

Business Domain

Digital Workforce

Project Type

Desktop Application

Multi-Functional Application for In-Vitro Diagnostics and Digital Microscopy

Client

The Client provides a broad portfolio, combining outstanding knowledge from more than 25 years of experience in the fields of optics, laser technology, digital imaging, optoelectronics, and sensors. Their customers specialize in different areas such as semiconductor equipment, laser material processing, healthcare & life science, industrial automation, automotive & mobility, and safety, as well as work in research institutes.

Project

Development of a multi-functional application for working with in-vitro diagnostics data. The functionality includes capturing images of cells in different channels (for example, in fluorescence mode); creating time-lapse videos; combining many images into a huge one; implementing an automatic experiment planner and their execution; customization of automatic post-processing of images; live video streaming, and many other features.

Objective

To create a very powerful and flexible desktop application to interact with the Client's miniaturized modular diagnostic imaging hardware platform that works in the areas of live-cell imaging, flow cytometry, and molecular diagnostics.

Team Reinforcement

The Client has deep domain knowledge but did not have enough developers available. Intetetics quickly provided an experienced Remote In-Sourcing Team®, proposed the software development process, and involved a part of the Client's team.

Challenge

The Client's company focuses on key technologies, elevates market and customer-specific systems to a new level, and meets the growing demands for highly integrated photonic solutions.

The Company's specialists have deep domain knowledge, but their IT department doesn't have the skills to develop the desktop application with the required technologies and quality.

The Client decided that it is not cost-effective to build an in-house team for the project. It required a lot of managerial efforts and could lead to risks related to the quality and launch time.

Quick Facts

- ✓ 4 Senior Engineers were allocated within a week after the project started
- ✓ The Client was involved only in business-related decisions, not engineering
- ✓ Intetics managed the whole development process

Technologies

Java / Spring / WebRTC / REST / Junit / Eclipse / Log4J / JDBC / JVM

Solution

★ 01

Together with the Client's team, Intetics built a world-class digital microscopy system.

★ 02

The new application had exponential growth in popularity and didn't experience any issues. The application allows users to quickly and efficiently generate all types of in-vitro diagnostics (IVD) image data.

★ 03

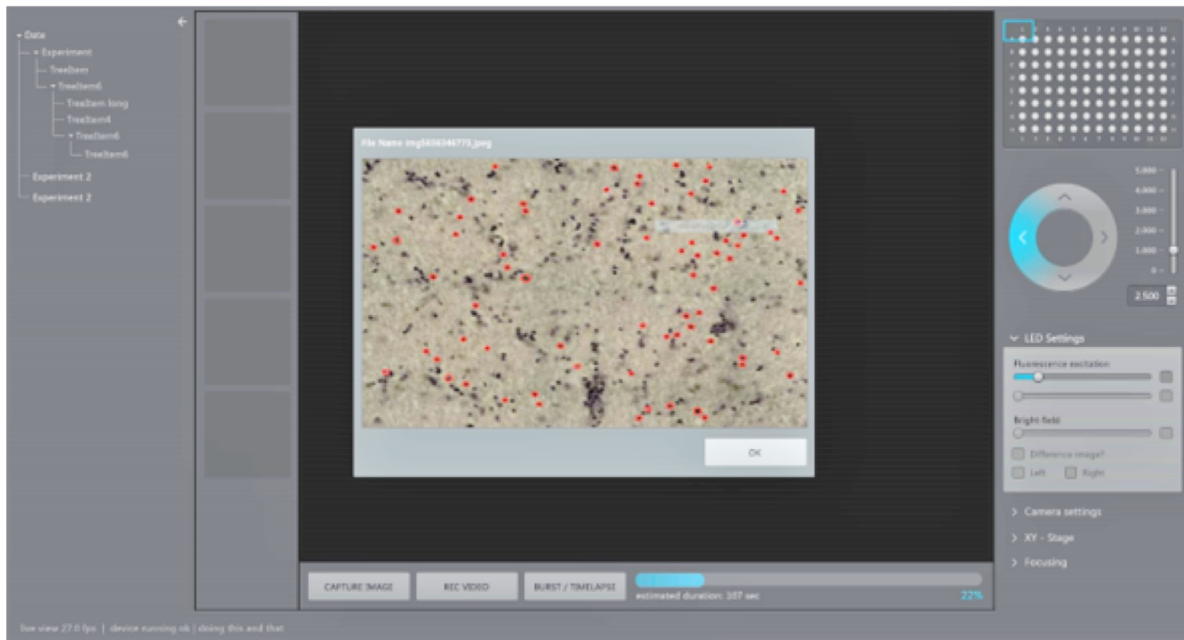
With the first prototype, the Client was able to get feedback from the market in a very short time.

★ 04

The developed software allows to obtain images of cells in different channels, create time-lapse videos, combine many images into a huge one, implement an automatic experiment planner and execute experiments.

★ 05

The Remote In-Sourcing Team's® performance was always on time and fit within the budget. The partnership was predictable, reliable, and flexible.



Client Reference



The Intetics Remote In-Sourcing Team® showed outstanding results in engineering. The team size was scaled up and down immediately upon request.

VP R&D

Benefits and Results

- ★ Development time was reduced by 2 times by developing software in parallel with hardware.
- ★ The Client decided to apply the development process proposed by Intetics.
- ★ Time confirms that the architecture proposed by Intetics was chosen and built flawlessly. The Client continues the development based on the present architecture.

Techstack:

Java, Spring, WebRTC, REST, Junit, Eclipse,
Log4J, JDBC, JVM

Team: 4

4 Java Developers