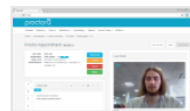
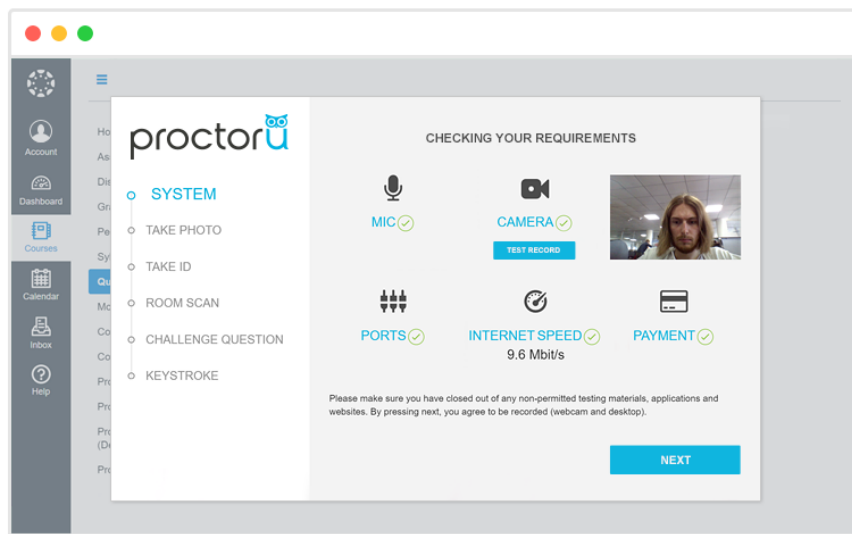


# Portfolio

## Innovative Machine Learning-Supported Proctoring Platform



java

ruby

real-time communication

e-learning

computer vision

## Project Overview

Oxagile leveraged state-of-the-art technology including WebRTC and machine learning to help a leading U.S. proctoring service enhance their flagship exam monitoring platform. The updated solution serves as an intuitive exam supervisor while supporting both live and automated sessions.

Key features and highlights:

- seamless WebRTC-based video stream capture and playback;
- automated session flagging based on a wide range of triggers (light and audio level changes, head movements, window resize events, and more);
- scoring functionality that assigns penalty points for suspicious activity;
- user identity validation based on a biometric profile;
- machine learning-supported face recognition;
- easy-to-use text and audio chat functionality;
- advanced reporting and statistics.

With smart, data-driven automation in place, the platform is poised to scale at a much higher rate, helping the client reinforce their position of a well-established proctoring service provider.



### Technology Stack

React, C++, OpenCV, Ruby on Rails, PostgreSQL, FreeTDS, Java, Kurento Media Server



### Timeframe and Workload

**Duration:** 9 months  
**Effort:** Ongoing