Postman

Agenda

1. Student API’s testing
2. Validations
3. Workflows
4. Order of Execution

Student API Tests

- Student API Features:
  1) Create new Student (Post)
  2) Listing of Students (Get)
  3) Update student (Put)
  4) Delete Student (Delete)

- How to run Student API
  1) Open Command Prompt--> Goto file location
  2) Run below command

     E:\>java -jar --add-modules java.xml.bind studentApp.jar --server.port=8085
  3) Check API is running or not

     http://localhost:8085/student/list

Student API Test Cases

TC	Title	URL	HTTP Request Type	Body	Body Type	Response	Response Code	Test script

1	Create new record	http://localhost:8085/student	POST	{
				"id": 101,
				"firstName": "Pavan",
				"lastName": "Kumar",
				"email": "abcxyz@risusDonecegestas.edu",
				"programme": "Manger",
				"courses": [
				"Java",
				"Selenium"
				]
				}
					JSON(Application/json)	{
						"msg": "Student added"
						}
							201 Created	tests["Status Code is 200"] = responseCode.code === 201;
								tests["Body contains Fault"] = responseBody.has("Student added");

2	Retrieve a record	http://localhost:8085/student/101	GET	NA	NA	{
						"id": 101,
						"firstName": "Pavan",
						"lastName": "Kumar",
						"email": "abcxyz@risusDonecegestas.edu",
						"programme": "Manger",
						"courses": [
						"Java",
						"Selenium"
						]
						}
							200 OK	tests["Status Code is 200"] = responseCode.code === 200 ;
								tests["Body contains Fault"] = responseBody.has("Pavan") ;
								tests["Body contains Fault"] = responseBody.has("Kumar") ;

3	Update record	http://localhost:8085/student/101	PUT	{
				"id": 101,
				"firstName": "Pavan",
				"lastName": "Kumar",
				"email": "abcxyz@risusDonecegestas.edu",
				"programme": "Trainer",
				"courses": [
				"Java",
				"Selenium",
				"Bigdata"
				]
				}
					JSON(Application/json)	{
						"msg": "Student Updated"
						}
							200 OK	tests["Status Code is 200"] = responseCode.code === 200 ;
								tests["Body contains Fault"] = responseBody.has("Student Updated") ;

4	Delete record	http://localhost:8085/student/101	DELETE	NA	NA	Empty	204 Content Not Found	tests["Status Code is 204"] = responseCode.code === 204;

Validations(Tests)

Validations	Script	Function

Check if response body contains a string	tests["Validating response body"] = responseBody.has("Student added");	pm.test("Body matches string", function () {
		pm.expect(pm.response.text()).to.include("Student added");
		});

Check Status code	tests["Validating Status Code"] = responseCode.code === 201;	pm.test("Status code is 201", function () {
		pm.response.to.have.status(201);
		});

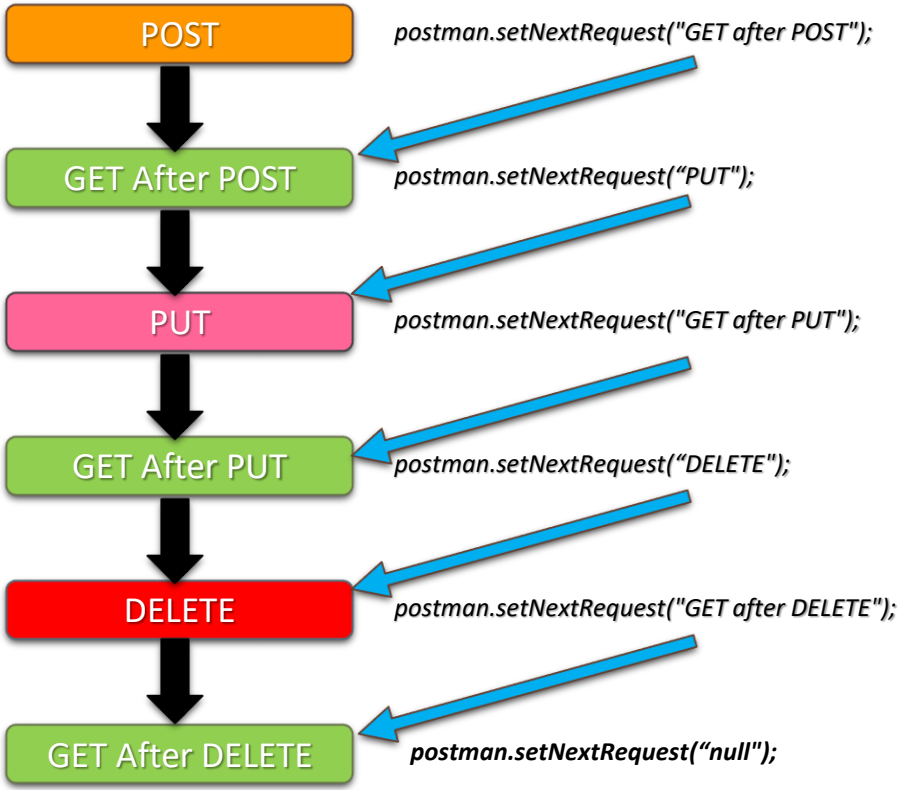
Response time is less than 200ms	tests["Response time is less than 200ms"] = responseTime < 200;	pm.test("Response time is less than 200ms", function () {
		
		pm.expect(pm.response.responseTime).to.be.below(200);
		});

Successful POST request status code	tests["Successful POST request"] = responseCode.code === 201 || responseCode.code === 202;	pm.test("Successful POST request", function () {
		
		pm.expect(pm.response.code).to.be.oneOf([201,202]);
		});

Content-Type is present in Header	tests["Content-Type is present"] = postman.getResponseHeader("Content-Type");	pm.test("Content-Type is present", function () {
		pm.response.to.have.header("Content-Type");
		});

Workflows in Postman

- Execution order of collection runner
- What is Workflow and default workflow.
- How to change the workflow
- *setNextRequest* in Postman

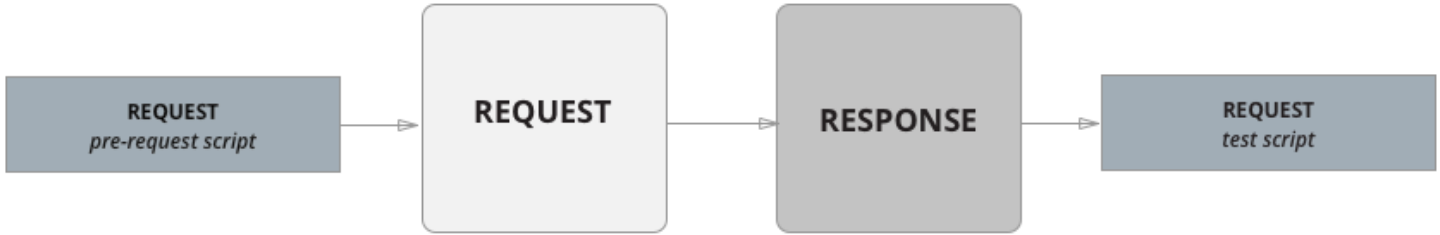


Postman Coding

- We can write code in 2 places under...
  - Pre-request script
  - Tests
- We can see results in Postman Console

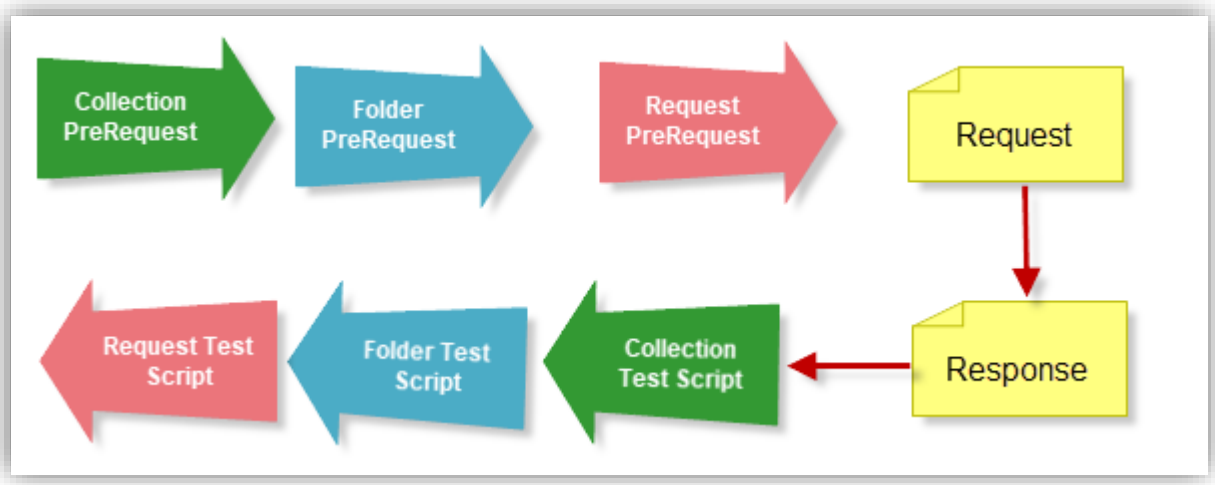
Execution order of scripts

- In Postman, the script execution order for a request looks like this:
  - A pre-request script associated with a request will execute before the request is sent
  - A test script associated with a request will execute after the request is sent



Execution order of scripts…

- For every request in a collection, scripts will execute in the following order:
  - A pre-request script associated with a collection will run prior to every request in the collection.
  - A pre-request script associated with a folder will run prior to every request in the folder.
  - A test script associated with a collection will run after every request in the collection.
  - A test script associated with a folder will run after request in the folder.



Execution order of scripts...