**Automation** Project – Part A: Exploratory testing session #1

Sessions focus: **Projects**

**Charter**:

Identify capabilities and areas of potential instability of the “rest API todo list manager”.

Identify documented and undocumented 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

Software used for testing

Windows 10

Postman

Testers

Dominic Wener 260871052 dominic.wener@mail.mcgill.ca

Christopher Cui 260867703 christopher.cui@mail.mcgill.ca

Duration: **45 minutes**

**TEST NOTES**

**Setup**: Windows 10 64-bit

**Postman** v7

7:00 **Chris:** Run Executable app

7:15 **Chris:** GET request on /projects. 1 project returned, was already stored in memory.

7:15 **Dominic:**

try

{

"title": "t in voluptate velit",

"completed": "true",

"active": "true",

"description": "occaecat cupidatat n"

}

a post request on the /project endpoint did not seem to work, i get boolean error : "Failed Validation: completed should be BOOLEAN, active should be BOOLEAN"

7:19 **Chris:** HEAD for projects does not return anything

7:19 **Chris:**  HEAD for projects does not return anything

7:22 **Dominic:** tried GET http://localhost:4567/projects/:id -> nothing returned

7:23 **Chris:**  tried GET <http://localhost:4567/projects/1> ->

**{**

**"projects": [**

**{**

**"id": "1",**

**"title": "Office Work",**

**"completed": "false",**

**"active": "false",**

**"description": "",**

**"tasks": [**

**{**

**"id": "1"**

**},**

**{**

**"id": "2"**

**}**

**]**

**}**

**]**

**}**

7:30 **Chris:** http://localhost:4567/projects/1 POST with

**body**

**{**

**"title": "ur sint occaecat cup",**

**"completed": "false",**

**"active": "true",**

**"description": "aute irure dolor ina"**

**}**

has error "Failed Validation: completed should be BOOLEAN, active should be BOOLEAN"

7:34 **Dominic:** POST /projects with

{

**"title": "erunt mollit anim id",**

**"completed": false,**

**"active": false,**

**"description": "ectetur adipiscing e"**

**}**

returned success. To fix, remove "" from completed and active properties.

7:39 **Dominic:** try POST http://localhost:4567/projects

**<project>**

**<active>false</active>**

**<description>aute irure dolor ina</description>**

**<completed>false</completed>**

**<title>ur sint occaecat cup</title>**

**</project>**

returns

**{**

**"id": "12",**

**"title": "ur sint occaecat cup",**

**"completed": "false",**

**"active": "false",**

**"description": "aute irure dolor ina"**

**}**

Post seems to work fine with XML. Using a json returns boolean errors as denoted previously

7:40 **Dominic:** try POST http://localhost:4567/projects/1 with body

<project>

<active>false</active>

<description>modify</description>

<completed>false</completed>

<title>ur sint occaecat cup</title>

</project>

**Returns**

{

"id": "1",

"title": "ur sint occaecat cup",

"completed": "false",

"active": "false",

"description": "modify",

"tasks": [

{

"id": "1"

},

{

"id": "2"

}

]

}

7:42 **Chris:** try GET http://localhost:4567/projects/1/tasks returns

**{**

**"todos": [**

**{**

**"id": "1",**

**"title": "scan paperwork",**

**"doneStatus": "false",**

**"description": "",**

**"tasksof": [**

**{**

**"id": "1"**

**}**

**],**

**"categories": [**

**{**

**"id": "1"**

**}**

**]**

**},**

**{**

**"id": "2",**

**"title": "file paperwork",**

**"doneStatus": "false",**

**"description": "",**

**"tasksof": [**

**{**

**"id": "1"**

**}**

**]**

**}**

**]**

**}**

7:42 **Chris:** try HEAD http://localhost:4567/projects/:id/tasks

does not return a value

7:43 **Dominic:** GET http://localhost:4567/projects/1/categories returns empty category list

7:45 **Dominic:** -> POST http://localhost:4567/projects/1/categories body {

"id":"1"

}. No response received.

**Bugs:**

There is a bug that is documented in session 2 that talks about incremented ids when a request fails. This is a bug that is not good for the end user. Refer to session 2 bug summary.

**Concerns:**

* The documentation’s example “projects” json has quotation marks around the active: “true”, and completed: “false” booleans. However, if a user tries to use this body for a post request, it will fail. The booleans must not have any quotation marks. As a tester, I did not realize this for a good amount of the session which caused confusion and caused me to wrongfully believe the body post requests of the api had issues. However, it was simply a documentation issue.
* The HEAD http request turned out to not be an issue. It is supposed to return http headers from the server which it did successfully. There was no json needed to be returned in any case.

**Areas of Potential Risk**

Instability**:**

Adding a slash at the end of a request will lead to an error 404.

Instability (See session 2 bug report):

Since the IDs are incrementally generated, if a request fails, it will skip that id.

**Capabilities**

CRUD operations on Projects Entity in JSON

HEAD operation on Projects Entity in JSON