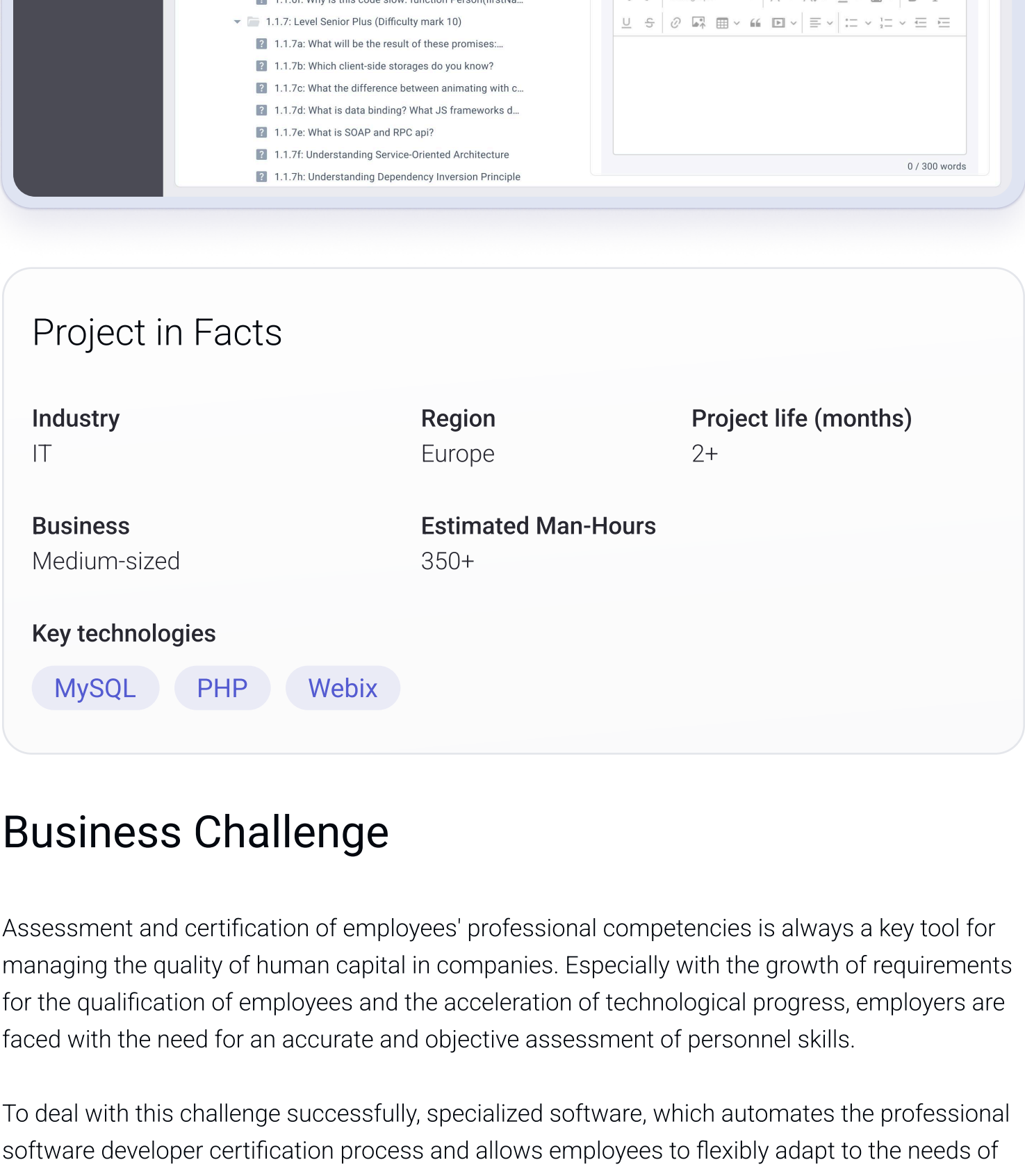


Corporate Training and Certification System for IT Teams

Skill assessment system based on Examarius and the Question Bank tool for testing both seasoned employees and new hires. The system streamlines the testing and certification process, reduces human error through automation features like the Randomizer, and recognizes and motivates employees with personalized certificates.



Project in Facts

Industry IT	Region Europe	Project life (months) 2+
Business Medium-sized	Estimated Man-Hours 350+	
Key technologies MySQL PHP Webix		

Business Challenge

Assessment and certification of employees' professional competencies is always a key tool for managing the quality of human capital in companies. Especially with the growth of requirements for the qualification of employees and the acceleration of technological progress, employers are faced with the need for an accurate and objective assessment of personnel skills.

To deal with this challenge successfully, specialized software, which automates the professional software developer certification process and allows employees to flexibly adapt to the needs of the company, is increasingly being introduced. Using such systems not only simplifies the control of the level of professionalism of employees but also opens up new opportunities for planning the training process and career growth.

Just like many other companies, we value the opportunities for growth given to our employees, which is why the question of how to make this technical training and certification process efficient was also raised. The consideration of how the use of Examarius for certifying the professionalism of employees can contribute to improving the efficiency of [human resource management](#) became our personal challenge. It was important for us to understand how this approach will help companies to meet the requirements of a dynamic labor market.

Therefore, we identified the challenges we needed to resolve:

- Simplifying Internal Testing and Professionalism Control:** using an online system to simplify the control of programmers' tech skills and open new opportunities for planning training and career growth was important for us. Besides that, our company follows the hybrid work environment, and many of the employees are working remotely, which was one of the factors to consider for successful control over skill testing;
- Automating Certification with Ease:** for our company, it was also important to find the way of automating the professional software developer certification process, while spending considerable amount of resources;
- Improving HR Management:** understanding how using [Examarius](#) for employee certification could improve human resource management efficiency and help our company to meet the dynamic labor market's requirements, which was ideal for us;
- In-House Testing:** Besides that, it was the perfect opportunity for us to test [Question Bank](#), one of the latest custom features of our online test system implemented at that moment.

Solution

To ensure the reliability and fairness of the assessment process, we decided to test the system from multiple angles. The goal was to evaluate not only how well the platform works technically but also how intuitive and useful it feels for different user groups. To achieve this, we brought in two distinct categories of participants: experienced employees who needed to reassess and validate their current skill levels, and new candidates who had never encountered the Examarius platform before.

This approach helped us to simulate real-life scenarios of internal certification and candidate evaluation. It also provided an opportunity to compare how different users interacted with the system and what kind of support or adjustments might be needed. As a result, we collected diverse and honest feedback, identified areas for improvement, and confirmed that the test outcomes effectively reflected the users' actual competencies.

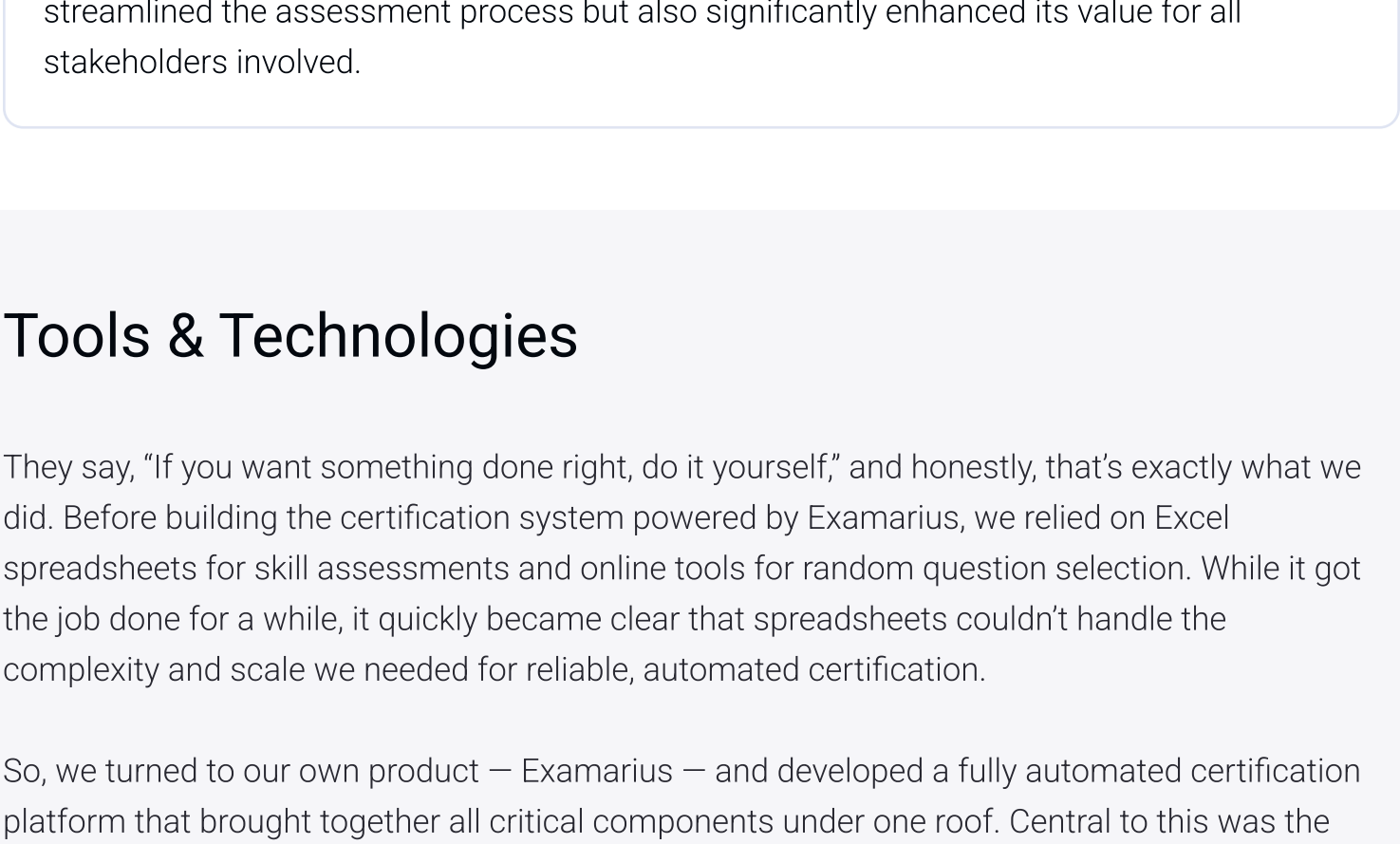
- Automated certification workflows** with minimized manual input and reduced human error in evaluation
- The Randomizer** feature to ensure fair and varied testing scenarios for each user
- Personalized certificate generation** for boosted employee motivation and recognition
- Integration of the Question Bank** to allow HR and team leads to easily create and manage up-to-date test sets

The ancient truth says that all people are different, you will not find two identical individuals. In our case, this truth was multiplied by the number of people involved in the certification: different examiners would choose questions for one certification test differently, and each examinee would answer every question in their own way.

Sergey Filatov
Business Analyst at XB Software

Question Bank

To make certification meaningful and scalable, we needed a centralized space to store, organize, and reuse questions across multiple tests and user groups. That's where the Question Bank comes in — a flexible feature designed to help Examiners manage large volumes of test materials without losing clarity or control.



Hierarchy of Topics

Initially, the Question Bank's repository must be filled with questions, distributing them according to their hierarchy and topics. This task is handled by the Examiners. In real terms, the procedure represents the division into main levels and sublevels.

For the certification in our company, the levels were divided according to the web development aspects:

- frontend,
- backend.

And then the topics were added accordingly:

- general,
- JavaScript,
- layout (for frontend),
- security,
- protocols, etc.

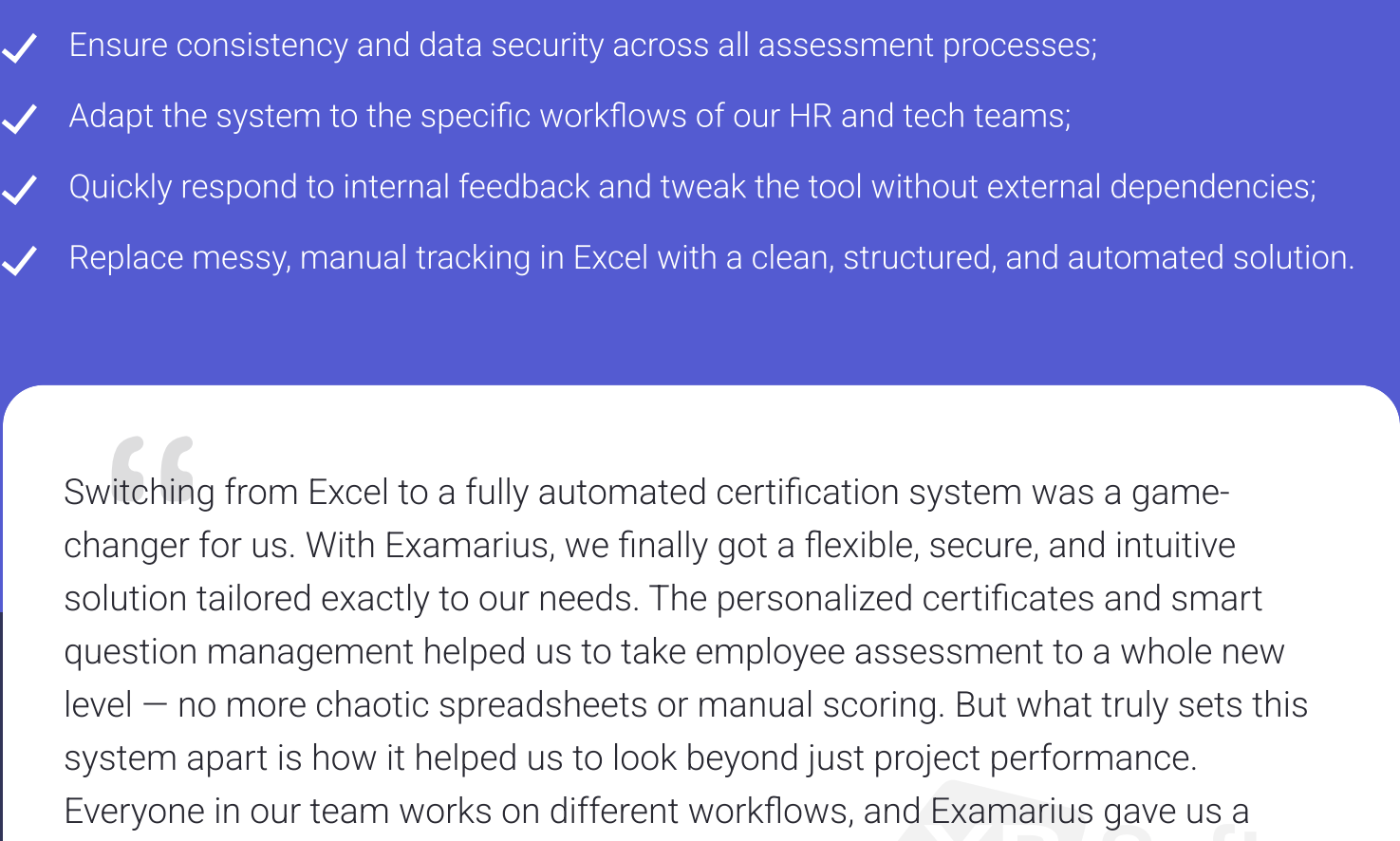
Creating a question reflects the logic in the Test Builder section: Question area (if needed), Answer area, Difficulty mark.

Complexity and Focus

We started with 150 questions of varying complexity and different focus that we already had to test the waters. Different groups of examiners were able to filter the questions on the Question Bank home page according to the criteria they wanted and created tests based on the skill levels of their examinees.

Test Management

To ensure fairness, scalability, and ease of use in the certification process, we extended the functionality of the Examarius platform with several powerful enhancements. These additions not only reduced manual effort for examiners but also improved the objectivity of assessments and the overall experience for examinees.



Randomizer

To reduce the influence of the human factor when selecting questions during the test design, it was decided to add a new Randomizer feature. Thus, an Examiner could select the necessary chapters, specify the required number of questions for the future test, and that's it. The system itself randomly gathers questions for the web developer skills certification exam.

Repository

Other than that, the Question Bank feature has proven to be a convenient and intuitive tool for creating a repository with a stock of questions. In the hierarchical system of displaying questions in Syllabus, the descriptions of the master level and subsidiary levels, question previews from the Syllabus tree, and the ability to transfer questions between levels via drag-and-drop have been added.

Results Review

It is also important to have the opportunity for feedback and discussion. That is why, for the examinees, we added the function of reviewing the results of the passed tests and seeing them in the random order to assess the answers with fresh perspective. For example, in case there were Multiple-Choice Questions (MCQs), the examinees are now able to see the right answer to compare with the option they chose.

Custom Certificates

A well-structured assessment system isn't just about evaluating knowledge — it's also about driving growth and engagement. One of the key elements to personalized certification mechanism, which helped both employees and managers get more value out of the test results — not just in terms of numbers, but in real, practical impact.

Recognition and Motivation

One of the standout features integrated into the testing process was the generation of custom certificates upon test completion. These certificates were designed to reflect the individual's performance, providing a tangible acknowledgment of their skills.

For developers, the certificates served as both a motivator and a career development tool. By clearly showcasing their strengths and areas for improvement, employees were able to track their growth over time and work on specific skills to enhance their professional competence. Furthermore, the personalized certificates fostered a sense of achievement, boosting morale and encouraging continuous learning.

Enhanced Team Management

As for team leaders, these certificates became a valuable resource to gauge the expertise levels within their teams, facilitating better task allocation and identifying areas for targeted training. With clear insights into the skill levels of their team members, team leads could make informed decisions about resource allocation and task assignments. Also, they were able to:

- Create focused training programs.** By identifying specific skill gaps, team leads were able to tailor training initiatives to align with both individual needs and organizational goals.
- Improve project outcomes.** Ensuring the right skillsets are applied to the appropriate tasks translated into higher efficiency and better project results.

By integrating this personalized approach into the evaluation process, the system not only streamlined the assessment process but also significantly enhanced its value for all stakeholders involved.

Tools & Technologies

They say, "If you want something done right, do it yourself," and honestly, that's exactly what we did. Before building the certification system powered by Examarius, we relied on Excel spreadsheets for skill assessments and online tools for random question selection. While it got the job done for a while, it quickly became clear that spreadsheets couldn't handle the complexity and scale we needed for reliable, automated certification.

So, we turned to our own product — Examarius — and developed a fully automated certification platform that brought together all critical components under one roof. Central to this was the **Question Bank**, which allowed examiners to organize questions by hierarchy and topic, and the **Randomizer** feature, which ensured fair and varied testing scenarios for every user.

To make the system user-friendly and efficient, we integrated a suite of [Webix JavaScript UI controls](#), including a [Tree UI widget](#) that provided intuitive navigation through the question hierarchy and a [Filter UI widget](#) that helped examiners to quickly search and sort questions based on various criteria. These tools gave both testers and administrators a smooth, responsive experience.

The backend of the platform was built using [PHP](#), which provided a solid and flexible foundation for handling business logic, managing user authentication, and processing test data securely and efficiently. PHP's robustness made it easier to integrate with the front-end JavaScript components and enabled smooth communication between the client side and the server.

The platform's architecture supported rapid iteration and easy customization, allowing us to adapt the system to the specific workflows of our HR and tech teams, respond quickly to feedback, and implement improvements without external dependencies.

Interested in developing a similar solution or have your own idea in mind?

We are ready for any challenge, just contact us!

[Let's start](#)

Result

With Examarius online testing system used for employee evaluation, we were able to elevate the assessment processes, making it easier, faster, and more productive than ever before. This in-house development approach transformed our certification process from a manual, error-prone routine into a streamlined, automated system that felt like it was custom-built for our unique needs.

The product turned out to be so flexible that it almost felt like it shaped itself around our needs. Over time, it became obvious that this exact setup was what we truly needed. It evolved naturally into the solution we were looking for, although of course, there's always room to make it even better.

By building the certification system in-house, we were able to:

- Seamlessly integrate testing, evaluation, and certification within one platform;
- Ensure consistency and data security across all assessment processes;
- Adapt the system to the specific workflows of our HR and tech teams;
- Quickly respond to internal feedback and tweak the tool without external dependencies;
- Replace messy, manual tracking in Excel with a clean, structured, and automated solution.

Switching from Excel to a fully automated certification system was a game-changer for us. With Examarius, we finally got a flexible, secure, and intuitive solution tailored exactly to our needs. The personalized certificates and smart question management helped us to take employee assessment to a whole new level — no more chaotic spreadsheets or manual scoring. But what truly sets this system apart is how it helped us to look beyond just project performance.

Everyone in our team works on different workflows, and Examarius gave us a unified way to assess knowledge, independent of current project specifics. It didn't just improve our HR workflows — it became an integral part of our growth strategy.

Ujin Kosy
Functional Manager, Software Engineer

Your questions and requests are always welcome!

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