

## Contribution Report – Ahmed Hussein

I worked alongside the backend developer, looking through and going over the process step by step. I also helped them along with initially downloading and setting up the environments required. I also created the diagram for the microservice, a small part of task 3 where I tried helping with Issues that came up and finished my contribution by doing task 6 by myself and sending it to our backend for him to put in an appropriate folder in the project git repository. The task 6 was from recognizing the patterns of the users, making a plan for load testing, using Jmeter to successfully execute the tests and the final part was producing the report of the load testing .

## Contribution Report – Rama Muharam

The first thing I took on was analyzing and documenting the software architecture of our web application by identifying scalability and fault tolerance issues and putting together a report about them.

I also explored different technologies, frameworks, and tools to support the solution. On the implementation side, I took the task of setting up logging for our microservice(API gateway, Booking service and User service) and making sure it worked properly. I also implemented probing for the API gateway microservice, making sure that everything ran as expected in K9s. Additionally, I added and defined probes in the k8-manifest YAML files for the API Gateway microservice

## Contribution Report – Julius Norén

I primarily worked on the 'code part' of splitting the backend into microservices. My biggest contribution during this course was probably on the API Gateway, since that is where we happened upon the most errors.

I worked on the most parts of the \*-cid.yml files.

I was also responsible for creating tests for one of the microservices. I only focused on testing the different API routes for the User Service, both happy and failing tests.

Additionally, I took on the task of creating the .yaml files in the k8s-manifests folder.

There, I also configured the HPA for the User Service.

## Challenges that the group faced

Challenges addressed in this project were finding what worked and what didn't. In the initial weeks it took a bit of trial and error to figure out how to configure the environments correctly so the project would run smoothly, After that I had difficulties with Azure student subscription not working on my school account and it took 2 weeks to address. After which the biggest challenge in our course was figuring out why when we pushed the project into azure services that the project refused to connect to the frontend, And that was due to our IP configuration that we later figured out .