Gdańsk, 19th of September 2019r.

REFERENCES

Name of the worker: **Jakub Bober**

Mr. Bober was working at Lufthansa Systems Sp. z o.o. from 1ˢᵗ of August 2019 till 20ᵗʰ of September 2019 in the position of Trainee.

Kuba joined our team and was assigned to a task of creating a web application that would help solve a real problem we faced in our day to day work.
The core functionality that we were aiming for was not very complex (semi-random assignment of test cases to testers) however the way we expected the final solution to be implemented was much more demanding.
The project consisted of not only implementation of the web application but also testing, deployment, debugging and many other subjects that one comes across during a career as a software developer.
He handled all of the assignments very professionally, he asked precise questions to clarify the requirements, reached out for help when he couldn't figure something out and delivered the final product as expected. Many of his solutions implemented were very clever and not just rushed to get it working. He did all that despite having no prior experience in many of the areas that he had to face here.
Aside of his technical prowess and quick learning abilities it was a pleasure working with him. He was calm, collected, communicative, and focused on the task at hand.

Below a list of technologies, concepts and solutions that Kuba had to tackle to meet the criteria posed by the product owner.
- Python (core functionality and application)
- JavaScript (Front end scripts)
- HTML + CSS (templating engines and styling)
- REST API (fetching from and posting data to JIRA)
- Object serialization and deserialization
- Cross-browser compatibility of a web application
- Unit tests
- Manual functional tests
- Deployment of the application (hosting in Azure Cloud)
- Logging mechanisms with different levels (INFO, DEBUG)
- Containerization of the web application in Docker
- Different techniques of debugging a web application
- Generating semi-random permutations with specified constrains (application logic)
- Taking care about non-functional requirements such as usability and performance

Andrzej Jakusk
Team Leader
Lufthansa Systems Poland