



Business Domain

Industrial, Manufacturing

Project Type

Web Application

WebLab Innovator: Intetics' Journey to Revolutionizing Laboratory Workflows with a Cutting-Edge Web Application

Client

The Client is a global leader in precision instrumentation, is renowned for innovative solutions in laboratory weighing, industrial measurement, and product inspection since 1945.

Project

Development of advanced software for design, analysis, and reporting experiments. The tool must control lab equipment, enabling chemists and engineers to understand reaction data thoroughly.

Objective

The Client sought a development team to create a web application tailored for laboratory and research settings. This complex platform aimed to streamline experiment design, analysis, and reporting processes. As a result, the Client aimed to quickly assemble a team comprising 12 skilled engineers and senior UI/UX designers to ensure adherence to industry-leading standards in functionality and user interface design.

Team Reinforcement

The project required developers proficient in Blazor for front-end development. Confronted with a limited pool of Blazor experts and the need for domain-specific experience, the client engaged Intetics for its expertise. Intetics utilized its substantial internal IT resources, searching its vast talent pool for the right candidates. The company executed a comprehensive search strategy that went beyond standard recruitment practices, achieving quick results and extending the search across various locations.

Challenge

The Client, an industry leader in precision instrumentation and services, offers a comprehensive suite of solutions, encompassing laboratory weighing, industrial measurement, and product inspection. With 16,000+ employees across the globe, the company delivers unrivaled accuracy and reliability to customers in 140+ countries.

The initial challenge was multifaceted, stemming from the need for a web application capable of revolutionizing laboratory operations. The project required developers proficient in Blazor for front-end development, a skill set in short supply in the market.

Time constraints exacerbated the situation, mandating swift talent acquisition, as well as rapid development and deployment to address the urgent needs of multiple clients.

Quick Facts

- ✓ 13 years of continuous cooperation with the Client
- ✓ Assembled a team within 2 months, comprising 12 Senior/Lead Developers and 3 UI/UX Designers
- ✓ Successfully released the MVP within 1 year, which promptly went live for several clients

Technologies

.NET 7 / Blazor / Web API / Orleans MongoDB / Azure DevOps / xUnit / SignalR / TypeScript / Jest

Solution

★ 01

The developed sophisticated web solution enables precise management of laboratory equipment.

★ 02

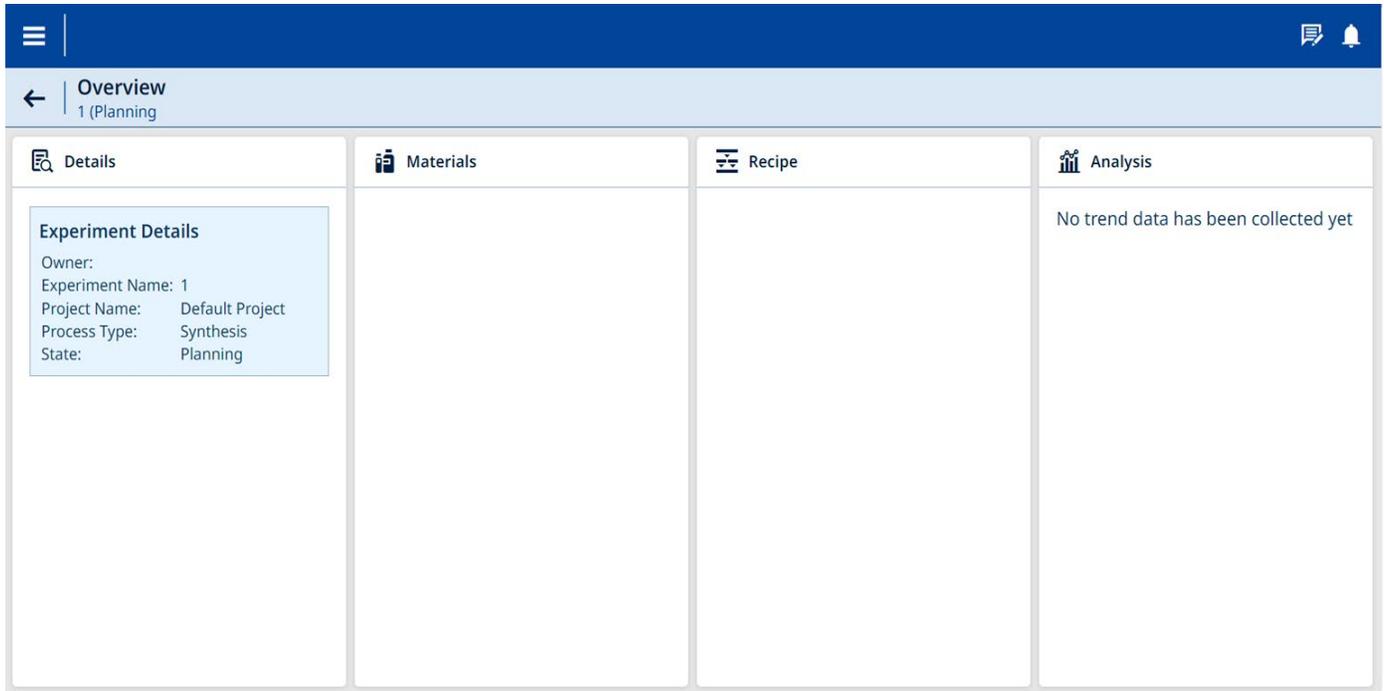
The feature scope allows chemists and engineers to create, track, and analyze experiments, understanding reaction data thoroughly.

★ 03

The delivered web application significantly enhances the gathering and analysis of experimental data, increasing efficiency by up to 3 times.

★ 04

Seamless operation with external instruments enhances experimentation capabilities, potentially establishing new industry standards.



Benefits and Results

- ★ The Client managed to successfully develop an MVP and launch it in live for several clients, demonstrating the solution's viability and effectiveness.
- ★ By streamlining equipment and experiment management, the Client has reduced the time and effort needed to set up and conduct research by up to 3 times, resulting in heightened laboratory throughput.
- ★ The inception of a new tool designed for equipment control further streamlines the management process. This development promises to enhance precision in equipment handling, reduce operational complexity, and elevate user experience, potentially establishing new benchmarks in laboratory efficiency and productivity.

Techstack:

.NET 7, Blazor, Web API, Orleans
MongoDB, Azure DevOps, xUnit, SignalR,
TypeScript, Jest

Team: 15+

3 teams with 15+ people each:
Architect, Full-stack
Developers, UX/UI Developers,
Automation & Manual Testers