type (i.e. integer, string, etc.), required / optional indicator, and description (ex. username corresponding to a user)
3. The response params, including the name, data type, and description.

Route 1

- **Route Path:** /cuisinetypes_by_city
- **Description:** Returns the distinct cuisine categories for the selected city
- **Route Parameters:** None
- **Query Parameters:** city (string), state (string)
- **Route Handler:** cuisinetypes_by_city(req, res)
- **Return Parameters:** [{categories (string)}]
- **Expected Output Behavior:** Returns an array of objects sorted by the cuisine category in ascending alphabetical order

Route 2

- **Route Path:** /all_cities
- **Description:** Returns the unique cities and states of restaurants in the Yelp business dataset
- **Route Parameters:** None
- **Query Parameters:** None
- **Route Handler:** all_cities(req, res)
- **Return Parameters:** [{city (string), state (string)}]
- **Expected Output Behavior:** Returns an array of (city, state) tuples sorted in ascending alphabetical order by city

Route 3

- **Route Path:** /top_5_stars_by_city
- **Description:** Returns the top-5 restaurants in a selected city, as rated by the number of stars and review counts in the Yelp business dataset
- **Route Parameters:** None
- **Query Parameters:** city (string), state (string)
- **Route Handler:** top_5_stars_by_city(req, res)
- **Return Parameters:** [{business_id (string)}, {name (string)}, {address (string)}, {city, (string)}, {state (string)}, {postal code (string)}, {latitude (float)}, {longitude (float)}, {stars (float)}, {review_count (int)}, {is_open (int)}]
- **Expected Output Behavior:** Returns an array of business data about 5 particular restaurants, sorted in descending order of star ratings and review_counts

Route 4

- **Route Path:** /top_5_by_cuisine
- **Description:** Returns the top-5 restaurants of a specified cuisine type in a selected city, as rated by the number of stars and review counts in the Yelp business dataset
- **Route Parameters:** None
- **Query Parameters:** city (string), state (string), cuisinetype (string)
- **Route Handler:** top_5_by_cuisine(req, res)
- **Return Parameters:** [{business_id (string)}, {name (string)}, {address (string)}, {city, (string)}, {state (string)}, {postal code (string)}, {latitude (float)}, {longitude (float)}, {stars (float)}, {review_count (int)}, {is_open (int)}]
- **Expected Output Behavior:** Returns an array of business data about 5 particular restaurants, sorted in descending order of star ratings and review_counts

Route 5

- **Route Path:** /top_10_reviewers
- **Description:** Returns the top 10 Yelp Elite Reviewers based on the number of compliments they have received
- **Route Parameters:** None
- **Query Parameters:** None
- **Route Handler:** top_reviewers(req, res)
- **Return Parameters:** [{user_id: (string), name: (string), yelping_since: (string), total_compliments: (int), years_elite: (int) }]
- **Expected Output Behavior:** Returns an array of 10 most complimented Yelp Elite users, sorted by the number of compliments they received in descending order.

Route 6

- **Route Path:** /reviewers/:reviewer_id
- **Description:** Returns the all the restaurants that this yelp user has commented, sorted by the rating given by this specific user
- **Route Parameters:** reviewer_id

- **Query Parameters:** None
- **Route Handler:** get_reviewer_favorites(req, res)
- **Return Parameters:** [{business_id: (string), text: (string), user_rating: (int), name: (string), address: (string), city: (string), state: (string), postal_code: (string), latitude: (float), longitude: (float), stars: (float), review_count: (int), is_open: (int), city_state: (string) }]
- **Expected Output Behavior:** Returns an array of reviews that this user has submitted, sorted by this user's ratings.

Route 7

- **Route Path:** /top_reviewed_restaurants
- **Description:** Returns the top restaurants of yelp reviewers who has the most number of friends on Yelp
- **Route Parameters:** None
- **Query Parameters:** None
- **Route Handler:** get_top_reviewed_restaurants(req, res)
- **Return Parameters:** [{user_id: (string), friends_count: (int), business_id: (string), restaurant_name: (string), latitude: (float), longitude: (float), categories: (string) }]
- **Expected Output Behavior:** Returns an array of top restaurants of each yelp reviewers who has the most number of friends on Yelp

Route 8

- **Route Path:** /restaurant_elite_reviews/:business_id
- **Description:** Returns all of the Yelp Elites's review for this particular restaurant
- **Route Parameters:** business_id
- **Query Parameters:** None
- **Route Handler:** get_restaurant_elite_reviews(req, res)
- **Return Parameters:** [{user_id: (string), text: (string), date: (string) }]
- **Expected Output Behavior:** Returns an array of all the reviews given by Yelp Elites on this restaurants

Route 9

- **Route Path:** /city
- **Description:** This route retrieves a list of the top 10 walkable cities with the highest number of restaurants in each city.
- **Route Parameters:** None
- **Query Parameters:** None
- **Route Handler:** top_10_walkable_city(req, res)
- **Return Parameters:** [{city(string), state(string)}]
- **Expected Output Behavior:** When a GET request is made to this route, the server will execute a SQL query to retrieve the top 10 walkable cities with the highest number of restaurants.

Route 10

- **Route Path:** /city/:city/:state
- **Description:** This route retrieves detailed information about a specific city identified by its name and state.
- **Route Parameters:** city(string), state(string)
- **Query Parameters:** None
- **Route Handler:** city_detail(req, res)
- **Return Parameters:** [{city(string), state(string), walkability_score (float), total_population (int), total_household (int)}]
- **Expected Output Behavior:** When a GET request is made to this route with a valid city and state, the server will execute a SQL query to retrieve detailed information (walkability score, total population and total households in the given city) about the specified city from the database.

Route 11

- **Route Path:** /top_restaurants/:city/:state
- **Description:** This route retrieves the top-rated restaurants in a specific city identified by its name and state.
- **Route Parameters:** city(string), state(string)
- **Query Parameters:** None
- **Route Handler:** city_top_restaurants(req, res)
- **Return Parameters:** [{business_id (string), name (string), city (string), state (string), ratings (float), votes (int)}]
- **Expected Output Behavior:** Return the top-rated restaurants in the specified city from the database.

Route 12

- **Route Path:** /city_restaurant/:business_id
- **Description:** This route retrieves detailed information about a specific restaurant identified by its business_id.
- **Route Parameters:** business_id (string)
- **Query Parameters:** None
- **Route Handler:** city_restaurant(req, res)
- **Return Parameters:** [{business_id (string), name (string), city (string), state (string), …, ratings (float), text (string)}]
- **Expected Output Behavior:** Return detailed information about the specified restaurant from the database, such as business id, restaurant name, address, restaurant attributes (GoodForKids, Price range), operation hours from Monday to Friday.