

## Quiz Questions | Answers

### Module 9 | Searching for listings with Google's Geocoding API

**1. Geocoding is the process of converting human-readable address information into geographic coordinates (i.e. latitude and longitude).**

- A: True
- B: False

**Answer:** A - True.

**2. If a user granted your application access to their real-time location information, reverse geocoding can be used to identify the city they are in.**

- A: True
- B: False

**Answer:** A - True. Real-time location information (with a GPS for example) often provides a user's location in geographic coordinates. Therefore, reverse geocoding can be used to identify the city they are in.

**3. A database index helps improve the speed of:**

- A: All data retrieval operations in a database.
- B: Specific data retrieval operations.
- C: All data insertion operations in a database.
- D: Specific data insertion operations.

**Answer:** B - Specific data retrieval operations. A database index is a data structure that improves the speed of **specific** data retrieval operations at the cost of additional writes and storage space to maintain the index data structure. An index on the `name` field of a collection, in MongoDB, will not help improve the speed of a query based on the `location` field of the same collection.

**4. In our implementation, why did we require the geocoder to at least derive the country of the location that is being searched for?**

- A: The TinyHouse application only allows for the searching of listings in countries.
- B: To maintain good practice and ensure that the geocoder should always derive the country, city, administration area, and postal code of a location input.
- C: To complement how Google's Geocoding API works.
- D: Every location being searched for should have a country associated with it. If a country can't be found, this most likely means the search didn't work as intended.

**Answer:** D - Every location being searched for should have a country associated with it. If a country can't be found, this most likely means the search didn't work as intended.