

The background of the top half of the page is a photograph of the STAN Polytechnic of State Finance building. The building is a modern, multi-story structure with a blue facade and a large circular emblem on the front. It is surrounded by lush green trees under a clear blue sky.

STAN Polytechnic of State Finance Access Control & Visitor Management with Health Protection Functions

Project Description

STAN Polytechnic of State Finance is a government-affiliated college in Indonesia, located in Banten, in Bintaro Sector V Tangerang Selatan. It offers undergraduate degrees in finance. The curriculum is focused on public finance, with an emphasis on government policy and regulation. Upon completion of their study, PKN STAN graduates serve in government institutions in Indonesia especially in the Ministry of Finance of the Republic of Indonesia (Directorate General of Taxes, Directorate of Customs and Excise, etc.). ZKTeco is proud to have the honour to serve them as a provider for their access control solution.

Solution Details

A. Reliable Authentication of Identity

To secure that the safety and privacy are not threatened, a reliable authentication method which prevents illegal and improper access must be deployed. Conventional verification methods including password and card could hardly verify the authenticity of the password or card holders' identities. Since our client highly concerns the security of the site, a truly reliable verification method of a person's identity thus become the critical point of the security. Thus it requires a biometric verification method with unique authentication of a person's identity.

Solution

ZKTeco deployed a solution consisting of 31 FBL series tripod turnstiles to form a multi-channel entrance for the access of campus. 18 ZKTeco ProFace X [TD] Access Control terminals are deployed at the entrance.

ZKTeco ProFace X [TD] Access Control Terminal is enabled with facial recognition technique, students and staffs are required to register their personal information and facial templates in the database. Card swiping is no longer needed, as students and teaching staffs are granted access upon successful facial recognition for verification of identity.

As ProFace X is equipped with anti-spoofing facial recognition algorithm against print attack (laser, color and black & white photos), video attack and 3D mask attack, it guarantees authenticity of identity verification.

With ultra-quick verification speed of face less than 0.3 second, and high storage capacity of up to 50,000 templates, the terminals are truly capable of performing smooth and efficient facial recognition for large-scale access control.

B. Visitor Management

Apart from students and staffs, there are also visitors coming to the university college, and they have no preregistered information and biometric verification data for identity authentication. As the purposes of the solution are to save unnecessary human resources, enhance efficiency and preciseness of identity authentication, if manual and conventional identity authentication is still required, the solution will be totally meaningless. Thus, a solution with efficient visitor access control is also needed.

Solution

For persons with no prior registration of personal information, a hyperlink for registration of personal information will be delivered to visitors' mobile phones. Upon successful registration of personal information and taking picture of face, they are enabled to directly have facial recognition by the ProFace X [TD] Access Control Terminal and be granted access without needing to be manually verified by security staffs.

C. Effective Pandemic Prevention Measures

Since the pandemic, people have been advised to avoid social gathering as much as possible, as the virus is extremely easily transmitted through droplet transmission and air transmission in close contact environment. In order to prevent outbreak caused by crowd gathering for inoculation, an effective measure of pandemic control is critical. As the most common symptoms of COVID-19 include fever, malaise, dry cough and shortness of breath, identifying people with high temperature has become one of the most common method to decrease the risk of virus spread. Generally, independent temperature detection devices are applied in access points including handheld infrared ear or forehead thermometers, however it not only take more manual work to staffs, but also does not prevent manual mistakes of detection.

Apart from concentration on temperature, wearing mask is regarded as one of the significantly useful measures to reduce transmission, thus it is critical to ensure that people entering the crowd put on their masks.

Solution

The devices are developed with the advanced facial recognition algorithm that is able to identify human face precisely, and temperature is detected automatically during facial recognition. The system is able to automatically display all real-time detected temperature to promptly identify all potential threats. The terminals are able to detect if people properly wear masks. All people are eligible for access only with mask on to minimize respiratory droplet transmission of virus.

End User

STAN Polytechnic of State Finance

Configurations

System	Device Name	Device Model	Device Quantity
Access Control	Facial Recognition Terminal	ProFace X [TD]	18
	Flap Barrier	FBL200	14
	Flap Barrier	FBL220	17
	Access Controller	InBio Pro 260	1
	Access Controller	InBio Pro 460	1
	Access Control Software	ZKBioSecurity	

