Charter Introduction:

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.

For categories

Environment:

MacOS, Screen Resolution 2560x1600 (Yida Pan)

Testers:

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Date:

17:25 PM, 01/02/2024

Run: java -jar runTodoManagerRestAPI-1.5.5.jar

Test Detail:

Time	Test er	Request	Туре	Note	Output in JSON file	Charter specific
17:30	Yida	http://localhost:456 7/categories	Get	work as expected, return all the instances of category	1 { 2	documented capability
17:34	Yida	http://localhost:456 7/categories	Head	No visible output,status 200 ok, Confusing since no visible output means potential instability	Body Cooles Helden (4) Test Besidos Petry Raw Preview Vessilate	documented capability Potential instability

17:36	Yida	http://localhost:456 7/categories/ with JSON body: { title: "Homework" }	Post	Satus is 201 created, a category with id 33 and title "Homework" is created successfully	Body Cookies Headers (5) Test Results Pretty Raw Preview Visualize JSON v 1 2 1 'id': "33", 3 1 title": "Honework", 4 1 description": "" 5 3	documented capability typical data input
17:38	Yida	http://localhost:456 7/categories/ with JSON body: { title: "" }	Post	error message, status is 400,cannot create a category if title is empty	Body Cookies Headers (4) Test Results Pretty Raw Preview Visualize USON 1 { 2 "errorWessages": 3 "Failed Validation: title : can not be empty" 4 5	Undocument ed capability Not working as expected
17:42	Yida	http://localhost:456 7/categories/1	Get	works as expected,return a specific instances of category using a id(1)	1	documented capability typical data input
17:44	Yida	http://localhost:456 7/categories/1	Head	no viable output,status 200 works as expected	Redy Codes: Headers Id. Teclifiests Design Size Proceed Visualists JACN v	documented capability
17:46	Yida	http://localhost:456 7/categories/2 with JSON body: { title: "Drinks" }	Post	works as expected,return the modified instance of category,status 200	Body Cooles Headers (4) Test Results Pretty Raw Preview Visualize JSON > 1 2 2 3 *title*: **Orinks**, 4 *description*: ***	documented capability
17:48	Yida	http://localhost:456 7/categories/2 with JSON body: { title: "" }	Post	error message,cannot change the category instance when title field is empty.status 400	Body Cookies Headers (4) Test Results Pretty Raw Preview Visualize JSON > 1	Undocument ed capability Not working as expected

17:51	Yida	http://localhost:456 7/categories/93 with JSON body: { title: "Food" }	Post	error message,cannot modify the instance of category when the id is not related to any instances.status is 404 Not Found	Body Cookies Headers (4) Test Results Pretty Raw Preview Visualize JSON v 1 2	undocumente d capability Not working as expected
17:54	Yida	http://localhost:456 7/categories/2 with JSON body: { title: "Food" }	Put	the modified instance of category with id 2 is returned.works as expected,status is 200 OK	Body Cookies Headers (4) Test Results Pretty Raw Preview Visualize JSON > 1 2 1 'id': '2', 3 1 'title': 'Food', 4 4 4 7 6 6 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	documented capability Not working as expected
17:57	Yida	http://localhost:456 7/categories/2 with JSON body: { title: """ }	Put	error message,unable to modify the category instance with an empty field JSON input,status is 400	Body Cookles Headers (4) Test Results Pretty Raw Preview Visualize JSON V "errorMessages": ["Failed Validation: title : can not be empty" 5 g	undocumente d capability not working as expected
18:00	Yida	http://localhost:456 7/categories/99 with JSON body: { title: "Food'" }	Put	error message,unable to modify the category instance if the input id is not matched to any instance.Status is 404 Not Found	Body Cookies Headers (4) Test Results Pretty Raw Proview Visualize JSON > 1 2 *errorMessages*: [3	undocumente d capability not working as expected
18:03	Yida	http://localhost:456 7/categories/2	Delete	successfully delete the category instance with ID 2 status is 200 OK	Body Coolies Headers (4) Test Results Pletty Raw Preview Visualize JSON ✓ ➡ 1	documented capability
18:06	Yida	http://localhost:456 7/categories/0	Delete	error message,cannot delete instance if the ID is not found.Status is 404 Not Found	Body Cookies Headers (4) Test Results Prestry Raw Preview Visualize JSON V To ** 2 **ercorfessages*: [undocumente d capability

18:10	Yida	http://localhost:456 7/categories/ with JSON body: { title: "Homework" } http://localhost:456 7/categories/ with JSON body: { title: "Homework"	Post	trying to create two instances with the same title name "film" works could be confusing since the category should have a unique title? Also the assigned id is 39 and 40 means that ids are not randomly signed. This could lead to potential security issue	Body Cookies Headers (5) Test Results Pertry Raw Proview Visualize JSON v 1	Stanus 201 Created Time: 4 ms	undocumente d capability should not work potential instability
		title: "Homework" }					

end of the session

List of concerns identified in session:

- 1:Head method does not return anything. Confusing to users.
- 2:Unable to create a category with a specific id, there should be a post method for this case.
- 3:Unable to recover deleted ids
- 4:Several categories instances could share the same title

Further testing ideas:

- 1:Testing with null values and negative values
- 2:Testing with several requests sent at the same time
- 3:Testing in XML format