

Universitas Terbuka Elevates Online Learning & Exam System with iCognis Proctoring

Business Challenge

Universitas Terbuka (UT) is one of the State Universities (PTN) in Indonesia that implements an open and distance learning system. Founded on September 4, 1984, UT is classified as "The Top Ten Mega University of the World" with more than 350,000 active students.

UT has had several accreditations, both nationally and internationally. Accreditations obtained include a Quality Certificate from the International Council for Open and Distance Education (ICDE) and ISO 90001:2000 certification from the SAI Global Certification Body and SGS. Most of the UT study programs have also received accreditation from the National Accreditation Board for Higher Education (BAN-PT).



Engaged in education, UT is one of hundreds of universities that need to adapt to the outbreak of the COVID-19 pandemic. Distance learning and online exams are the options chosen so that learning activities can continue to run safely. Because it can be done anywhere, online exams need to be monitored in progress. It is necessary to ensure that both parties, students and universities, can maintain each other's quality.

To maintain credibility and integrity, UT Needs to have oversight of the learning system and the exam system that is conducted remotely or online. With this monitoring, it is hoped that the grade and quality can be maintained to be accounted for.

Solution

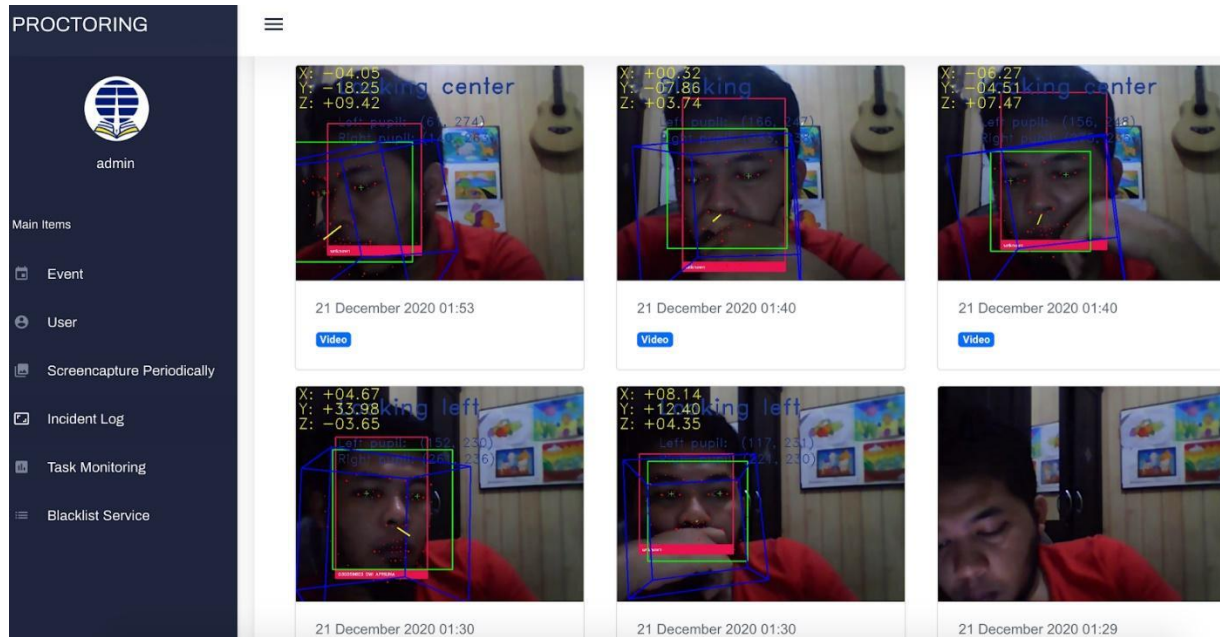
PT Imani Prima has an AI-based Proctoring System (AIPS) that can monitor online activities measurably, both in learning sessions and online exams.

AIPS products owned by PT Imani Prima are also equipped with an Online Proctoring System (OPS) which includes Exam App and Web Proctoring. OPS is supported by Artificial Intelligence (AI) for more optimal results in conducting exam supervision. Examinees will be observed in real-time starting from the beginning of verification until the exam takes place. Every potential violation will be detected by audio and visual, including the presence of the participant/exam jockey, the behavior and facial movements of the participant, the participant's environment and the potential use of prohibited devices/applications.



OPS does not collect and store any participant's personal information. OPS tracks and stores clips of indications of fraud for later validation by supervisors. Besides being able to save human resources, the results of OPS supervision are transparent and guaranteed through human supervision for subjectivity.

	Offline Exam	Online Exam with Zoom	Online Exam with AIPS
Exam Room Preparation	Using class/room	Done anywhere/according to agreement	Done anywhere/according to agreement
Presence of Supervisor	Required	Required	Not mandatory
File Administration	Physical file	Physical file/Excel Database/Spreadsheet	Database on the system
Identity Verification	Checked by the supervisor one by one	Checked by the supervisor one by one	Automated by AI with Face Recognition
Exam Supervision	1 supervisor for 1 place (manual, per room)	1 supervisor with alternate participants (manual, per tile)	All participants are supervised by AI simultaneously (automatic, simultaneous) The system can kill prohibited applications (Virtual machine, Remote Desktop, etc.)
Violation Warning	Alert instantly	Verbal warning online	AI sends alert notification on participant screen
Cheating Evidence Records	Using CCTV	Using the recording feature	Auto-recorded by AI
Required Resources	Room, Supervisor	Internet, Supervisor	Internet, Supervisor for reviewing exam results



Results

- Real-time monitoring and supervision starting from the initial verification process
- Detection and monitoring of participants through face recognition, face detection, facial authenticity and facial gesture detection
- Detection of violations during the test through audio and visual
- Violation indication clips are recorded and saved automatically by the system
- A warning notification that immediately appears on the student/test taker's screen
- Turn off applications that are prohibited from being used, such as Virtual Machine, Remote Desktop, and so on

OPS has been tested by the Universitas Terbuka in two courses with a total of 40 students. Although it is still on a small scale, it is possible that OPS can be used for a larger mass, from other universities, schools, and other educational institutions such as courses.