

Charter

Identify capabilities and areas of potential instability of the “rest api todo list manager”.
Identify documented and undocumented “rest api todo list manager” capabilities.
For each capability create a script or small program to demonstrate the capability.
Exercise each capability identified with data typical to the intended use of the application.

NOTE: This session will be testing the above for todos of the REST API Sessions 2, 3, 4 will be testing projects, categories, and the interoperability of these capabilities (respectively).

Build

`java -jar runTodoManagerRestAPI-1.5.5.jar`

Area

Capabilities and areas of potential instability (documented and undocumented) as well as tests using data typical to the intended use of the application.

Environment

Mac OS, Screen resolution 1400x1050

Start

9:44 am, 02/03/2023

Other Data

List of commands used in this session is in the file ‘ListOfCommands.txt’

Testers

Neel Faucher, 260921929, neel.faucher@mail.mcgill.ca

Session Breakdown


Total length 45 minutes

Test Notes

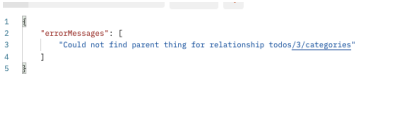
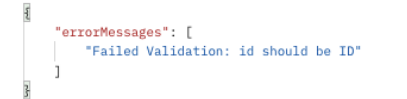


02/03/2023


9:44 AM

Ran the REST API on web browser

Date & Time	Tester Name	Curl Command	Command: Refer to 'ListOfCommands'	Charter Specifics	Note	Output
02/03/2023, 9:46 AM	Neel Faucher	GET	Command #1	Documented capability	Worked as expected: all todo instances were retrieved	<pre> 1 { 2 "todos": [3 { 4 "id": "2", 5 "title": "file paperwork", 6 "doneStatus": "false", 7 "description": "", 8 "tasksof": [9 { 10 "id": "1" 11 } 12] 13 }, 14 { 15 "id": "1", 16 "title": "scan paperwork", 17 "doneStatus": "false", 18 "description": "", 19 "categories": [20 { 21 "id": "1" 22 } 23], 24 "tasksof": [25 { 26 "id": "1" 27 } 28] 29 } 30] 31 }</pre>
02/03/2023, 9:47 AM	Neel Faucher	HEAD	Command #2	Documented capability	No output visible; however since the GET is working the HEAD must be working	 <pre> Key: VALUE Date: Thu, 09 Feb 2023 17:40:55 GMT Content-Type: application/json Transfer-Encoding: chunked Server: Jetty(9.4.z-SNAPSHOT)</pre>
02/03/2023, 9:50 AM	Neel Faucher	POST	Command #3	Documented capability, typical data for application	Worked as expected: created a new todo without an ID as documented; an ID of 14 was randomly assigned	<pre> { "id": "14", "title": "this is a test", "doneStatus": "false", "description": "i love 429" }</pre>
02/03/2023, 9:52 AM	Neel Faucher	POST	Command #4	Undocumented Capability, typical data for application	Not working as expected: we are not allowed to create a todo with an ID	<pre> { "errorMessagees": ["Invalid Creation: Failed Validation: Not allowed to create with id"] }</pre>
02/03/2023, 9:54 AM	Neel Faucher	GET	Command #5	Documented Capability	Worked as expected: retrieved the todo I just created using the ID (14)	<pre> {"todos": [{ "id": "14",</pre>

						<pre>"title": "this is a test", "doneStatus": "false", "description": "i love 429"} }}</pre>										
02/03/2023, 9:55 AM	Neel Faucher	HEAD	Command #6	Documented Capability	No output visible; however since the GET is working the HEAD must be working	<div>Headers</div> <table><tr><th>KEY</th><th>VALUE</th></tr><tr><td>Date</td><td>Thu, 09 Feb 2023 19:35:42 GMT</td></tr><tr><td>Content-Type</td><td>application/json</td></tr><tr><td>Transfer-Encoding</td><td>chunked</td></tr><tr><td>Server</td><td>Jetty(9.4.z-SNAPSHOT)</td></tr></table>	KEY	VALUE	Date	Thu, 09 Feb 2023 19:35:42 GMT	Content-Type	application/json	Transfer-Encoding	chunked	Server	Jetty(9.4.z-SNAPSHOT)
KEY	VALUE															
Date	Thu, 09 Feb 2023 19:35:42 GMT															
Content-Type	application/json															
Transfer-Encoding	chunked															
Server	Jetty(9.4.z-SNAPSHOT)															
02/03/2023, 10:00 AM	Neel Faucher	GET	Command #7	Undocumented Capability, area of potential instability	Used a URL Query Parameter - the output was an empty array of todos. It is not clear how the URL is hashed and can be broken down.	<pre>{ "todos": [] }</pre>										
02/03/2023, 10:03 AM	Neel Faucher	POST	Command #8	Documented Capability, typical data for application	Worked as expected: created a new todo. Will use this to try to retrieve by URL Query.	<pre>{ "id": "15", "title": "simple", "doneStatus": "false", "description": "example" }</pre>										
02/03/2023, 10:05 AM	Neel Faucher	GET	Command #9	Documented Capability	Worked as expected: returned information for todo with provided ID value.	<pre>{ "todos": [{ "id": "13", "title": "Office Work Project", "doneStatus": "false", "description": "" }] }</pre>										
02/03/2023, 10:06 AM	Neel Faucher	DELETE	Command #10	Documented Capability, area of potential instability	BUG: was unable to delete a todo instance with a valid id number. This todo was visible when I called GET right after.	<pre>{ "errorMessages": ["Could not find any instances with todos/1\n"] }</pre>										
02/03/2023, 10:10 AM	Neel Faucher	DELETE	Command #11	Documented Capability, area of potential instability	Worked as expected: was able to delete item with ID 2 and then 1 when I tried it again. Therefore DELETE not consistently working	NA										

02/03/2023, 10:13 AM	Neel Faucher	PUT	Command #12	Documented Capability, typical data for application	Worked as expected: updated the title of todo instance with ID 14	<pre>{ "id": "14", "title": "this is a test updating", "doneStatus": "false", "description": "i love 429" }</pre>
02/03/2023, 10:16 AM	Neel Faucher	DELETE	Command #13	Documented Capability	Worked as expected: deleted the todo instance with ID 15	NA
02/03/2023, 10:18 AM	Neel Faucher	POST	Command #14	Undocumented capability	BUG: was unable to POST using XML input for valid ID value, relationship was not identified	 <pre>1 { 2 "errorMessage": [3 "Could not find parent thing for relationship todos/3/categories" 4] 5 }</pre>
02/03/2023, 10:20 AM	Neel Faucher	POST	Command #15	Documented Capability, area of potential instability, typical data for application	BUG: was unable to use POST using XML input for valid ID value, unclear error message was thrown	 <pre>1 { 2 "errorMessage": [3 "Failed Validation: id should be ID" 4] 5 }</pre>
02/03/2023, 10:21 AM	Neel Faucher	DELETE	Command #16	Documented Capability	Works as expected: since no todo with ID '300' exists, nothing happened and error was thrown	 <pre>1 { 2 "errorMessage": [3 "Could not find any instances with todos/300" 4] 5 }</pre>
02/03/2023, 10:23 AM	Neel Faucher	GET	Command #17	Documented Capability	Works as expected: the GET request is received and categories is returned.	<pre>{ "categories": [] }</pre>
02/03/2023, 10:26 AM	Neel Faucher	PUT	Command #18	Documented Capability	BUG: nothing is returned meaning that the relation is incorrect. Wrong Error.	 <pre>1 { 2 "errorMessage": [3 "Could not find parent thing for relationship todos/3/categories" 4] 5 }</pre>
02/03/2023, 10:29 AM	Neel Faucher	PUT	Command #19	Undocumented Capability	Works as expected was able to use PUT operation on a todo using XML.	<pre>{ "id": "13", "title": "hello", "doneStatus": "false", "description": "" }</pre>

02/03/2023, 10:30 AM	Neel Faucher	GET	Command #20	Documented Capability	Worked as expected: shutdown the API server	 <p>Could not get response</p> <p>Error: socket hang up View in Console</p> <p>Learn more about troubleshooting API requests</p>
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Session End: 10:31 AM

Sessions findings:

- Most of the documented API functions work properly
- Most of the error messages are intuitive
- There are issues with certain curl commands which are more drilled down
- Issues occur when trying to use XML text to update objects

Further testing ideas:

- Test using null parameters
- Test other commands i.e. PATCH, COPY
- Test commands where XML input failed with JSON
- Test inputs with HTML input
- Testing using computer with different OS