**Silver**

There are 3 microservices called Auth, Fu (file upload) and main. Main is using the first 2 for generating token for authentication, submitting a file, and passing to the TK service through the id returned after file submission. It uses a double certificate key for JWT token generation and verification. Token has a duration of 60 minutes and can be regulated.

**Gold**

By using docker-compose I’m able to create a network where internal microservices can be blocked totally or at request (by enabling / disabling ports for development purposes into the configuration) although Main microservice will always be able to reach them, so it will expose the Auth and Fu rest entry points by delegating the corresponding microservice, but hiding their direct access.

The docker configuration have been converted into Kubernetes configuration with a load balancer with 3 replicas on the Main microservice, and with SSL to assure security on basic authentication (the credentials for requesting the JWT are passed with encoded basic auth).

Counting of uploaded documents can be done by adding [microprofile metrics](https://quarkus.io/guides/microprofile-metrics).

