

## **An Approach to Online e-Assessment for Distance Learning**

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### **ABSTRACT**

The main objective of this work is to provide an evident system of preventing plagiarism in a less supervised environment for distance learning.

The assumed environment consists of a supervisor, who is in charge of a set of candidates. For each candidate, a black box and a Linux system which can be provided in a live compact disk are issued by the assessment centre. The black box contains a microcontroller circuit board with a SD card. The candidate's Linux system can be provided in a re-mastered Linux operating system which provides restricted facilities to the candidate.

During the examination period, software in the Linux system, obtains screen shots periodically. Selected screenshots and important data such as examination date, time and index number, will be stored in the SD card memory which will be sent to the e-assessment centre for examination for hacking. Internet access is restricted via a firewall and the hard disk access is also restricted during the examination period. The present system worked as expected during the pilot project phase.