

Part 4

A problem with the API gateway is that it is a single point of failure. Describe how you would solve this problem?

We can solve with replicating the API gateway. When main gateway goes down replica replaces the main by serving the 8080 (configured on main http server) port.

Part 5

A problem with a microservice architecture is that is difficult to keep track of the business processes that run on the microservice architecture. Describe how you could solve this problem?

Because of business process may perform actions from different composed micro service communications we have to have some resource tracking tool like tracing. Where will be logged all services with there requests and responses between micro services.

Part 6

A problem with a microservice architecture is that is difficult to keep the interfaces of the different microservices in sync with each other. Describe how you could solve this problem?

As my experience we can write as minimum as much possible exposing the interface functionalities as one of the main principle. But if there will be some changes in case of REST interfaces we can add extra path starting from /v2 and add new features. That's how we can work backward compatible with v1 and v2 legacy interface versions. To make it easy to understand the interface we can use tools like swagger + actuator.