Student Activity Detecting and Reporting System for Online Learning Platforms

AHT Lakshan# and TGI Udayangi

Department of Information Technology, General Sir John Kotelawala Defence University, Sri Lanka

#tharinduathapaththuhewage@gmail.com

After the onset of the COVID-19 epidemic, people had to bring their work home. The working from home concept is not good for everyone, yet is suitable for some industries. The lack of positive outcomes of online lectures in the field of education is due to the lack of interaction between lecturers and students, amongst students themselves, misbehaviour of students, and misuse of microphones and cameras by students. Therefore, there is an urgent need to develop an online learning system that focuses on the positivity of learning outcomes. Existing systems are developed focusing on business perspectives. At present, there is a requirement to develop an application to overcome the said problems. Requirements for the application development were captured from previous research done by the researcher. The system focuses on tracking student behaviours using web cameras and by monitoring computer tasks. Protecting the privacy and security of users and enhancing learning accuracy by improving lecturer-student interaction during the class is the main objective of the system. Attendance marking is also generated during the main process. While making space to develop multi-platforms and using modern technologies, the most important target of the researcher is to keep students attached during online lectures as an online learning system, and the research concludes with the definitions of technologies and features that enhance the existing online learning platforms.

Keywords: distance learning systems, student-lecturer interaction, video conferencing, virtual classrooms, activity detection through webcam, activity detection through computer task monitoring