IK Company

About IK Company

IK Company was established in 2016.

The company has made a significant contribution into the evolution of our customers from redesigning web-sites and organizing community events for developers to improving the code base, implementation new features and documentation.

We take part in upgrading workflow and tools, reverse engineering and improving implementation and design quality of the code base and researching a new strategy for the evolution.

Our mission is to simplify scientific experiments providing high quality consulting in the field of software development.

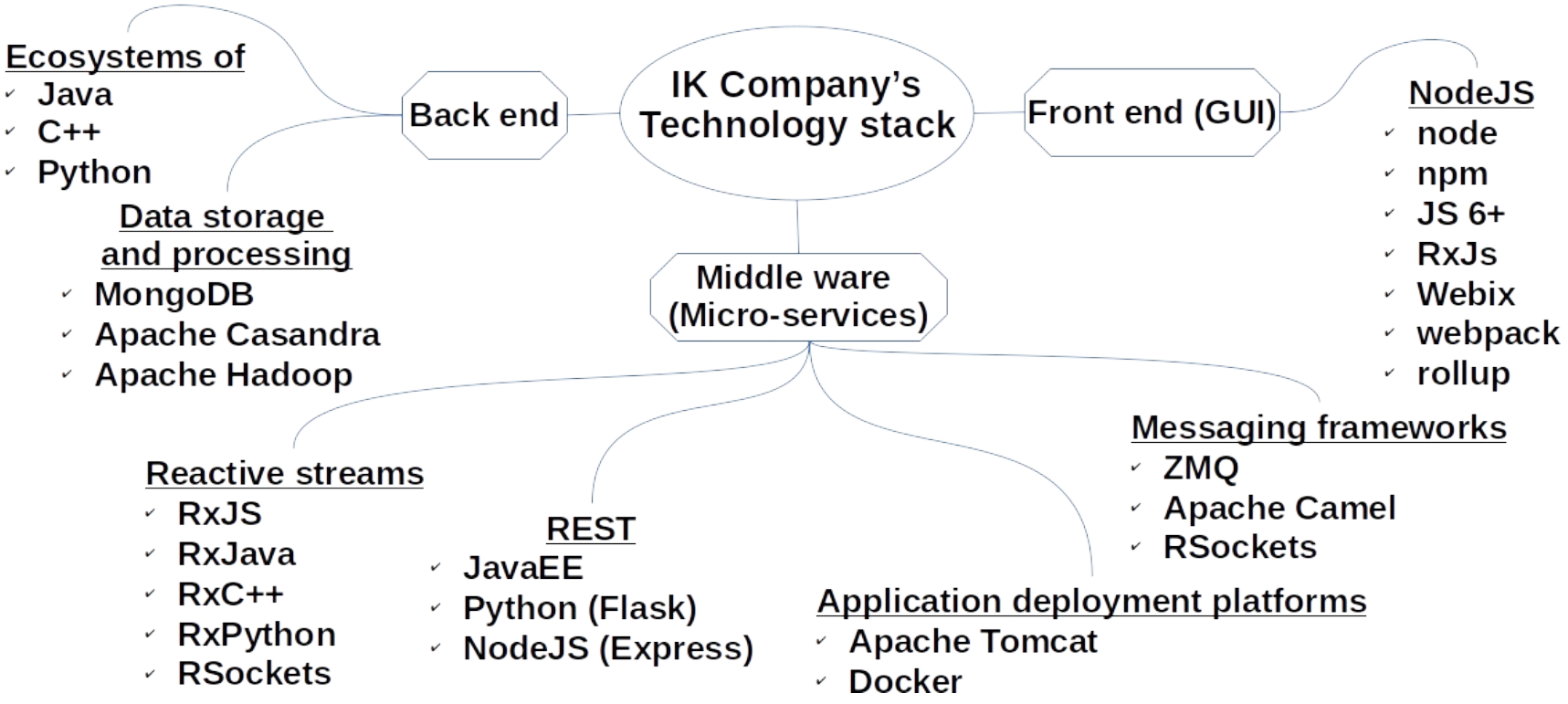
Strong competencies of IK

We have developed strong competencies in the following fields:

- Planing and agile project management
- Requirements capture and Analysis
- Architecture design
- Design and implementation of new features in the existing code base
- GUI design and implementation
- Code review, CI/CD, testing automatization
- Maintaining legacy code
- Creating new libraries and frameworks
- Creating new platforms
- Writing Technical and User documentation and specification

Technology stack

We have strong tech skills and abilities in the following stack:



Customers' relationships

Being on the market over the years, we have developed and established the following process working with our customers:

- Understanding and analysis of clients' needs and desires, collecting information, proposing solution, approving and discussing it with the client
- Scheduling and plan validation
- Creating communication channels with the customers like Issue tracking systems and time management system
- Each collaboration is supported with online and offline meetings (if possible), status reports and detailed calculation of hours and tasks
- Technical and user's documentation support
- Usually we make road maps of how to proceed further, where to look for tips

Projects relevant to TANGO

Tango Controls support and consulting

- REST API specification and implementation (https://github.com/tango-controls/rest-api)
- Tango WebApp (Waltz GUI) using Node.js, Webix, JavaScript, RxJs technologies and libraries
- Java, C++ support (code review, bug fixing, new features' implementation)
- Migration of Tango Controls repositories to GitHub from SVN
- Tango v10 evolution road-map development (https://github.com/tango-controls/tango-v10-design-doc)

Projects relevant to TANGO

Tango Controls support and consulting

- Tango Controls website redesign and support (https://www.tango-controls.org/credits/)

- Analysis and restructure of Tango Controls documentation and requirements for the further improvements including participation in offline brainstorms (https://www.tango-controls.org/community/events/write-docs-camp/).

Projects relevant to TANGO

Tango Controls support and consulting

- Regular participation in annual Tango Controls collaboration meetings
- Participation in Kernel Tango Controls workshops (online and offline, https://www.tango-controls.org/community/events/tango-kernel-doc-camp/)
- Organization meet-ups related to Tango Controls
  - in Krakow
    https://www.tango-controls.org/community/events/waltz-tangowebapp-workshop-solaris/,
  - in Hamburg
    https://www.tango-controls.org/community/events/tangowebapp-workshopdesy/,
  - In Grenoble
    https://www.tango-controls.org/community/events/tango-webui-workshop/,
  - In Moscow
    https://www.tango-controls.org/community/events/tango-users-meeting-russia/
  - We still also hope to meet in Saint Petersburg

Projects relevant to TANGO

Tango Controls support and consulting

Since 2016 the JetBrains company provides *All products pack* license for at least 5 persons each year.

Meaning the Tango Community has be granted about 30 licenses so far for about € 20 000 in total.

Projects relevant to TANGO

p05Nano controls system

The project was related to the software improvements of the existing code based on PyTango and upgrade to the new version of Python, PyTango and Windows (https://github.com/hzg-wpi/p05nano)

- ➔ Code base review and refactoring
- ➔ Migration of the system to PyTango 9.3 (Python 2.7 to Python 3, Qt 4 to Qt5)
- ➔ Writing tutorials and documentation
- ➔ Requirements capture and regular meetings and discussions with customers

Other points of interest

Piazza and Magix

The goal of the project was to prototype and design an advanced control system for Axsis spectrometer. The system was successfully implemented and tested during the experiments in DESY, Hamburg, Germany and PAL-XFEL, Pohang, South Korea (https://axsis.desy.de/axsis_news/2020/von_hamos_x_ray_emission_spectrometer_for_the_axsis_beamline/)

- ➔ Analysis and requirements capture
- ➔ Prototyping of the system
- ➔ Prove of the concept implementation
- ➔ GUI design and implementation
- ➔ Support during the experiments

Publication: http://dx.doi.org/10.20944/preprints202108.0336.v1

Other points of interest

Controls.kt and Magix

Design, implementation and testing of slow control and monitoring system for Baby IAXO

(https://github.com/mipt-npm/controls.kt/tree/dev)

- ➔ Designing new architecture for Baby AIXO slow control
- ➔ Prototyping of the system
- ➔ Implementation
- ➔ GUI design and implementation
- ➔ Participation in collaboration workshops and meetings

Contacts

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