

Trusted Mobile Education (Learning) Software

Natarajan Vijayarangan

Innovation labs, Tata Consultancy Services Limited (TCS), Chennai, India

E-mail: n.vijayarangan@tcs.com

Abstract

Trusted Mobile Education (Learning) Virtual Classroom (Closed Group) is an online interacting tool that can be used in mobile handsets or tiny devices. This tool enables organizations, academicians, learners, corporate professionals, defense officers and customers to connect live from anywhere, offering real-time collaboration and secure communication.

Customers or instructors can schedule and launch chats, budget reviews, editing agenda, classes, training sessions, view recordings, addressing attendance management within the organisation and teach learners across the globe, concurrently. The tool can accommodate any number of participants in a closed group depending on the requirement.

This software tool benefits customers by making online teaching or training or chatting environment "Virtual Interactive Setup", increasing the value proposition to participants, and creating new capabilities with mutual understanding among users.

Through emails and phones, everyone follows a mechanism to exchange communication. But it is not effective and does not encourage live interactions. The proposed tool invites all users through a certificateless authentication protocol for accessing interactive sessions. Each user has been assigned a session to enable live connection with others. Among them, one is responsible to act as an administrator for generating sessions.

Advantages of Trusted Mobile Education Software as follows:

- The proposed Mobile Education software tool provides a trusted network connection among users.
- The tool builds confidentiality, authentication, authorisation and accounting (CAAA) among users.
- Users satisfy non-repudiation setup.
- No password-based negotiation between customers and an administrator.
- The tool has a robust, tamper-proof and lightweight authentication mechanism.
- The tool helps to transmit data packets through secure communication protocols based on Double Base (Multi Base) Number Systems.
- The tool sends and receives voice, data and video transmission without any delay.
- The tool supports Point-and-shoot learning with camera phones and 3D codes.