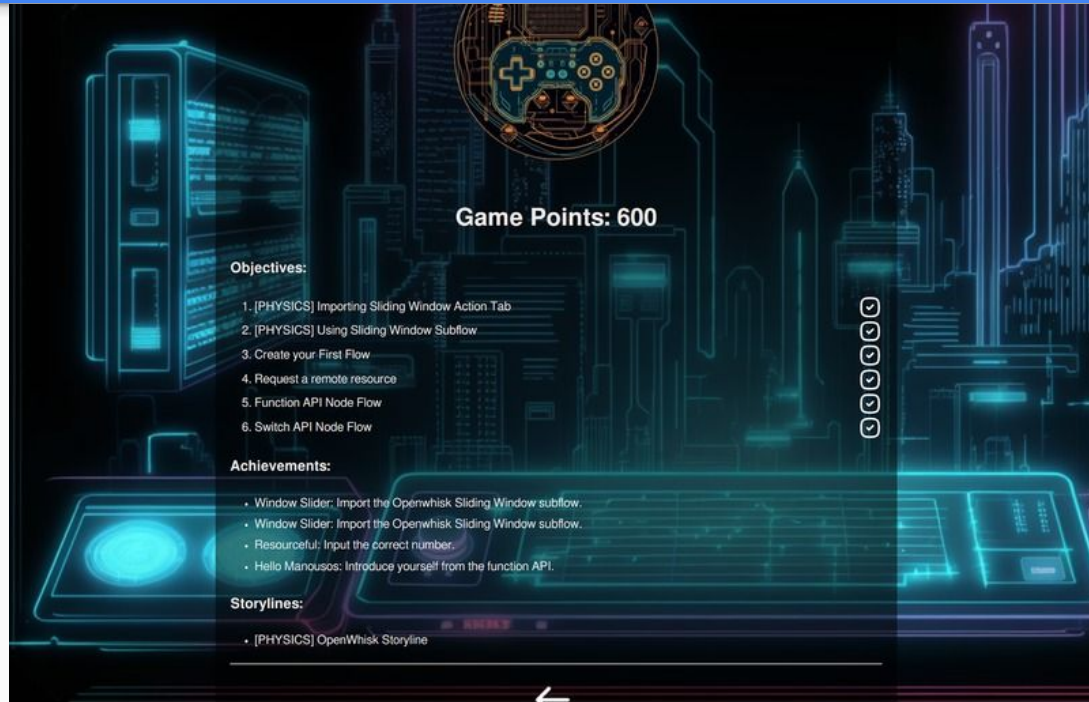


2nd PHYSICS Hackathon 2023

Manousos Linardakis, it22064
Christos Kazakos, it22033

Game Challenge

Game Challenge



Game Points: 600

Objectives:

1. [PHYSICS] Importing Sliding Window Action Tab
2. [PHYSICS] Using Sliding Window Subflow
3. Create your First Flow
4. Request a remote resource
5. Function API Node Flow
6. Switch API Node Flow

Achievements:

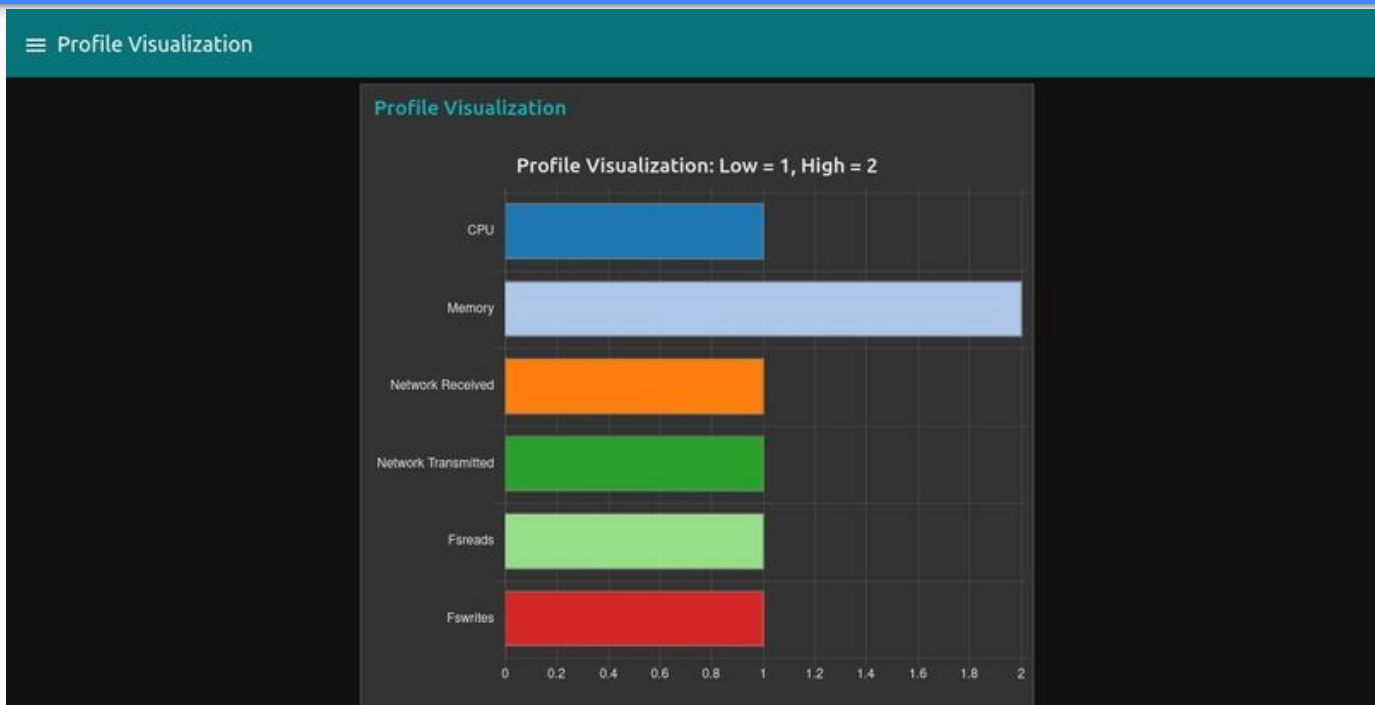
- Window Slider: Import the Openwhisk Sliding Window subflow.
- Window Slider: Import the Openwhisk Sliding Window subflow.
- Resourceful: Input the correct number.
- Hello Manousos: Introduce yourself from the function API.

Storylines:

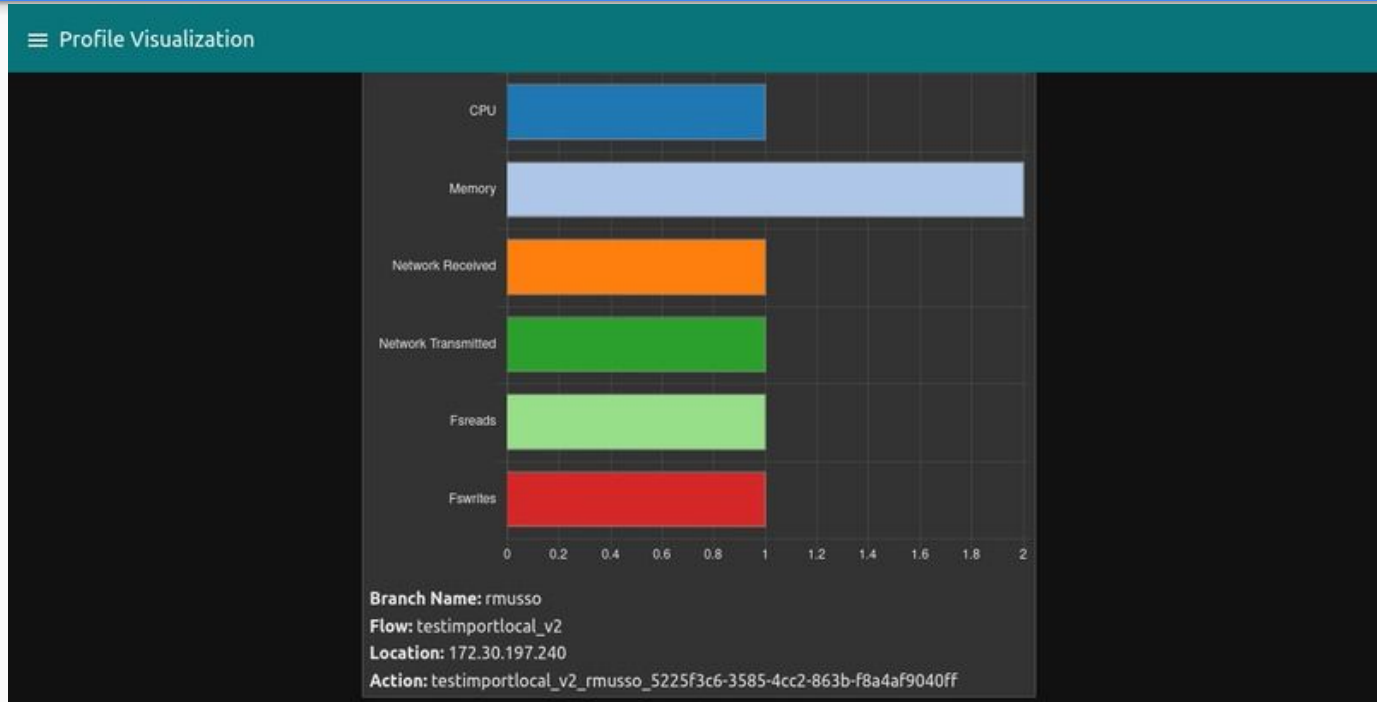
- [PHYSICS] OpenWhisk Storyline

Data Visualization Challenge

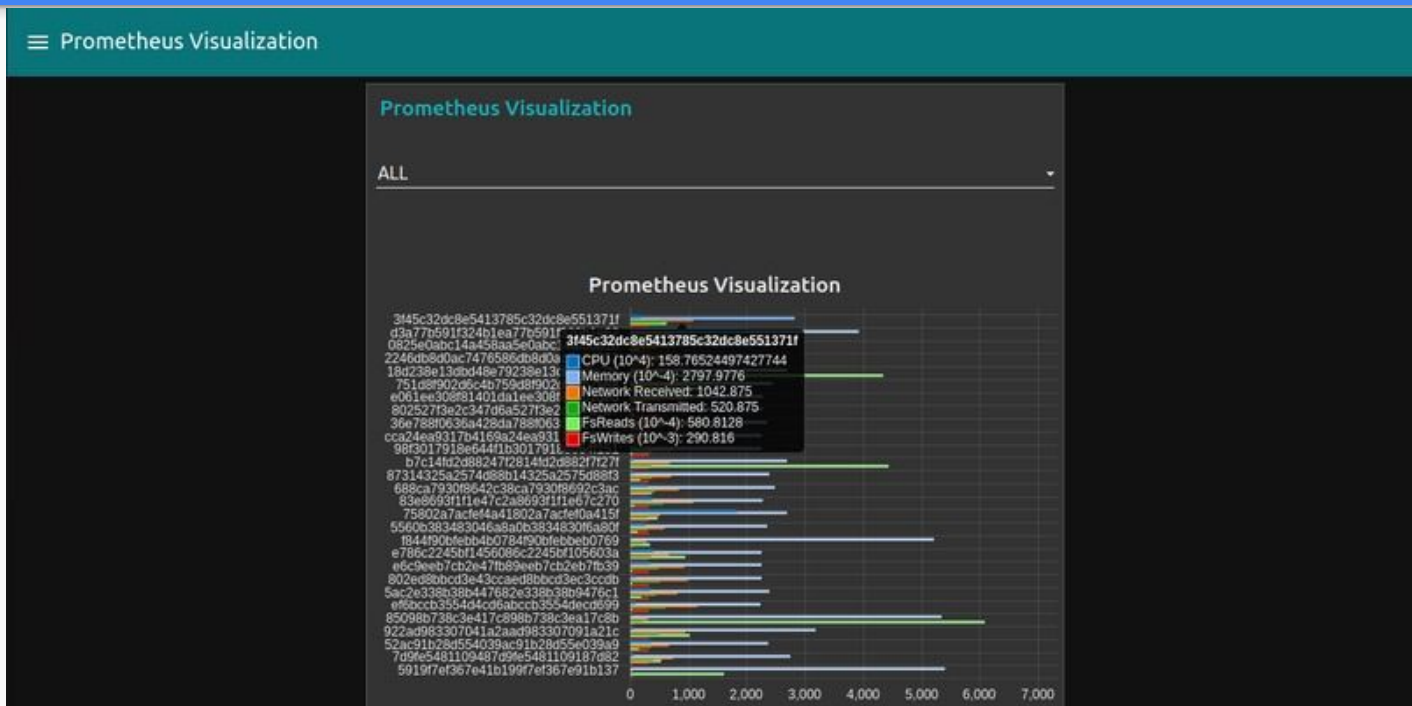
Profile Data Visualization



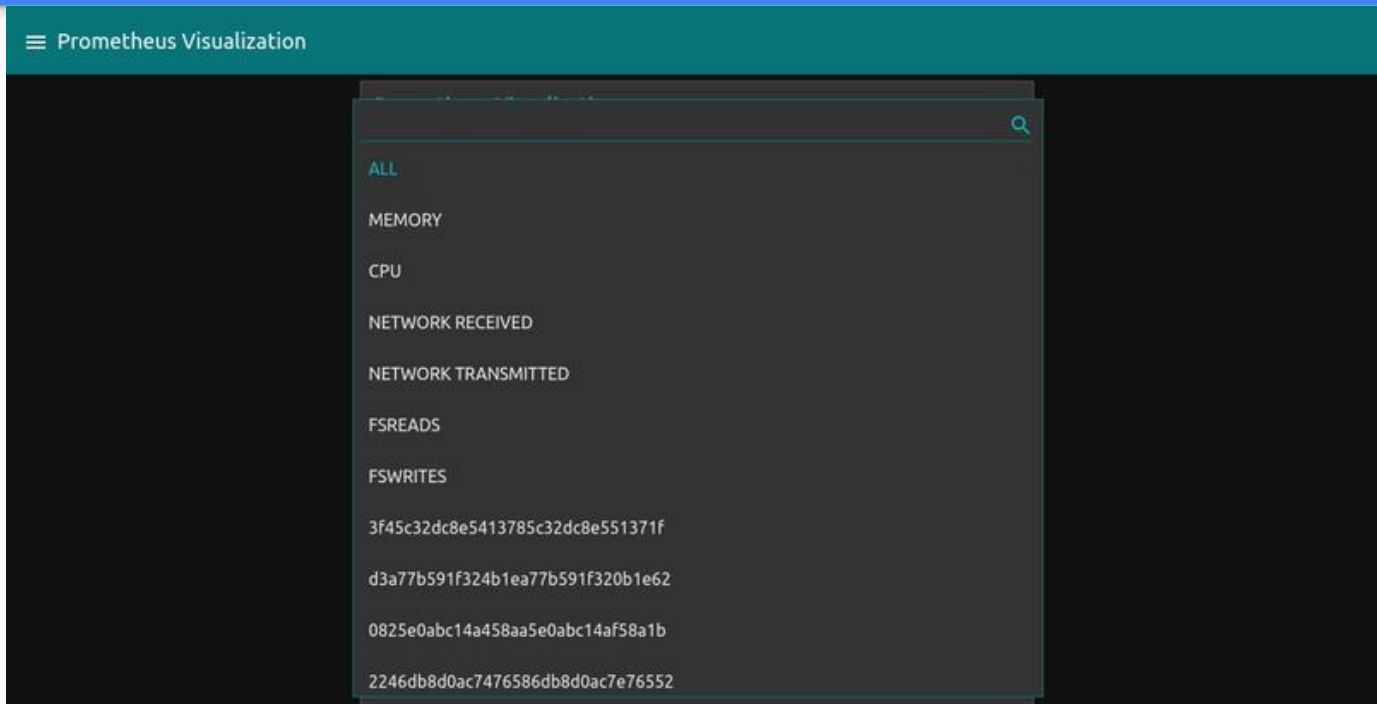
Profile Data Visualization



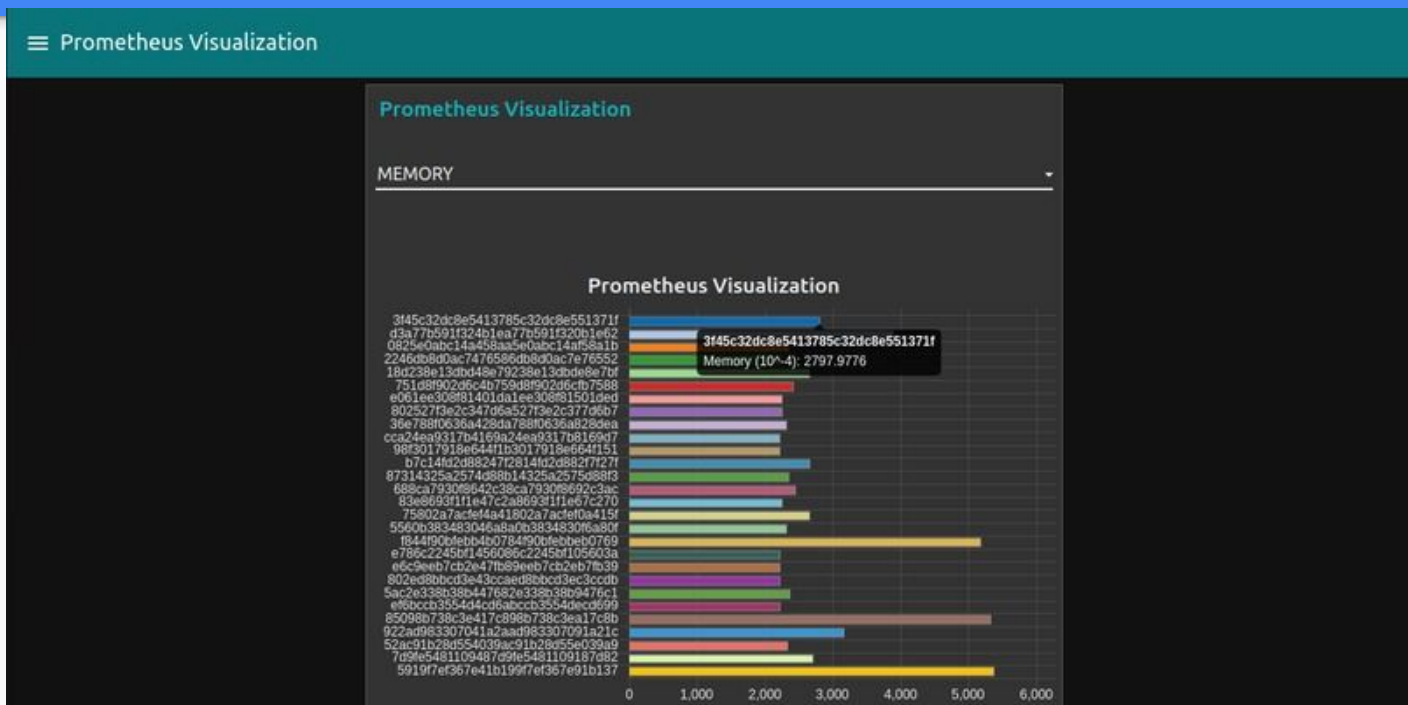
Prometheus Data Visualization



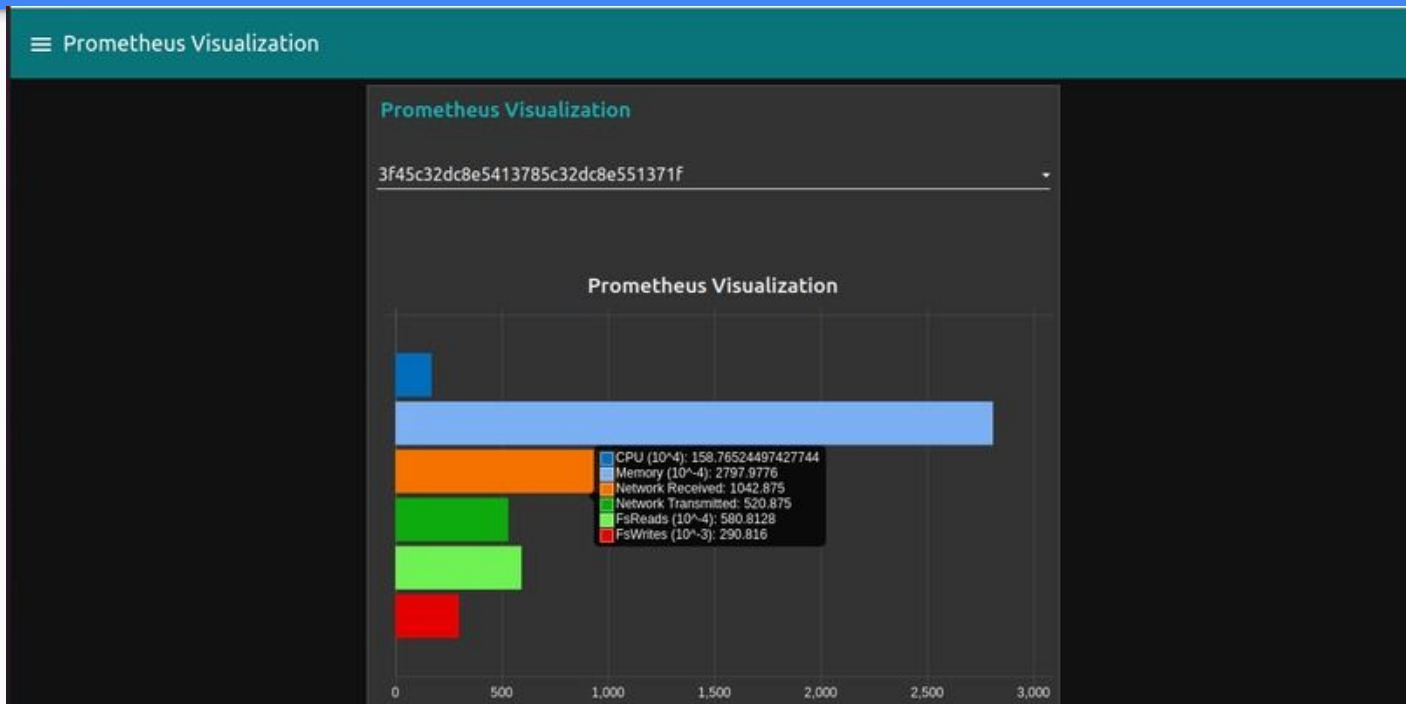
Prometheus Data Visualization



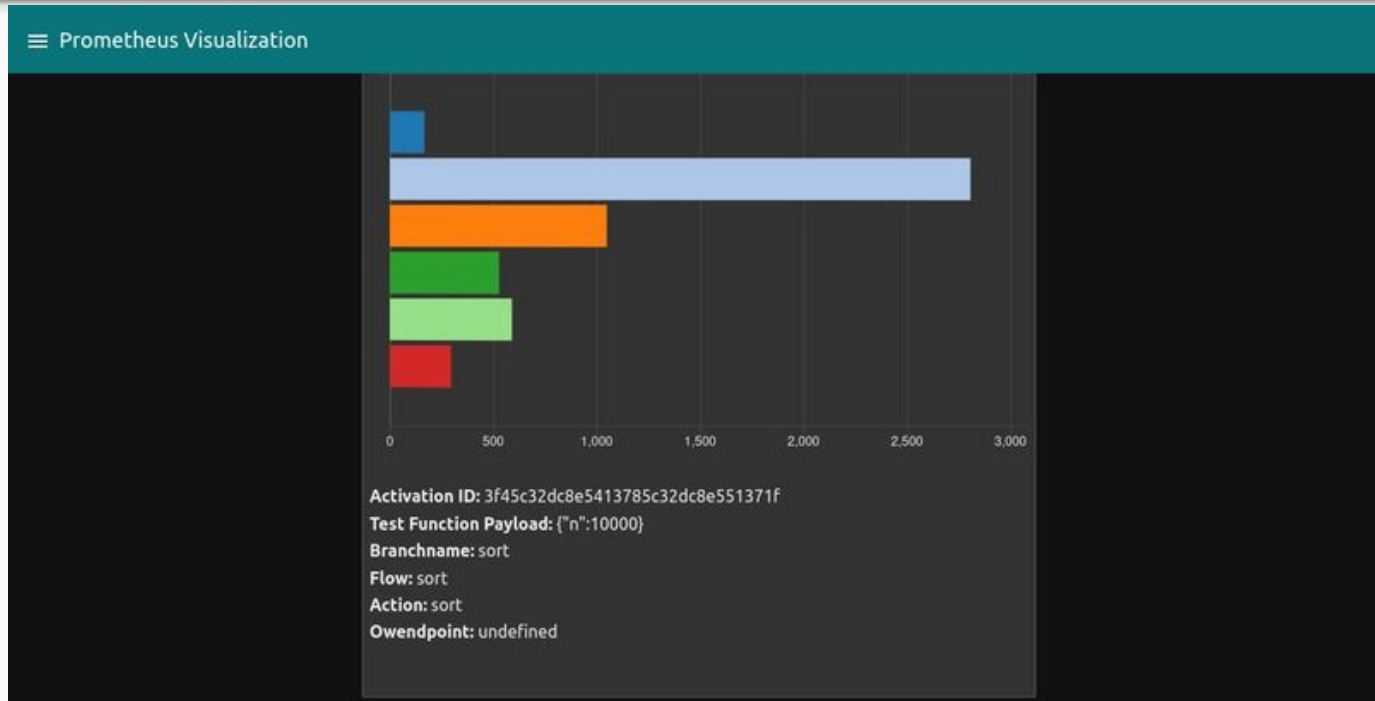
Prometheus Data Visualization



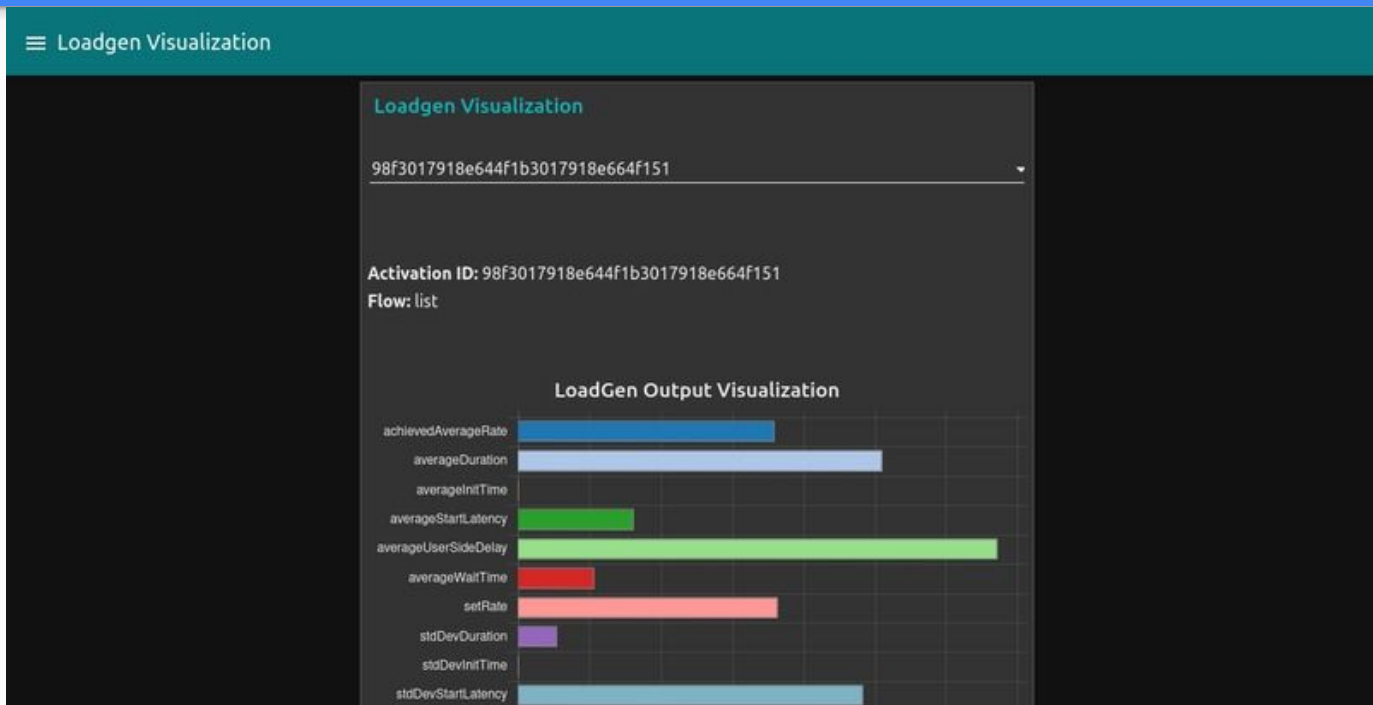
Prometheus Data Visualization



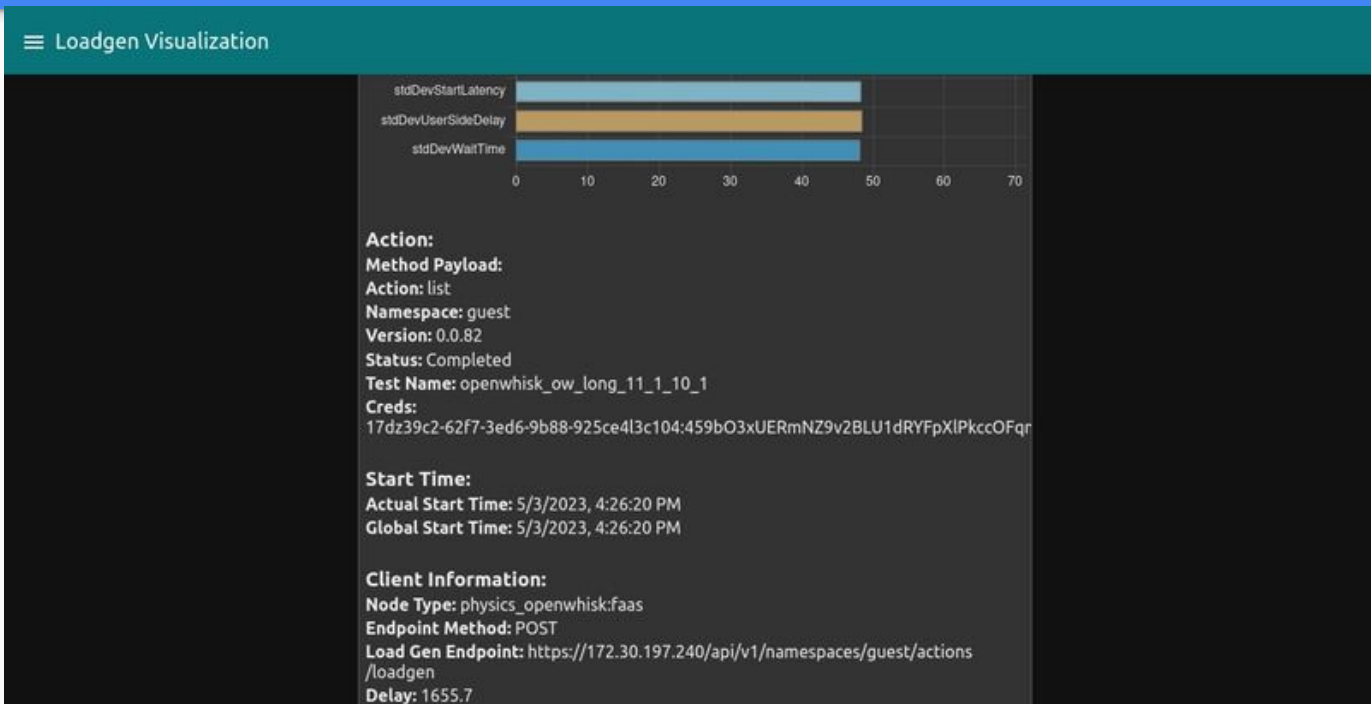
Prometheus Data Visualization



Loadgen Data Visualization



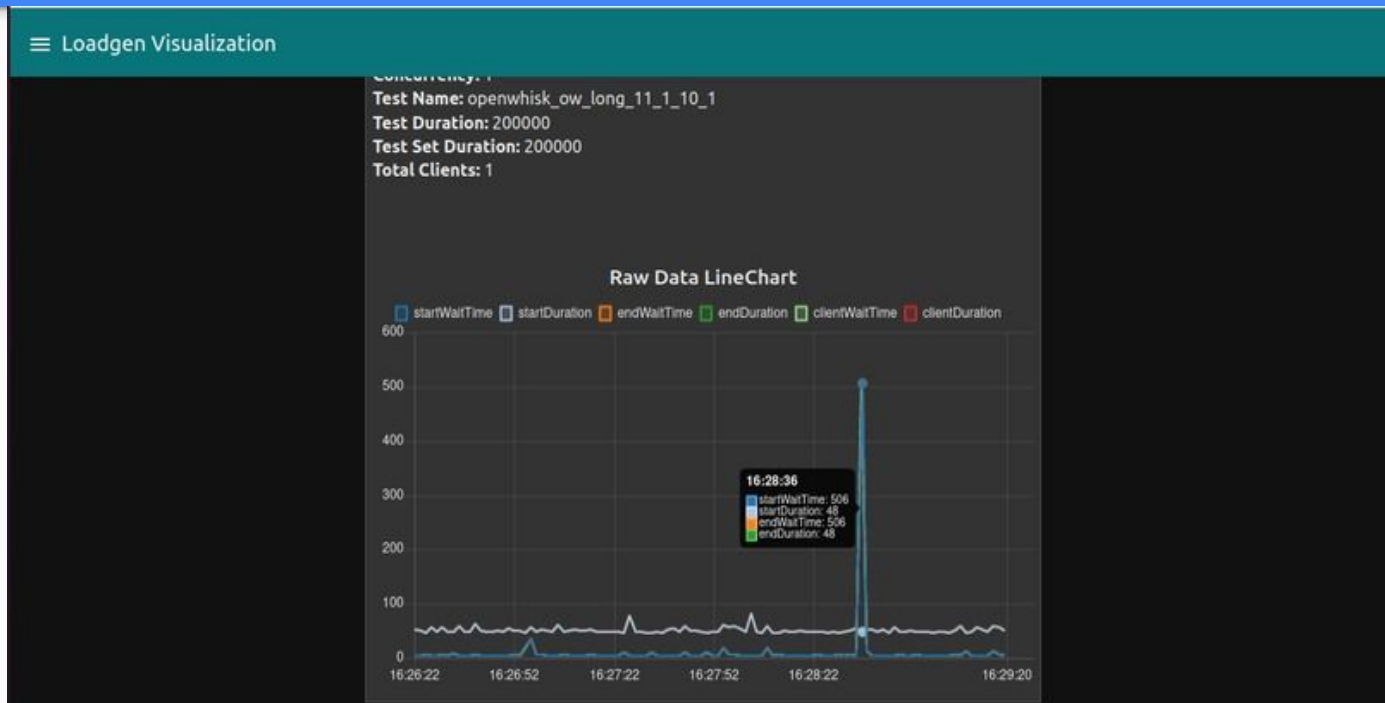
Loadgen Data Visualization



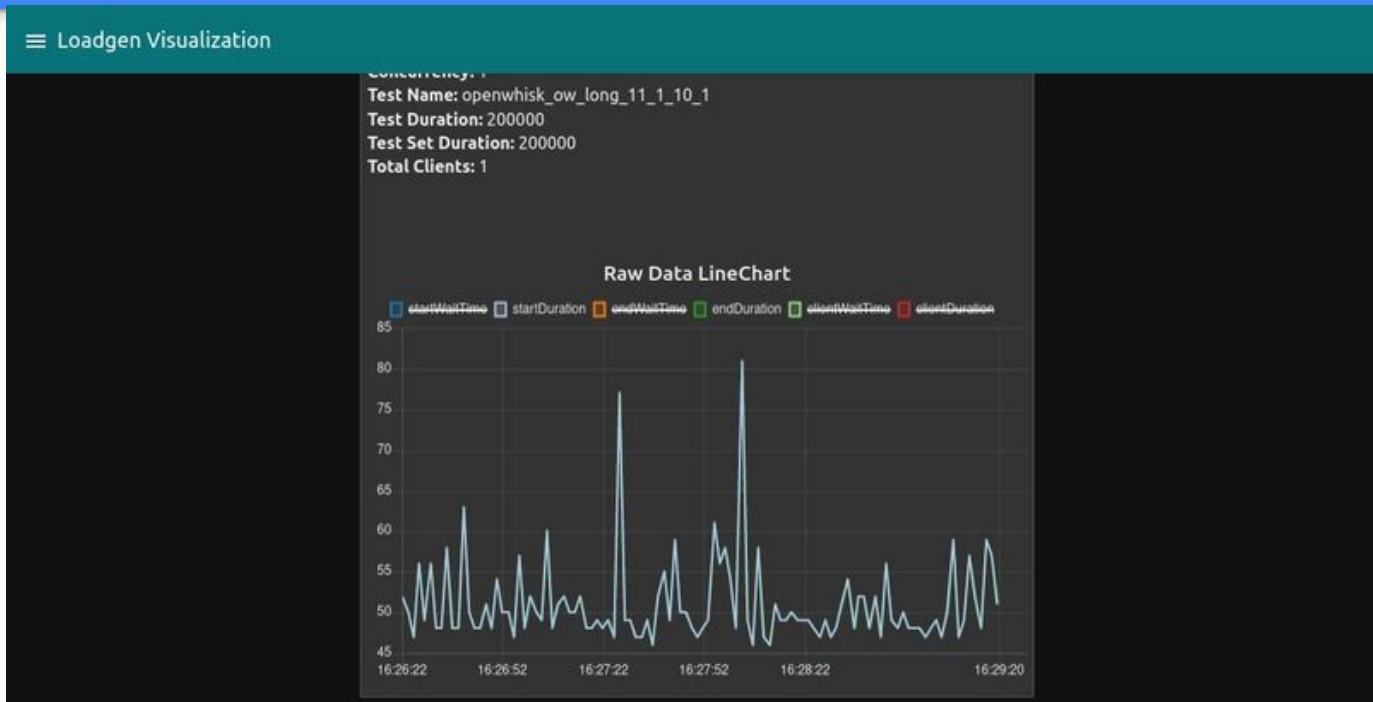
Loadgen Data Visualization

Loadgen Visualization		
	Client Information: Node Type: physics_openwhisk:faas Endpoint Method: POST Load Gen Endpoint: https://172.30.197.240/api/v1/namespaces/guest/actions/loadgen Delay: 1655.7 Client Number: 1 Cold Starts: 0 Launch Generator Delay: 160	
	Additional Information: Memory: 256 Other Info: 1000 Parent Sample Time: 5/3/2023, 4:26:20 PM Sample Number: 108 Status: Completed Status Endpoint: https://172.30.197.240/api/v1/namespaces/guest/activations/ Target Endpoint: https://172.30.197.240/api/v1/namespaces/guest/actions/list Success: true Success Percentage: 100 Concurrency: 1 Test Name: openwhisk_ow_long_11_1_10_1 Test Duration: 200000 Test Set Duration: 200000 Total Clients: 1	

Loadgen Data Visualization



Loadgen Data Visualization



Common Functions Challenge



Common Functions Challenge

- One docker image with 3 functions: Quicksort, Weighted Average and K-Means Clustering.
- Set the param function to the desired function.
- <https://hub.docker.com/r/kazakos13/common-functions>

Subflows Challenge

Subflows Challenge

- We have made a collection of subflows submitted in node red library.
- Implemented Subflows: Quicksort, Quicksort with Docker, Weighted Average, Weighted Average with Docker, Common Functions Subflow, Many Weather API Subflow, City Info Subflow.
- <https://flows.nodered.org/collection/052-kzn3RATd>

Video Demonstration



Documentation & Other Links

- [Documentation](#)
- [Github Repository](#)
- [Docker Image](#)
- [Node-red Collection](#)
- [App Video Showcase](#)

Thanks For Your Time!