

Department of Information and Communication Technology

Faculty of Technological Studies

University of Vavuniya

Proposal for Online Proctored Examination

Preamble

Due to the COVID-19 pandemic, which burst out the last two years, an entire education system in Sri Lanka was forced to make a switch from in-campus classes into online classes. This was a challenging situation for all countries worldwide, especially with developing countries that are less experienced in online classes. Technology has played a greater role with respect to the Education system, which facilitated the process of learning for the acquisition of knowledge, skills, and values.

The pandemic started to affect Sri Lanka in March 2020 and affected hundreds of counties around the world. As a result, all day-to-day activities of our country were interrupted to prevent the pandemic from spread. The schools and higher education institutions were closed as the first step. Hence, the State Universities initiated giving education to students uninterrupted by online teaching. Although the academic activities were conducted online uninterrupted from the COVID-19 outbreak, there was a bottleneck in continuing this process due to the necessity of holding assessments, including examinations. The examinations are necessary evaluation points in the University curriculum along with the continuous assessments. However, for the students to continue to the subsequent semesters, the evaluation through the End Semester Examination procedures is mandatory in the University system as most of the curriculum is based on prerequisites from the previous semesters.

The Department of Information and Communication Technology at the University of Vavuniya led the process of delivering online education to the students and was able to complete the semesters virtually without interrupting from the COVID-19 global pandemic. However, the only bottleneck in the process was conducting the End Semester Examination while continuous assessments were conducted virtually as assignments, online quizzes and

tutorials etc. Continuous assessments carried out while learning the course, should be conducted while the course is in progress rather than after several months pass after completing the course. Consecutive semesters per the academic calendar of the Faculty of Technological Studies are enduring, hence, it is required to conduct an end of course examination in time while the course is in progress online as it will benefit the students to gain more practice and become good programmers.

The Department of ICT has decided to conduct the online proctored examination with minimum resources.

Road to Completion of Online End of course examination

The major steps are followed to achieve the goal:

1. Getting an analysis of student's home or personal network and internet connectivity
2. Gathering the minimum resources required for an online examination
3. Finding required technical tools to cater to the requirement
4. Testing the tools to set up an examination
5. Preparing a guideline for the online examination procedure
6. Getting the student consent to hold the end of course examination online
7. Arranging an online mockup practice examination for students
8. Obtaining feedback from the practice online examination to improve the actual examination
9. Analyzing feedback obtained, extracting solvable issues and giving appropriate solutions to resolve them
10. Providing individual feedback to students by analyzing the proctor results of the practice online examination
11. Preparing guidelines for Online Examination Attempts
12. Adopt the UGC guidelines for conducting alternative assessments in Universities and HEIs and examination rules and ethics of University of Vavuniya.

Guideline for Online Proctored Examinations

Mode 1: Proctored Exam via Zoom

The examination guidelines are prepared for students/examinee as follows:

1. The examination will be a specified hour proctored (via Zoom) examination, and an additional 30 min will be given for the submission of answers.
2. Zoom link and Exam paper will be posted in the LMS (University of Vavuniya)) before the examination. Video and mic should be kept ON throughout the examination. Students are assembled in separate groups and separate zoom links will be shared. One group has 10 students and each group have one supervisor with one invigilator.
3. Students make sure that they are in a location where their video and the mic can be kept alive throughout the examination.
4. Students must use the mobile phones to connect to the Zoom session and Laptop to access the LMS. The laptops/phones should be fully charged.
5. Students are required to log into the LMS and Zoom session half an hour before the scheduled time of the exam.
6. Students should make sure they have switched on their microphone and camera. Supervisor will check them identity during the exam. When the supervisor requests, students must show their surroundings by turning the mobile phone around.
7. The screen name should be student's Index number + First Name
8. Students/Examinee are NOT allowed to use the Internet. That is, the use of the keyboard is NOT allowed during the examination.
9. Examinee need to make sure they have their University ID, all the stationary available within their reach.
10. 10 minutes before the start of the exam, students are asked to look into the camera and to present their university student ID card so that it is legible.
11. All examination rules of University are applied to this examination as well so that they will not be allowed to leave the seat under any circumstance or use their mobile phones.
12. During the exam, the browser window with the exam questions must be maximized to full screen size and must be visible at all times.
13. Students will be asked to share their screens randomly during the examination

14. Answers should be written clearly on clean (white-A4) papers with page numbers indicated mandatorily. Each page should have their registration number and student's signature. Any issue should be reported immediately to Supervisor or Head of the Department.
15. Upon the supervisors command, show all pages of the answer script through the camera on Zoom.
16. After writing time will be ended, they will be provided 30 mins in order to compile and upload their examination paper to the Moodle.
Use a Cam Scanner to scan their answers to PDF format. Students should be make sure that the quality of the scanned answers is good enough and readable.
17. Students should be make sure that the submission is complete and submission confirmation is received in their email.

****Examinee must submit their documents within the time allowed; the documents submitted later will not be accepted. For control purposes, the exam will be recorded locally; it will be deleted after the exam.**

Mode 2: Proctored Exam via Zoom, Moodle and Safety Exam Browser (SEB)

Safe Exam Browser is a customized web browser, available for Windows (7, 8.1, 10), macOS (starting 10.7, recommended 10.11 or newer) and iOS (9.3.5 or newer). The application must be downloaded and installed on the device that the student uses to attempt the quiz. The restrictions placed on students are similar to those in the quiz *Extra restrictions on attempts* > *Browser security* "Full screen pop-up with some JavaScript security" case, but because Safe Exam Browser is software running on the student's computer, it can do a much more effective job of restricting their actions. In order to enable students to take an attempt with Safe Exam Browser, it is necessary to hand them a Safe Exam Browser configuration file which contains the rules applying. This Safe Exam Browser configuration file can either be generated using the Safe Exam Browser config tool under https://safeexambrowser.org/windows/win_usermanual_en.html#configuration) or directly within Moodle.

Steps to start an exam with Safe Exam Browser and Zoom proctoring

1. Students need to have the following items for the exam:
 - a. Student Identification Card
 - b. A Zoom account
 - c. The screen name should be your Index Number + First Name
 - d. Smart mobile phone with Zoom and a document scanning software installed
 - e. Writing paper (Some exams may ask you to write answers on paper, and scan and upload at the end of the exam. They must use a second mobile phone for scanning and uploading. If they cannot find a second mobile phone, they must obtain permission from supervisor to use Zoom from their computer)
 - f. A computer (laptop computer with a working battery, or a PC with backup power) with Windows or MacOS.
 - g. Only if you are permitted to use Zoom on your computer:
 - h. Zoom software installed on their computer
 - i. A microphone and a detachable webcam
 - ii. SEB (Safe Exam Browser) installed on their computer
 - i. Access to the LMS Exam University of Vavuniya Portal
 - j. Familiarity with LMS and other tools by taking at least one mock exam
 - k. Sufficient internet connectivity, data package and power
 - l. Download the Safe Exam Browser version 3.1 for Windows or version 2.2.2 for MacOS and Install.
2. On the examination day, students must be logged in to Zoom and LMS 30 min before the exam, as the first step, they should open Zoom in their mobile phone, they may use Zoom on their computer only if the has permitted them to do so.
3. Students can join assigned Exam Room before the exam start time, using the Zoom meeting link given on the course page/exam link for the exam.
4. Log in to LMS (with a regular web-browser) by following "Log in with Faculty LMS" using Moodle credentials and visit the course page/exam link for the exam.
5. Go to the exam link (Moodle Quiz activity) and download the "Quiz Configuration" by clicking on the button.
6. Double click on the "config.seb" file downloaded. Safe Exam Browser will open and students will be navigated to the LMS login page.

7. Inside SEB, log into FTSLMS by following using FTS login credentials.
8. Safe Exam Browser will start and ask for a password, please type in the password provided by the proctor within the Zoom session. (Note: They might require to enter the password twice).
9. When Safe Exam Browser opens, students will see Moodle login page
10. Logon to FTSLMS Moodle
11. Click on the exam link
12. Wait for the time for exam paper will be active within Moodle and follow the instructions of the proctor.
13. Start their online exam