hugoTECHNO Virtual Classroom (Application)

FEATURES

- Completely cloud based supports 720p live video stream with 30 fps to connect any endpoint which is connected to the internet using IP v4 or IP v6
- Supporting multi language interfaces including English, Hindi and others as required.
- Virtual classroom is Web based (web app) and works in Google Chrome, Mozilla Fire Fox web browsers without any software downloads. Supports major operating systems like Windows, Mac and Linux.
- Record all session content: video, audio, whiteboard and presentation, to record and playback High definition video and presentation, up to HD 720p, a built in content management portal is provided that allows easy user access to all recordings, the management portal support sort of the recordings by various parameters such as name and duration, allow users to view recording only when they access web app via password, It is possible to fast forward, rewind and skip video of recording during playback session recording can be streamed via HLS in Chrome/Firefox. the Admin/Instructor are allowed to save the recordings file on a local disk
- Solution support HTTPS Live Streaming of recorded sessions (audio/video) for higher security, configurable, if a particular class requires the recording to start by default. It is possible to configure this on a per class basis, auto-recording of a class, configurable whether the presenter may or may not have the permissions to pause and restart the recording, a class recording becomes automatically available for web and mobile streaming within a certain duration of the class ending.,
- The management application provides the Virtual Classroom admin with the ability to limit the maximum number of participants, the management application support multi-tenant architecture where users are registered per tenant the virtual classroom application provide the ability to restrict or authorize the recording capabilities to a definite set of users
- The management console support personalized virtual classrooms. Access to virtual classrooms can be protected by username and password authentication so that before the Instructor/Co-instructor enters, participants are placed in a virtual waiting room
- The virtual classroom application provide an intuitive web based UI to modify and adjust session invitation emails
- Virtual classroom displays the time lapsed and time remaining option to extend the duration of the class from within the session, Instructor/Co-instructor can annotate on top of the shared content (like PDF, PPT and DOC) in the session
- Multiple & minimum of 4 session layouts and presentation modes viz. 1) Video with Whiteboard/Content, 2) Multiple Videos in Tiled Layout, 3) Full Screen Video Layout, 4) Full Screen Whiteboard/Content
- Multiple image formats like JPG, PNC, JPEG etc. to be uploaded and shared during the session
- Text tool inside the whiteboard
- Option for attendees to raise their hands during the live class, the classroom has facility of Save to pdf option in the live class, Content loading from Google Drive, Drop box. Box & one drive in to the library
- Support you tube Videos within the live classroom
- Recordings stored back in the content library automatically, session recording downloadable in mp4 format
- The switching of virtual classrooms by the user as easy as logging out from one and logging in into another session

- Intelligent built in capability for dynamic bandwidth, resolution matching to give each user an experience for his available bandwidth. In case, an endpoint is unable to support video + audio due to lack of bandwidth, the system should make that endpoint fall back to pure audio maintaining the continuity of the session, support both 4:3 & 16:9 aspect ratios.
- Various layout adjustment with different video sizes or no video at all.
- Display names for each participant connected in the session, web-based scheduling interface to schedule live sessions, additional registered co-instructor, with sufficient permissions, to schedule a session at any time, scheduled sessions and ad hoc sessions mode at the same time
- Support minimum bit rate of 250kbps per user connection for video connection
- Virtual white board, which updates its view for all attendees in real time
- Instructor managed mute control for both audio & video
- Single Virtual Classroom support multiple users in two-way Virtual Classroom session
- Any participant can bring on main screen for everyone else to view up to 5 speaker videos simultaneously
- Manage Users, get attendance Reports, Manage content
- Media player enabling the presenter or attendees to share any audio/video file (streamed directly from the cloud)
- Support H.264 AVC/H.264 SVC or VP 8 based video compression
- REST Based API to schedule sessions
- AAC or opus audio codec for audio
- Participants can share their local screens (or any specific applications running on their local machines) within the live class
- Content sharing supported on the ubiquitous HTTPS/REST protocol
- Code editor enabling the teaching of software languages
- The ability to view attendee list in the live class and provide the presenter with the ability to remotely control their audio/video streams
- Live Chat (Group & Private) for connected attendees
- Attendance report including total number of sessions conducted, each attendee's login/logout time, total number of minutes attended, absentees etc. The reports can be retrieved and downloaded as excel formats
- Instructor/Co-instructor can share desktop using screen sharing, access his or her Content Library, upload and share content from desktop, plot shapes like triangle, rectangle, cube, advanced Shapes like Flow charts, Chemistry, Maps and Grids, Emoticons etc. during the session
- Each Instructor/Co-instructor gets the ability to create their online content library for contents like videos and documents, ability to upload different of file formats viz. MS Word, MS PPT, MS Excel, PDF and videos in the dedicated cloud content library, ability to share Word Doc, PowerPoint, PDF and videos without having to share screen within the live session,
- Instructor/Co-instructor can remove the unwanted attendee from the live session, Co-Instructor can play a video file, conduct a poll during the session
- The act of joining a session requires authentication by the user over oAuth2.0, or other standard SSOs if desired, the web app support automatic NAT firewall traversal, ICE, STUN, TURN protocols for secure connectivity over internet. The media traverse over encrypted SRTP (Secure RTP)
- Solution is supported on Android smart phones and tablets via mobile apps, the web app and mobile apps include a feature that enables participants to text chat while in session
- The administrator can provision a centralized directory of all registered users, Solution support registered users access based on administrator privileges
- Solution support email notifications about session scheduling, session reminder, etc
- Create/delete new and bulk users through a CSV file
- Role management of the users is possible
- Solution does not require any special piece of hardware to perform Firewall Traversal