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.

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

Windows 10, 1920x1080 (Joey) MacOS 13.4.1, 3024 × 1964 (Ke)

Start

8:00pm, Tuesday October 11th 2023

Testers

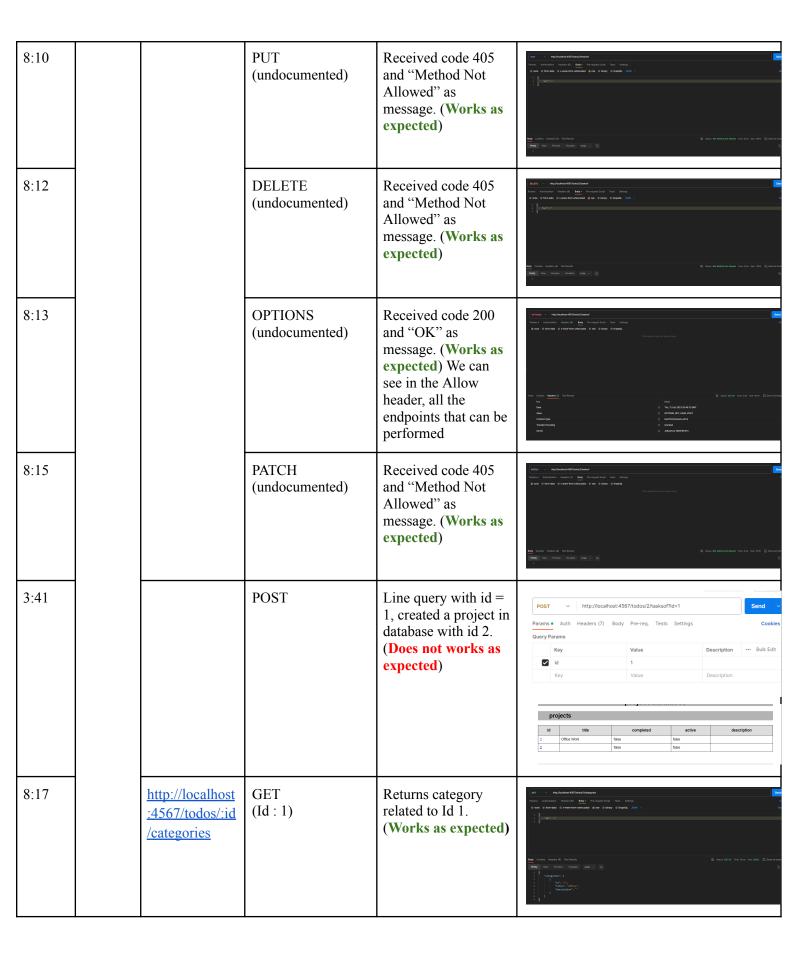
Ke Yan	260988148	ke.yan@mail.mcgill.ca
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Session Breakdown

Total length 45 minutes

Session 2

Time	Tester	Request	Туре	Comment	Screenshot
8:02	Joey	http://localhost :4567/todos/:id /tasksof	GET	Returns project related to Id 1. (Works as expected)	The second description of the second descrip
8:03			GET (Id not in memory)	Returns project related to Id 3 which means none. However, no warnin that todo with id 3 doesn't exist, still returns 200 (Unexpected)	Text - Programme continues and programme continues to the control of the control
8:05			HEAD	Received the response OK and code 200. (Works as expected)	### COCKED / INCAD T New Proposed Ed.AD
8:07			POST	Received the response OK and code 201, but instead description should have been "created the relationship" (Does not works as expected)	THE I SEPTEMBER OF THE PROPERTY OF THE PROPERT
8:07			POST (Id not in memory, todos Id: 6)	Received the response Not Found and code 404. (Works as expected)	Cook Cooker Number Cooker Coo



8:18		GET Id : 2)	Returns category related to Id 2. (Works as expected)	AND COMMERCANIC PROCESSES AND
8:20	Н	HEAD	Received the response OK and code 200. (Works as expected)	### (COLORS / MAD/Decahout-0547/book/book/book/points/ ####################################
8:21	P	POST	Received the response OK and code 201, but instead description should have been "created the relationship" (Does not works as expected)	County Post Alley (Post-Andre 4597 Notice Post-Andre 4597 Notice 4597 Notice A597 No
8:23	(I	POST Id not in memory, odos Id: 4)	Received the response Not Found and code 404. (Works as expected)	### COSALS / FOOT / Map/Decahous-Add/Problem/Codespores FOOT / Intg/Decahous-Add/Problem/Codespores Fourth / Intg/Dec
8:23	(I	POST Id not in memory, ategory Id: 9)	Received the response Not Found and code 404. (Works as expected)	The Colors (POTT / Phtt)/Norshort 4567 hodol/adaported POST V Prop/hochrod-4567 hodol/adaported Post V Prop/hoch
8:25		PUT undocumented)	Received code 405 and "Method Not Allowed" as message. (Works as expected)	The state former former to the first term of the

8:27			DELETE (undocumented)	Received code 405 and "Method Not Allowed" as message. (Works as expected)	B (1901) (1) Medical property (1901)
8:28			OPTIONS (undocumented)	Received code 200 and "OK" as message. (Works as expected) We can see in the Allow header, all the endpoints that can be performed	Service described in the Personal Sold Service
8:29			PATCH (undocumented)	Received code 405 and "Method Not Allowed" as message. (Works as expected)	NOS Implement of Production property International Production International Productional Production International Productional Productional Produc
8:30		http://localhost :4567/todos	POST (malformed json body)	Received code 400 and "Bad Request" as message.	The improvement of the control of th
8:32			POST (malformed json body)	Received code 405 and "Bad Request" as message.	FIRST - May place Application (March 1997) And Application (March 1997) An
8:33	Ke	http://localhost :4567/categori es/:id	GET	Received the existing objects with a 200 code (Works as expected)	OET Notp.//scalhest-457/categories1 Params Authorization Headers (I) Body Pre-request Script Tests Sattlings Coakies Proce © form-data © x-www-form-unterpooded © raw © binary © GraphQL JSDN ∨ Beauthy 1

8:35		PUT (title)	Received the response OK and code 200 and received updated object. (Works as expected)	PUT Intp://locahosis.4697/cafegories/1 Furams Authorization Headers (i) Body * Pre-request Script Tests Settings Cookies Once @ form-data @ *-www-form-uterocoded @ raw @ breary @ GraphOL JSON > Beauthy 1
8:36		PUT (description only)	Object cannot be updated, 400 error with message "title: field is mandatory" (Does not works as expected)	PUT Intp://scahost-4507/categories/1 Purams Authorization Headers (I) Body • Pre-request Script Tests Settings Cookies Tests Settings Cookies Cookies Tests Settings Cookies Beautify Tests Settings Cookies Tests Se
8:38		PATCH	Received code 405 and "Method Not Allowed" as a message. (Works as expected)	PATCH V Intp://lecahout-4587/categories/2 Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies none ® form-data ® x-www-form-unknocodes ® raw ® binary ® OraphOL JSON V Beautify 1 Body Cookies Headers (4) Test Results Peatty Raw Preview Visualize MTML V \$55
8:39		POST	Received the response OK and code 200 and received an updated object. (Works as expected)	POST V http://ocahost.4567/categories/2 Parama Authorization Meaders (8) Body * Pre-request Soript Tests Settings Cookies @ none @ form-data @ x-www-form-utencoded @ raw @ bhrary @ GraphOL JSON V Beautify 1
8:41		PUT	Received the response OK and code 200 and received an updated object. (Works as expected)	Post v Intp://ocalhost4507/categoriss/2 Params Authorization Headers (D) Body Pre-request Script Tests Settings Cookless © note ® form-data @ **ewwe-form-defenceded @ raw @ browy @ GrephOL JRON v Beautry 1

8:42		DELETE	Received the response OK and object is deleted (Works as expected)	DELETE V http://locahost-4587/cotegories/1 Purams Authorization Headers (0) Body • Pre-request Script Tests Settings Cookies © none © Commission Ormodata © **ewwe*formunierocosid © raw © branzy © GraphOL JSON ∨ Beautity 1 2 3 5 **title*: "newex title*" 3 8 **Title*: "newex title*" Body Cookies Headers (d) Test Results Pretty Raw Praviow Visualiza JSON ∨ 5
8:43		HEAD	Received the response OK and code 200, no output in body. (Works as expected)	NEAD

Table 2: Findings of Session 2

Summary of Session

This session we tested ...

todos/:id/tasksof

- GET
 - Id in memory Works as expected
 - Id not in memory Unexpected
- Head
- POST
 - Valid id Does not works as expected
 - Id in line query **Does not works as expected**
 - Invalid id Works as expected
- PUT (undocumented) Works as expected
- DELETE (undocumented) Works as expected
- OPTION (undocumented) Works as expected
- PATCH (undocumented) Works as expected

/todos/:id/categories

- GET Works as expected
- HEAD Works as expected
- POST Does not works as expected
 - Valid id
 - Invalid todo id Works as expected
 - Invalid categories id Works as expected
- PUT (undocumented) Works as expected
- DELETE (undocumented) Works as expected
- OPTION (undocumented) Works as expected

- PATCH (undocumented) Works as expected

/todos

- POST
 - malformed json Works as expected

/categories/:id

- GET Works as expected
- PUT
 - Title only Works as expected
 - Title and description Works as expected
 - Description only Does not works as expected
- PATCH Works as expected
- POST
 - Title Works as expected
 - Description Works as expected
- DELETE Works as expected
- HEAD Works as expected

List of Concerns Identified in Session

- For todos/:id/taskosf GET, if we try to get the tasks of a todo that does not exist (invalid id), an empty list is returned with code 200. However, the todo doesn't exist. This could mislead users into thinking the todo id is valid.
- POST for todos/:id/taskosf, if we pass in an id in the query it may not be used in the created object
- When doing a POST for todos/:id/tasksof and todos/:id/categories, a 201 code is returned, however the "created the relationship" description is missing
- For /categories/:id, PUT doesn't allow users to only edit the description of a category. They have to pass in a title as well. This isn't great if the user only wants to update the description
 - Additionally, the documentation for the PUT and POST endpoints are the same, but POST allows updates with only the description, which is confusing

List of new Testing Ideas Identified in Session

We noticed many issues caused by the use of invalid ids. However, due to time constraints, we were unable to test every endpoint with invalid id. It would be good to cover these during unit testing. Additionally, endpoints with two different sections, like todos and tasks, have a lot more noticeable instabilities. Some of our members will focus a whole session on interoperability to tackle those.