

CS 677 S21 Lab 2 - Bookstore

Performance Evaluation Document

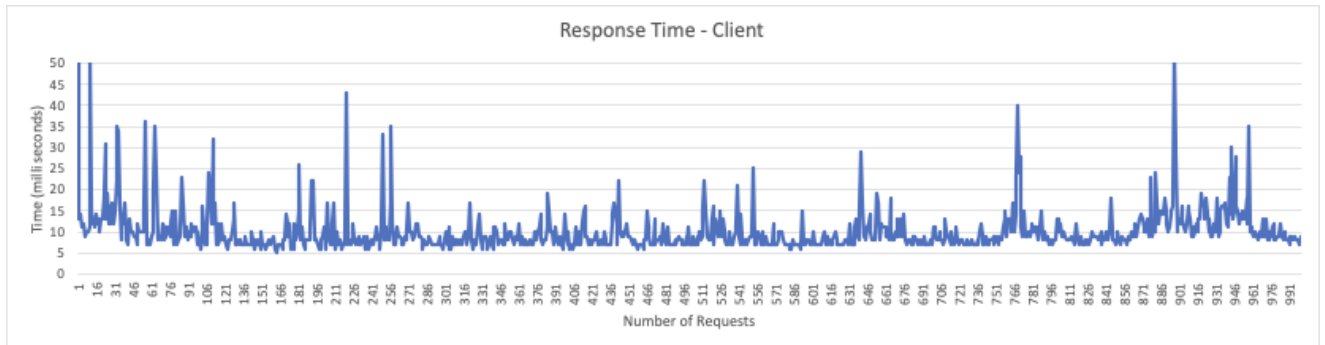
Submitted By

Jagriti Singhal, Bhumika Kalavadia

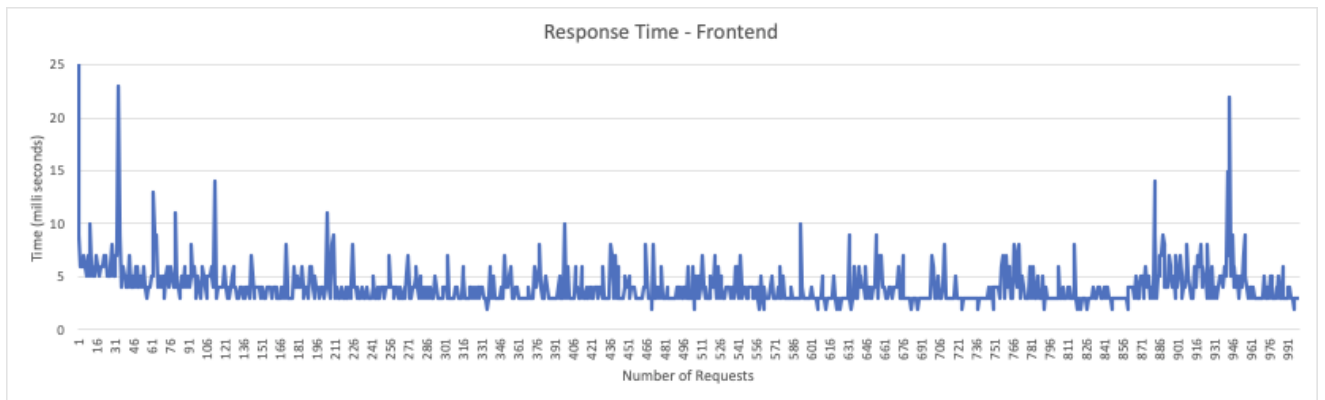
Date: 29 March, 2021

We noted the response time observed by the client and each microservice to serve the http request. There is no wait time between two requests. Following are the observations:

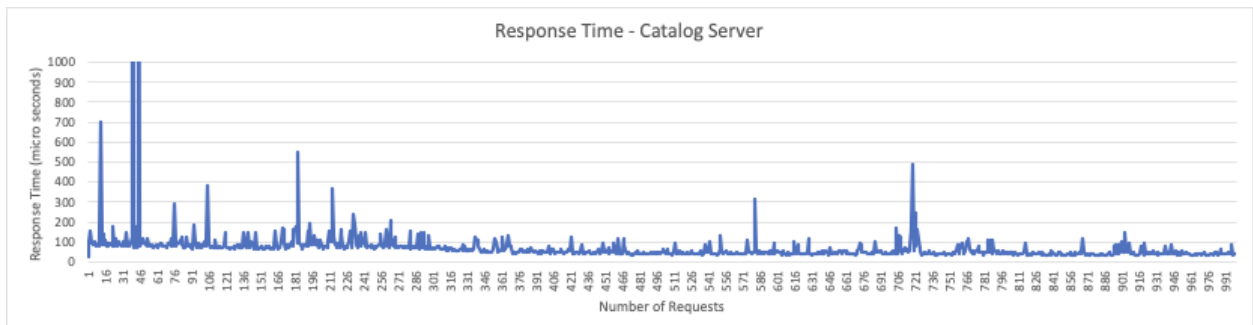
Lookup Request



Average response time = 10.67 milliseconds



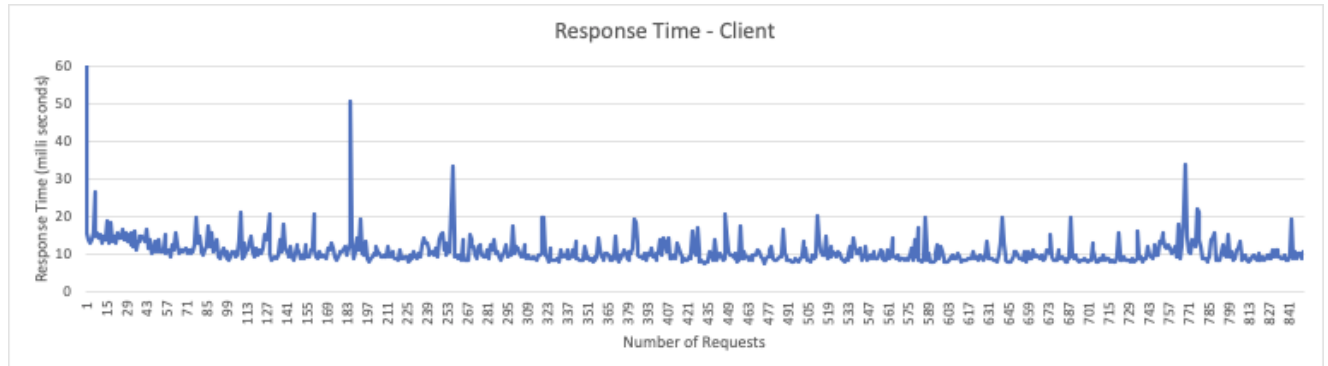
Average response time = 4.24 milliseconds



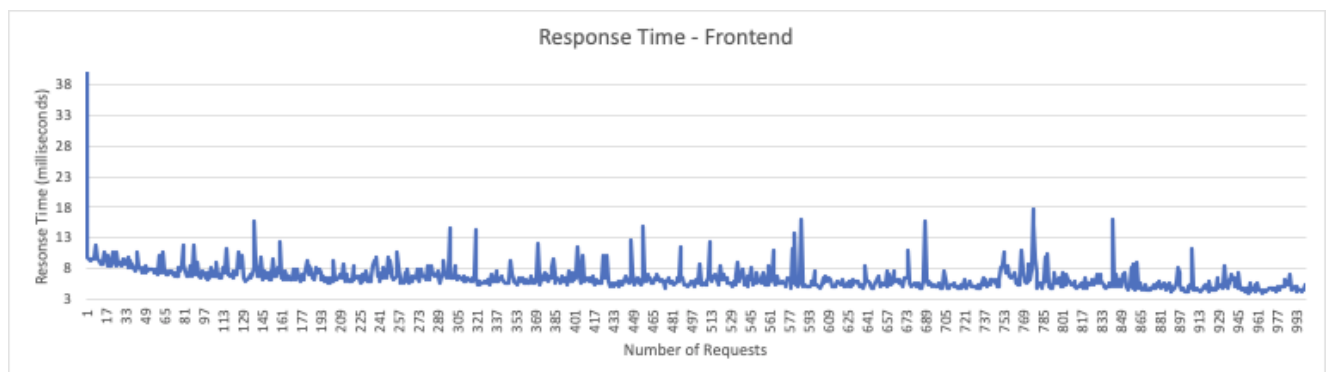
Average response time = 0.073 milliseconds

The first request on the server takes more time than the average observed. As the mapping of routes for microservice endpoints to application controllers is done. Also the data is fetched from the database to in-memory data structure. All the subsequent requests are served directly using hashmap. Client and Frontend observe more response time as compared to catalog server as network overhead will be considered.

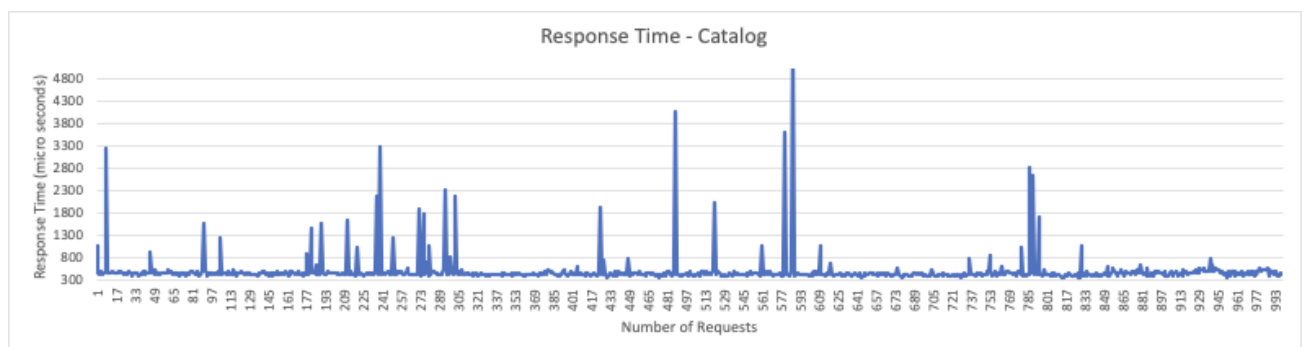
Buy Request



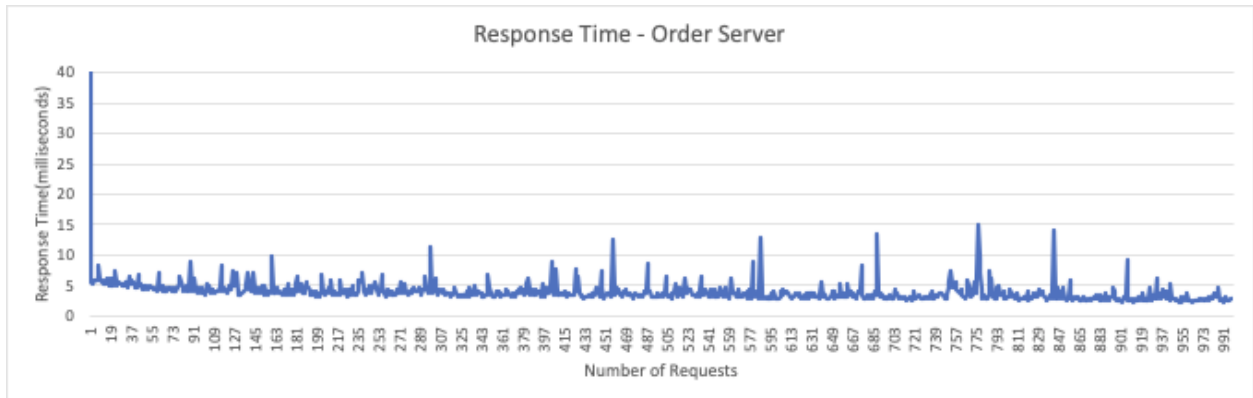
Average Response Time = 12.23 milliseconds



Average Response Time = 7.2 milliseconds



Average Response Time = 0.487 milliseconds



Average Response Time = 4.43 milliseconds

The overall response time observed by all microservices for but request is more compared to lookup request as it involves database update as well as additional checking for availability of items. Catalog server observes least response time as no network overhead experienced.