

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

runTodoManagerRestAPI-1.5.5.jar

AREA

Exploratory testing for API endpoints

ENVIRONMENT

macOS Monterey

START

11:24 PM 2/4/26

TESTER

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TIME

45min

SESSION NOTES

Without specific values:

11:24 PM (GET /categories) Return all the instances of category.

11:24 PM (HEAD /categories) Return 200 OK

11:24 PM (POST /categories) Return 400 Bad Request

11:24 PM (GET /categories) Return 405 Method Not Allowed

11:24 PM (DELETE /categories) Return 405 Method Not Allowed

11:24 PM (OPTIONS /categories) Return 200 OK

11:24 PM (PATCH /categories) Return 405 Method Not Allowed

11:24 PM (GET /categories/:id) Return 404 Not Found

11:24 PM (PUT /categories/:id) Return 404 Not Found
11:24 PM (POST /categories/:id) Return 404 Not Found
11:24 PM (DELETE /categories/:id) Return 404 Not Found
11:24 PM (OPTIONS /categories/:id) Return 200 OK
11:24 PM (HEAD /categories/:id) Return 404 Not Found
11:24 PM (PATCH /categories/:id) Return 405 Method Not Allowed
11:24 PM (GET /categories/:id/projects) Return 200 OK **#BUG 1**
11:24 PM (PUT /categories/:id/projects) Return 405 Method Not Allowed
11:24 PM (POST /categories/:id/projects) id_value=1, return 201 Created
11:24 PM (DELETE /categories/:id/projects) Return 405 Method Not Allowed
11:24 PM (OPTIONS /categories/:id/projects) Return 200 OK
11:24 PM (HAED /categories/:id/projects) Return 200 OK **#BUG 2**
11:24 PM (PATCH /categories/:id/projects) Return 405 Method Not Allowed
11:24 PM (GET /categories/:id/projects/:id) Return 404 Not Found, but expect 405 Method Not Allowed
11:24 PM (PUT /categories/:id/projects/:id) Return 405 Method Not Allowed
11:24 PM (POST /categories/:id/projects/:id) Return 404 Not Found, but expect 405 Method Not Allowed
11:24 PM (DELETE /categories/:id/projects/:id) Return 404 Not Found when id have no value or 1
11:24 PM (OPTIONS /categories/:id/projects/:id) Return 200 OK
11:24 PM (HEAD /categories/:id/projects/:id) Return 404 Not Found, but expect 405 Method Not Allowed
11:24 PM (PATCH /categories/:id/projects/:id) Return 405 Method Not Allowed
11:24 PM (GET /categories/:id/todos) Return 200 OK **#BUG 3**
11:24 PM (PUT /categories/:id/todos) Return 405 Method Not Allowed
11:24 PM (POST /categories/:id/todos) Return 400 Bad Request when only input id value
11:24 PM (DELETE /categories/:id/todos) Return 405 Method Not Allowed
11:24 PM (OPTIONS /categories/:id/todos) Return 200 OK
11:24 PM (HEAD /categories/:id/todos) Return 200 OK **#BUG 4**

11:24 PM (PATCH /categories/:id/todos) Return 405 Method Not Allowed

11:24 PM (GET /categories/:id/todos/:id) Return 404 Not Found, but expect 405 Method Not Allowed

11:24 PM (PUT /categories/:id/todos/:id) Return 405 Method Not Allowed

11:24 PM (POST /categories/:id/todos/:id) Return 404 Not Found, but expect 405 Method Not Allowed

11:24 PM (DELETE /categories/:id/todos/:id) Return 404 Not Found

11:24 PM (OPTIONS /categories/:id/todos/:id) Return 200 OK

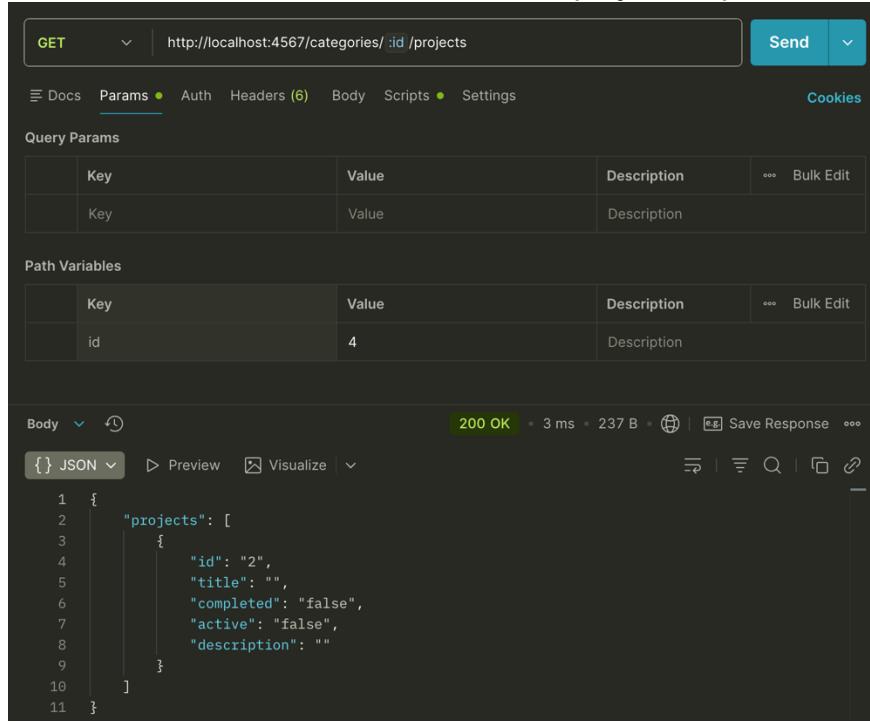
11:24 PM (HEAD /categories/:id/todos/:id) Return 404 Not Found, but expect 405 Method Not Allowed

11:24 PM (PATCH /categories/:id/todos/:id) Return 405 Method Not Allowed

BUGS

1. GET /categories/:id/projects

When insert value that does not exist in project, expect error but get 200 OK.



The screenshot shows a POSTMAN interface with the following details:

- Method:** GET
- URL:** http://localhost:4567/categories/:id/projects
- Params:** id = 4
- Body:** JSON (empty)
- Response:** 200 OK (3 ms, 237 B)
 - JSON Response:

```
1 {  
2   "projects": [  
3     {  
4       "id": "2",  
5       "title": "",  
6       "completed": "false",  
7       "active": "false",  
8       "description": ""  
9     }  
10   ]  
11 }
```

2. HEAD /categories/:id/projects

When insert value that does not exist in project, expect error but get 200 OK.

HEAD | http://localhost:4567/categories/:id/projects | Send

Docs Params (6) Auth Headers (6) Body Scripts Settings Cookies

Query Params

	Key	Value	Description	...	Bulk Edit
	Key	Value	Description	...	Bulk Edit

Path Variables

	Key	Value	Description	...	Bulk Edit
	id	4	Description	...	Bulk Edit

Body | 200 OK | 29 ms | 147 B | Save Response |

{ } JSON | Preview | Visualize |

```
1
```

3. GET /categories/:id/todos

When insert value that does not exist in project, expect error but get 200 OK.

GET | http://localhost:4567/categories/:id/todos | Send

Docs Params (6) Auth Headers (6) Body Scripts Settings Cookies

Query Params

	Key	Value	Description	...	Bulk Edit
	Key	Value	Description	...	Bulk Edit

Path Variables

	Key	Value	Description	...	Bulk Edit
	id	4	Description	...	Bulk Edit

Body | 200 OK | 15 ms | 159 B | Save Response |

{ } JSON | Preview | Visualize |

```
1 {  
2 |   "todos": []  
3 }
```

4. HEAD /categories/:id/todos

When insert value that does not exist in project, expect error but get 200 OK.

The screenshot shows a REST API testing interface. At the top, a header bar displays 'HEAD' and the URL 'http://localhost:4567/categories/:id/todos'. Below this is a navigation bar with 'Docs', 'Params' (which is selected), 'Auth', 'Headers (6)', 'Body', 'Scripts', and 'Settings'. To the right of the navigation bar are 'Cookies' and a 'Send' button. The main area is divided into sections for 'Query Params' and 'Path Variables'. The 'Query Params' section has a table with columns 'Key', 'Value', and 'Description', containing one row with 'Key' and 'Value' both empty and 'Description' as 'Description'. The 'Path Variables' section has a table with columns 'Key', 'Value', and 'Description', containing one row with 'Key' as 'id' and 'Value' as '4', and 'Description' as 'Description'. Below these sections is a 'Body' section with a dropdown menu showing 'JSON' (selected), 'Preview', and 'Visualize'. The response status is '200 OK' with a response time of '27 ms' and a size of '147 B'. The response body is a single digit '1'.

CONCERNS

1. For BUG1&3, users are access to non-exist data, should be warned by error message.
2. For BUG2&4, the return type is mismatch with actual situation.