



Senior
Integration
Developer –
Integration Scenario

Scenario

- The client has a simple scenario
- REST countries API (<https://restcountries.eu/#api-endpoints-all>) returns detailed country information
- OpenWeatherMap REST API (<https://openweathermap.org>) returns detailed weather information for a particular city
- The client needs a new REST API which will:
 - a) Support CRUD operations for a city
 - b) Combine weather and country data for a particular city when searching

Requirements

- Create a C# REST API that supports the following operations
 - Add City - adds city name, state (i.e. geographic sub-region), country, tourist rating (1-5), date established and estimated population. Adds record to local SQL data store and generates unique city id.
 - Update city – update rating, date established and estimated population by city id
 - Delete city – delete city by city id
 - Search city – search by city name, and returns the city id, name, state (i.e. geographic sub-region), country, tourist rating (1-5), date established, estimated population, 2 digit country code, 3 digit country code, currency code and weather for the city. If there are multiple matches, this information is returned for all matches. If the city is not stored locally no results need be returned. The APIs above should be used to provide any information not stored locally.
- The Add, Update and Delete operations will take place against a local SQL data store
- Provide at least 1 unit test

Non-Functional Requirements

- There's only 1 explicit non-functional requirement:
 - Structure your code using modern development practices, the type you'd be proud to see in production



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