Performance Testing of API

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Metrics :

- Metrics – Response time, Throughput
- Response time – time elapsed between first request sent and first response received.
- Throughput = (number of requests) / (total time)
- Best case, Avg. case , Test case

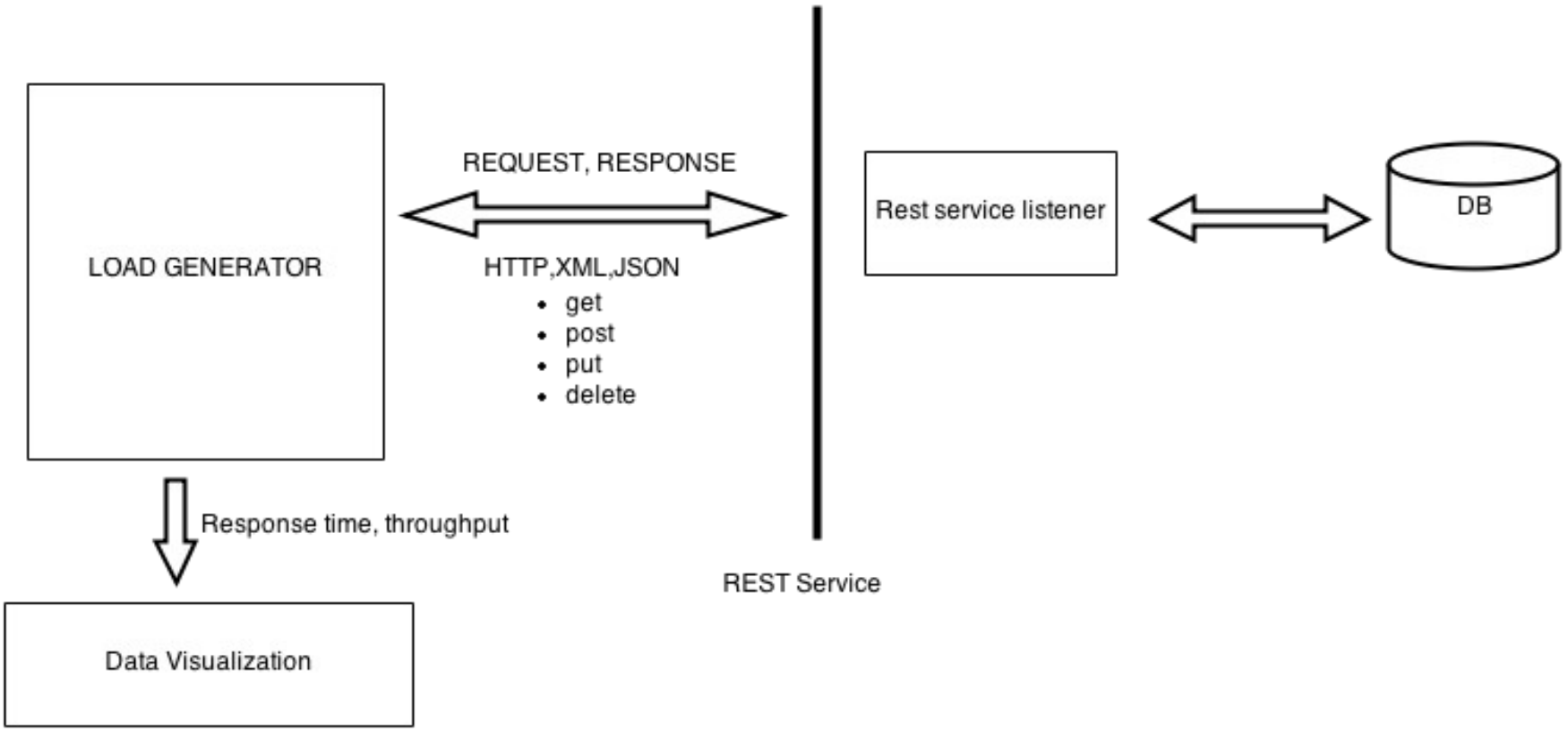
Input :

- Base URI
- Path
- Method
- Payload based on the method
- Number of threads/load
- Frequency to load – loop forever

Output :

- Charts for the Response time and throughput recorded
- Bar chart – best -1 , avg.- 50% , worst- 100%
- Line chart – for each load generated – Dynamic

System Design:



Load generator :

- JSP and JAVA
- Pages that take input and show Output.
- JAVA – Concurrent threads to send HTTP requests to the REST service
- Scripts that load the server at set frequency

Data visualization :

- Fusion charts
- JSON - files
- Bar chart
- Line chart

Input parameter :

get:

Base Url : http://108.168.175.186:8080
Poll Frequency : 10
Number of Users : 1000
Path : /yuppsocial/social/api/livelist

POST :

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base url: http://www.thomas-bayer.com
Poll Frequency : 10
Number of Users : 10
Path : /sqlrest/PRODUCT/0/

<resource>
<PRICE>99.9</PRICE>
</resource>

PUT:

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base url: http://www.thomas-bayer.com
Poll Frequency : 10
Number of Users : 10
Path : /sqlrest/PRODUCT/99/

<resource>
<NAME>Cloud</NAME>
<PRICE>99.9</PRICE>
</resource>

delete :

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base url: http://www.thomas-bayer.com
Poll Frequency : 10
Number of Users : 10
Path : /sqlrest/PRODUCT/99/