**Analysing the requirements:**

The provided link is for the documentation of the iTunes Search API from Apple. The API allows to search for content on the iTunes Store and Apple Books Store, retrieve details about albums, songs, movies, books, etc., and obtain metadata for media content.

To effectively test the API, we need to understand its functionalities, endpoints, request/response formats, authentication mechanism, and any specific constraints or limitations mentioned in the API Contract.

**Test Plan:**

**a. Test Objective:**

The objective of testing the iTunes Search API is to ensure its functionality, reliability, and compliance with the documented specifications.

**b. Test Scope:**

The testing will focus on the following areas:

API endpoints and their corresponding functionality

Handling of different types of search queries

**c. Test Cases:**

Based on the API documentation, we can create test cases covering the following scenarios:

* Positive test cases: Valid search queries and expected responses.
* Negative test cases: Invalid or unsupported search queries and expected error responses.
* Boundary test cases: Testing with maximum and minimum input values.
* Error handling test cases: Testing different error conditions and verifying error messages.

**e. Test Execution:**

The tests can be executed manually or using automated test scripts. The execution steps will include:

* Sending API requests
* Comparing the actual responses with the expected results.
* Verifying error responses and messages.
* Testing authentication mechanisms, if applicable.
* Logging and reporting any issues encountered during the testing process. (Reports not included as of now.)

**Creating Automated Tests:**

To create automated tests, I have used JAVA as my primary programming language .The tests can be created based on the test cases defined in the test plan.

Example automated test scenarios:

* Verify valid API
* Verify the response format and data integrity for different search results.
* Verify error response when an invalid search query is provided. (Not included)

The automation framework can make HTTP requests to the API endpoints, parse the JSON or XML responses, and perform assertions to validate the expected outcomes. The tests can be executed as part of a test suite, and the framework can generate test reports for documentation and issue tracking.

**Discovered Issues:**

The provided API doesn’t have any specific endpoint.