

The project contains a set of unit tests written in C# using the MSTest framework to test the API for retrieving information about cocktails and ingredients from TheCocktailDB.

### Functional Tests:

There are tests for searching ingredients by name:

- **SearchIngredients\_ExistingIngredient\_ReturnsExpectedFields** - Verify that searching for an existing ingredient returns expected fields.
- **SearchIngredients\_CaseInsensitive\_ReturnsExpectedResults** - Verify that searching for ingredients is case-insensitive.
- **SearchIngredients\_PartialName\_ReturnsExpectedResults** - Verify that searching for ingredients with a partial name returns expected results, e.g. vod (for vodka).
- **SearchIngredients\_NonExistingIngredient\_ReturnsNull** - Verify that searching for a non-existing ingredient returns null.

There are also tests for searching cocktails by name.

- **SearchCocktails\_ExistingCocktail\_ReturnsExpectedFields** - Verify that searching for an existing cocktail returns expected fields.
- **SearchCocktails\_NonExistingCocktail\_ReturnsNull** - Verify that searching for a non-existing cocktail returns null.
- **SearchCocktails\_CaseInsensitive\_ReturnsExpectedResults** - Verify that searching for cocktails is case-insensitive.
- **SearchCocktails\_PartialName\_ReturnsExpectedResults** - Verify that searching for cocktails with a partial name returns expected results, e.g. marg (for margarita)
- **SearchCocktails\_WithSpecialCharacters\_ReturnsExpectedResults** - Verify that searching for cocktails with special characters in the name returns expected results. e.g. Piña Colada

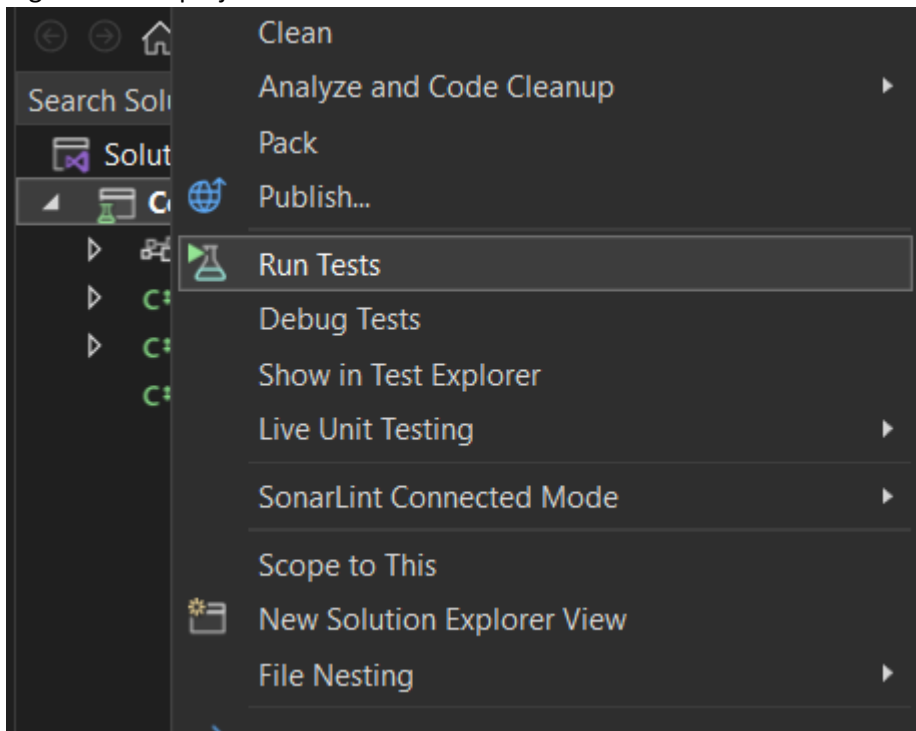
### Non-functional tests:

1. Performance Test
  - Measure the API response time under varying load conditions.
  - To automate performance tests, JMeter can be used to simulate concurrent user requests to the API and measure the response time for various load levels.
2. Reliability and Availability
  - Evaluate the reliability and availability of the API by assessing its ability to consistently handle requests and maintain uptime.
  - To automate reliability and availability testing, JMeter can be used.

### Instructions

To run these tests, you can use Visual Studio to execute the tests. Below are the instructions:

1. Open the project using Visual studio.
2. Right click the project and click run tests



3. Test explorer will open up and execute the tests.

