Overcome challenges in online exams

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Our Presentation will cover ...

- Why Online Exams?
- Solutions & Features
- Maintenance Effort
- Support and Infrastructure
- Common Problems
Why Online Exams?

- Auto-marking
- Scripts available online
- Instructor: Easier to read submissions
- Students prefer to type
Solution 1: Exam Browsers

SMU Exam Browser

SMU in-house developed product. Developed on MS .Net Framework. Work on MS Windows environment only.
Solution 2: Lockdown Browsers

Respondus LockDown Browser

Commercially-available secured browser. Work on both MS Windows and Mac environment.
Key Features

SMU Exam Browser
- Every 15 seconds backup data
- Restoration of lost answers

Respondus Lockdown Browser
- Ability to enforce the use of Lockdown browser
- Support Windows and Mac
Why two Browsers?

For Essay-based Exams, we would recommend the use of our in-house SMU Exam Browser because of the Autosave feature.

For MCQs, and Short Answers type of questions, we would recommend the use of Respondus LockDown Browser because of the ability to enforce the use of Lockdown Browser.
Maintenance

Compatibility Test

Against latest version of VM

OS Service Pack, patches and updates

Internet Explorer 11

Microsoft Patch Tuesday

OS X Yosemite
Infrastructure

- Multi-tier server architecture
- Multi data centre redundancy
- Active monitoring of the server and network health prior and during exam.
  
  riverbed  Nagios®

- Load Balancing among Wireless Access Point to avoid Access Point overload
Exam Preparation

1. Create mock quiz
2. Conduct Briefing to students
3. Provide installation support 2-3 weeks before exam
4. Confirm with instructors’ on exam requirements
Exam Preparation

5. Inform General IT Support
6. Inform Infrastructure team
7. Ensure extra laptops are available for loan
8. Advise Students to have dual network connectivity during exam
Invigilating Process

- Advise students to use their power adapter.
- Remind students to save regularly. Monitor students exam progress and if need to, ask invigilator to remind the students save.
- Inform faculty how many students are doing the exam online.
- Late submission will be marked as late.
Common Problems

• **Windows Update**
  Advise students to change their Windows Update setting.

• **Loss of Network connectivity**
  Use both Wireless and LAN connections. Advise students to save regularly.

• **User Account Password Issues**
  Help Center will be on-site to assist with password issues.
Common Problems

• Students accidentally removed part of the essay
  Exam Browser: Recover from Auto Save
  Lockdown Browser: Recover from previously save attempts

• Student Laptop unable to run Exam Software
  Have spare laptops ready.

• Students forget to bring laptop
  Have spare laptops ready.
Thank you