
Examod: Digital Exam & Assessment Software with AI Supported Proctoring

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Examod: Digital Exam and Assessment Software (examod.com) is a digital exam and assessment platform designed for educational institutions, enterprises, and competent licensing authorized institutions as part of the TUBITAK TEYDEB 1512 Techno-Entrepreneurship Capital Support Program (Project no: 220037).

Examod enables institutions to digitize all summative assessment and evaluation activities undertaken in-person (paper-based exams, skills exams, clinical performance exams, and so on) or online (remote or e-exam centers). This solution is available from Examod as Software as a Service (on Examod Cloud Servers) and On-Premise (on the institution's own servers).

For each course, institutions can generate multimedia supported question banks with multiple choice, multiple response, open-ended, matching, hot spot, and coding question types. These questions can be associated with course learning objectives and question attributes like Bloom's Taxonomy or clinical problems learning levels etc. that are tailored to the institution's needs.

The conservative list or blueprint method can be used to generate exam sets by matrixing the questions vertically and horizontally according to the required variables (topics, learning objectives or question attributes). Paper-based exams can be generated from these exam sets and imported to the system for use in face-to-face environments. Furthermore, online exams can be delivered remotely or at e-exam centers. They can review the advanced exam, item, and distractor analysis created in accordance with Examod's scientific measurement-evaluation in education norms, and they can constantly check the measurement performance of the course or question. They can make adjustments to the measurement's quality and consistency if necessary.

Objectively structured (using rubrics) performance criterias associated with course learning objectives can be used to evaluate face-to-face oral, clinical performance, or skill assessments. During these performance exams, candidates are evaluated instantly on a tablet or computer, and

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the audio just-in-time feedback provided during the exam is recorded and displayed in a way that the candidate can access again in the results to be given to the candidate.

Examod records the outputs of the assessment device's camera, audio, screen recording, and peripherals to assure online exam security. In this context, candidate recognition, multiple faces entering the screen, the behavior of the candidate getting off the screen, full-screen forcing, single tab and screen use, virtual machine detection, phone and headset usage controls are documented before and during the exam by using artificial intelligence and reported to the examiner.

The COVID-19 pandemic has served as a driving factor for the digital transformation of measurement-evaluation procedures, particularly online education. In this context, the vision of this product, which was developed entirely with local and national capital and TUBITAK support, is to produce more accurate, comprehensive, and longitudinal results from measurements of current and previous learning, rather than completely remote measurement-evaluation. In other words, it is to provide a more complete, mass, and labor-effective assessment option with various forms of questions and assessments. At the same time, it aims to assist institutions in doing full merit placement/licensing by decreasing location and expense issues in student recruiting, recruitment, or qualification licensing processes through the secure remote examination opportunity.

Keywords: digital exam, assessment software, proctoring