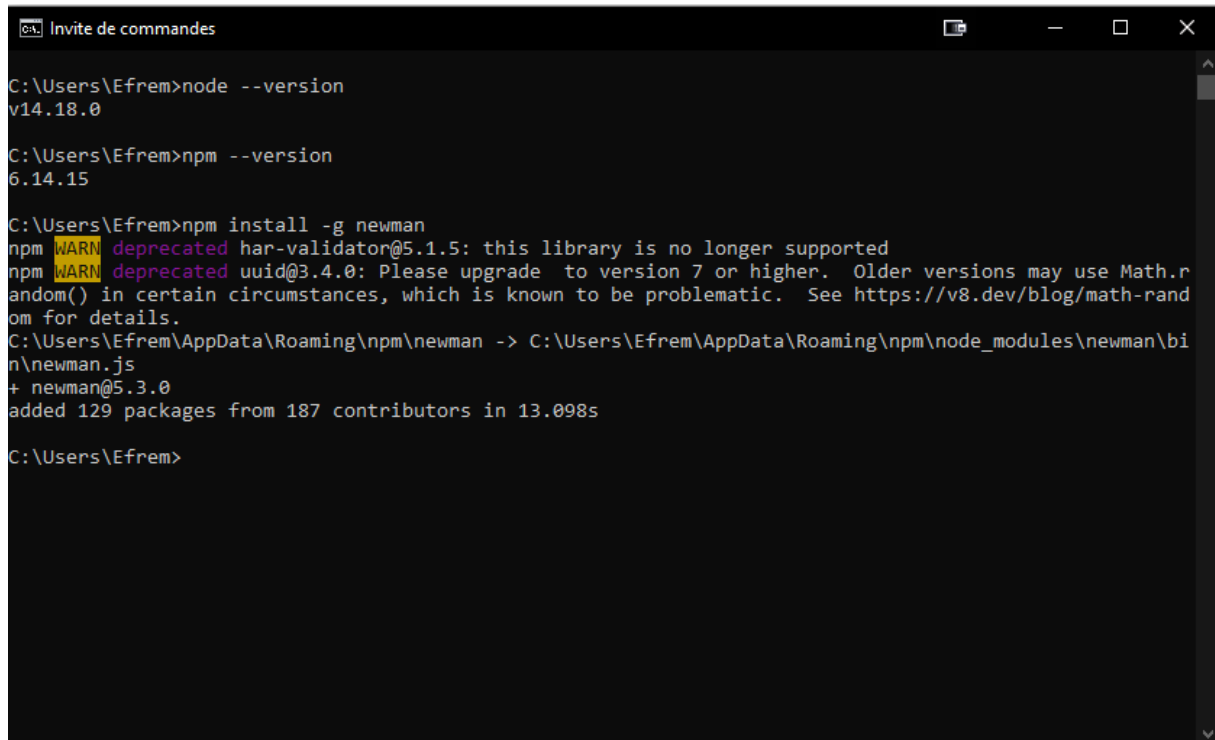


Sectie 7 - Automatically running tests

Newman

Newman is een command line tool om collecties automatisch te laten uitvoeren.



```
C:\Users\Efrem>node --version
v14.18.0

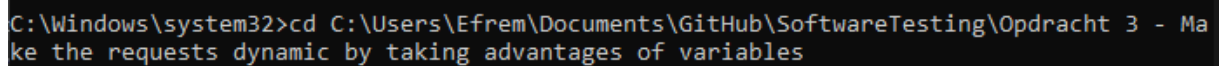
C:\Users\Efrem>npm --version
6.14.15

C:\Users\Efrem>npm install -g newman
npm WARN deprecated har-validator@5.1.5: this library is no longer supported
npm WARN deprecated uuid@3.4.0: Please upgrade to version 7 or higher. Older versions may use Math.random() in certain circumstances, which is known to be problematic. See https://v8.dev/blog/math-random for details.
C:\Users\Efrem\AppData\Roaming\npm\newman -> C:\Users\Efrem\AppData\Roaming\npm\node_modules\newman\bin\newman.js
+ newman@5.3.0
added 129 packages from 187 contributors in 13.098s

C:\Users\Efrem>
```

Hier ga ik de commando “node --version” en “npm --version” gebruiken om de huidige versie te zien van NodeJS/NPM.

Daarna voer ik het commando “npm install -g newman” om de newman-cli te installeren.



```
C:\Windows\system32>cd C:\Users\Efrem\Documents\GitHub\SoftwareTesting\Opdracht 3 - Make the requests dynamic by taking advantages of variables
```

Bij deze stap ga ik een collectie runnen aan de hand van de command line met newman. Daarvoor moet ik eerst naar de map waar ik mijn collectie heb en mijn environment. Daarna ga ik het commando (newman run "Opdracht 3.json" --environment "trello-environment.json") uitvoeren zodat de collectie wordt gerund.

```
C:\Users\Efrem\Documents\GitHub\SoftwareTesting\Opdracht 3 - Make the requests dynamic
by taking advantages of variables>newman run "Opdracht 3.json" --environment "trello-
environment.json"
newman
```

Trello

→ Create Board

```
POST https://api.trello.com/1/boards/?name=My board 1&key=1c0b21980c6841c9e0e69936ec
e307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69&defaultL
ists=false [200 OK, 3.08kB, 382ms]
✓ Status code is 200
✓ Board should be created
✓ Board should be private
```

→ Create TODO List

```
POST https://api.trello.com/1/lists?name=TODO&idBoard=617548f38ae8b188d3563aef&key=1
c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a353
5d3a270dd6b05d69 [200 OK, 2.24kB, 194ms]
✓ Status code is 200
✓ Check list name
✓ Check list is not closed
✓ List is created in API_test board
```

→ Create DONE List

```
POST https://api.trello.com/1/lists?name=DONE&idBoard=617548f38ae8b188d3563aef&key=1
c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a353
5d3a270dd6b05d69 [200 OK, 2.23kB, 181ms]
✓ Status code is 200
✓ Check list name
✓ Check list is not closed
✓ List is created in API_test board
```

→ Create Card "Learn Postman" in TODO List

```
POST https://api.trello.com/1/cards?name=Learn Postman&idList=617548f48f27f8487f4936
5d&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab
0389a3535d3a270dd6b05d69 [200 OK, 3.24kB, 240ms]
✓ Status code is 200
✓ Check card name
✓ Check card is not closed
✓ card is created in TODO list
```

→ Put Card "Learn Postman" in DONE List

```
PUT https://api.trello.com/1/cards/617548f43b08f11127425f2a?idList=617548f43b9cc67a4
7fe0af9&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7
d93ab0389a3535d3a270dd6b05d69 [200 OK, 3.2kB, 239ms]
✓ Status code is 200
✓ Check card name
✓ Check card is not closed
✓ card is in DONE list
```

→ Delete Board

```
DELETE https://api.trello.com/1/boards/617548f38ae8b188d3563aef?key=1c0b21980c6841c9
e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d6
9 [200 OK, 2.13kB, 519ms]
✓ Status code is 200
```

| | executed | failed |
|--|----------|--------|
| iterations | 1 | 0 |
| requests | 6 | 0 |
| test-scripts | 6 | 0 |
| prerequest-scripts | 1 | 0 |
| assertions | 20 | 0 |
| total run duration: 2.2s | | |
| total data received: 3.41kB (approx) | | |
| average response time: 292ms [min: 181ms, max: 519ms, s.d.: 120ms] | | |

C:\Users\Efrem\Documents\GitHub\SoftwareTesting\Opdracht 3 - Make the requests dynamic by taking advantages of variables>

Dit is het resultaat van het uitgevoerde commando.


Jenkins


Jenkins is een open source automatiseringsserver. Het helpt bij het automatiseren van de onderdelen van softwareontwikkeling die verband houden met het bouwen, testen en implementeren, waardoor continue integratie en continue levering worden vergemakkelijkt.


The screenshot shows the Jenkins web interface in a browser. The top navigation bar includes the Jenkins logo, a search bar, and user information for 'Efrem Gokinan'. The main content area displays the 'Console Output' for a build named 'httpbin_rest_api_tests' with ID '#3'. The output shows the build was started by 'Efrem Gokinan', running as 'SYSTEM', and successfully installed Node.js (v14.18.0) and npm (6.14.15). The left sidebar contains links for 'Retour au projet', 'État', 'Modifications', 'Console Output' (selected), 'View as plain text', 'Informations de la construction', and 'Delete build '#3''. The bottom right corner of the interface shows 'REST API' and 'Jenkins 2.303.2'.


Dit was de installatie van Jenkins, het is gelukt. De eerste test is ook gelukt, namelijk de versie van NodeJs en npm te laten zien.


Nu dat Jenkins goed geïnstalleerd is en geconfigureerd ga ik mijn collectie uitvoeren met mijn environment Trello.

**Jenkins**



1

1

Efreem Gokinan






se déconnecter


Tableau de bord > httpbin_rest_api_tests > #6


 Retour au projet


 État


 Modifications


 Console Output

 View as plain text

 Informations de la construction

 Delete build '#6'

 Build précédent

 **Sortie de la console**

Démarré par l'utilisateur Efreem Gokinan
Running as SYSTEM
Building in workspace C:\Users\Efreem\.jenkins\workspace\httpbin_rest_api_tests
[httpbin_rest_api_tests] \$ cmd /c call C:\Users\Efreem\AppData\Local\Temp\jenkins592483136961879470.bat

C:\Users\Efreem\.jenkins\workspace\httpbin_rest_api_tests>cd
C:\Users\Efreem\Documents\GitHub\SoftwareTesting\Opracht 3 - Make the requests dynamic by taking advantages of variables

C:\Users\Efreem\Documents\GitHub\SoftwareTesting\Opracht 3 - Make the requests dynamic by taking advantages of variables>newman run "Opracht 3.json" --environment "trello-environment.json" --color off --disable-unicode
newman

Trello

Root Create Board
POST https://api.trello.com/1/boards/?name=My board
1&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69
&defaultLists=false [200 OK, 3.08kB, 356ms]
Pass Status code is 200
Pass Board should be created
Pass Board should be private

Root Create TODO List
POST https://api.trello.com/1/lists?
name=TODO&idBoard=61755936aadb3f2164209fb1&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69 [200 OK, 2.24kB, 195ms]
Pass Status code is 200
Pass Check list name
Pass Check list is not closed
Pass List is created in API_test board

Root Create DONE List
POST https://api.trello.com/1/lists?
name=DONE&idBoard=61755936aadb3f2164209fb1&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69 [200 OK, 2.23kB, 391ms]
Pass Status code is 200
Pass Check list name
Pass Check list is not closed
Pass List is created in API_test board

Root Create Card "Learn Postman" in TODO List
POST https://api.trello.com/1/cards?name=Learn
Postman&idList=6175593738271e24ad76d791&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69 [200 OK, 3.24kB, 232ms]
Pass Status code is 200
Pass Check card name
Pass Check card is not closed
Pass card is created in TODO list

Root Put Card "Learn Postman" in DONE List
PUT https://api.trello.com/1/cards/61755938f76c885ee593ff33?
idList=617559377152e4480b6e6282&key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69 [200 OK, 3.2kB, 220ms]
Pass Status code is 200
Pass Check card name
Pass Check card is not closed
Pass card is in DONE list

Root Delete Board
DELETE https://api.trello.com/1/boards/61755936aadb3f2164209fb1?
key=1c0b21980c6841c9e0e69936ece307c6&token=3fce7efe427ae299e909070c98d0d9779f7d93ab0389a3535d3a270dd6b05d69 [200 OK, 2.13kB, 449ms]
Pass Status code is 200

| | executed | failed |
|----------------------|----------|--------|
| iterations | 1 | 0 |
| requests | 6 | 0 |
| test-scripts | 6 | 0 |
| prerequisite-scripts | 1 | 0 |
| assertions | 20 | 0 |

total run duration: 2.3s

total data received: 3.41kB (approx)

average response time: 307ms [min: 195ms, max: 449ms, s.d.: 96ms]

Finished: SUCCESS

We zien dat dat het resultaat succesvol is, de collectie is goed geëxecuteerd door Newman.

Nu ga ik een rapport genereren met newman.

Om dat te doen ga ik eerst een commando uitvoeren om de rapporten te kunnen aanmaken.

```
C:\Users\Efrem>npm install -g newman-reporter-htmlextra
npm WARN deprecated highlight.js@9.18.5: Support has ended for 9.x series. Upgrade to @latest
npm WARN deprecated gulp-header@1.8.12: Removed event-stream from gulp-header
npm WARN deprecated urix@0.1.0: Please see https://github.com/lydell/urix#deprecated
npm WARN deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
C:\Users\Efrem\AppData\Roaming\npm\newman-reporter-htmlextra -> C:\Users\Efrem\AppData\Roaming\npm\node_modules\newman-reporter-htmlextra\bin\htmlextra.js
> highlight.js@9.18.5 postinstall C:\Users\Efrem\AppData\Roaming\npm\node_modules\newman-reporter-htmlextra\
node_modules\highlight.js
```

Hier ga ik de newman html reporter dependency installeren.

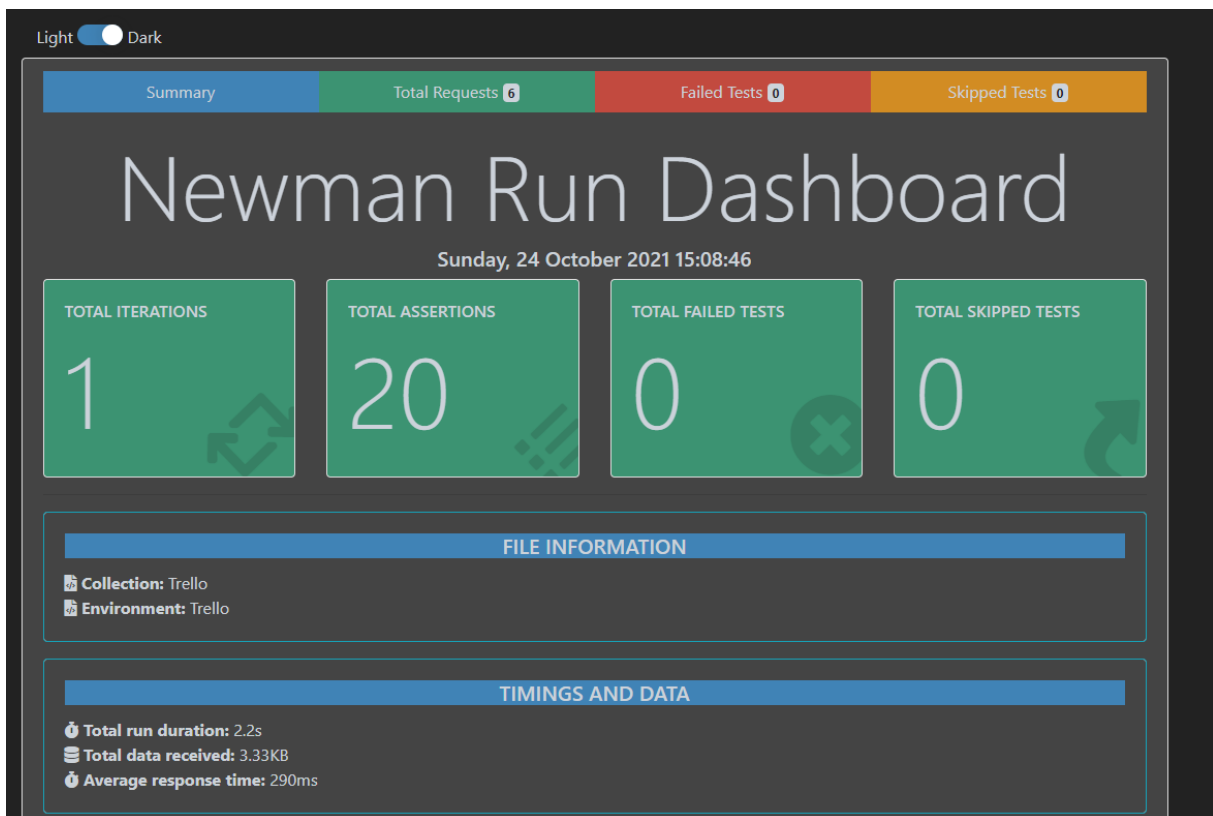
Om een rapport te genereren ga ik een paar commando's toevoegen zodat een html pagina aangemaakt wordt met het rapport van de uitvoering.

```
Exécuter une ligne de commande batch Windows

Commande

cd C:\Users\Efrem\Documents\GitHub\SoftwareTesting\Opdracht 3 - Make the requests dynamic by taking advantages of variables
newman run "Opdracht 3.json" --environment "trello-environment.json" --color off --disable-unicode --reporters cli,junit,htmlextra --reporter-j-unit-export "newman-report/report.xml" --reporter-html-export "newman-report/report.xml"
```

Na het builden krijg ik een folder "newman" in de map "sectie 7"



Dit is het resultaat van het rapport. Om het rapport volledig te zien → zie github, sectie 7: newman