eAssessment with Moodle 3.9
(Safe Exam Browser deeper integration)

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Moodle is great for online and blended learning, but...

...if you do a lot of online learning, you want to grade online too and sometimes you do have to do it summative with a final exam.

Challenges:
- Most popular Learning Management System
- Open Source
- Moodle Pty Ltd.
- https://moodle.org

- Most popular open source lockdown browser
- Open Source
- SEB consortium
- https://safeexambrowser.org

«The best straight forward solution for online learning and assessment»
Accessing a quiz

Kiosk mode

Grant access

«SEB?»

«SEB!»
Scenarios – just two of many

Exam with BYOD

«Dan wants to confront students with challenging tasks and questions in exam situations. Dan setups a Moodle quiz with SEB, that allows no external URL or communication except the quiz. He selects different buttons in the quiz settings to lock down the system following his wishes. When students arrive for the exam with their notebooks, they start the quiz. Those who didn’t install safeexambrowser before are asked to do so. With pressing the start button, the SEB settings are loaded from Moodle. The exam can start.»

Exam on managed devices

«Eric is responsible for online exams in his University. All the online exams are done on managed systems in a controlled environment. He integrates the safeexambrowser into the image of the devices. While approaching the exam sessions, he configures different configuration files for the exams. One of them allows using the calculator. A day before the exam, he determines in Moodle, which configuration file of SEB should be used in which exam. No additional work needed systemwise, although, every exam is using a different configuration.»
Live Demo
Deeper Integration compatibility

Moodle 3.9 (Version May 4th+)

Safe Exam Browser

    Win  3.0+ (probably a backward compatibility in 2.4.x in future)
    Mac  2.1.5+
    iOS  2.1.16+
A collaboration between universities

Leading houses
- ETH Zurich, Switzerland
- Bern University of Applied Sciences, Switzerland

Funding partners
- Zurich University of Applied Sciences, Switzerland
- Ruhr-Universität Bochum, Germany
- Berlin School of Economics and Law, Germany
- Hochschule Neubrandenburg, Germany
- University of Applied Sciences Upper Austria, Austria
- University of Applied Sciences and Arts, Hannover, Germany

Development partners
- Catalyst IT, Australia
- Moodle Pty Ltd., Australia
# Project timeline

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 2018</td>
<td>First discussions (ETHZ)</td>
</tr>
<tr>
<td>Feb 2019 –</td>
<td>Wireframes, User stories (ETHZ, BFH)</td>
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<tr>
<td>Mar 2019</td>
<td>Basic agreement and cost estimation (ETHZ, BFH, HQ)</td>
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<tr>
<td>Apr 2019</td>
<td>Fundraising (BFH, ETHZ)</td>
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<tr>
<td>Aug 2019</td>
<td>Offers by some Moodle partners (ETHZ, BFH, HQ)</td>
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<tr>
<td>Sep 2019</td>
<td>Contracting Catalyst IT and Moodle HQ (BFH)</td>
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<tr>
<td>Oct 2019 –</td>
<td>Development by Catalyst IT, Testing and Integration (ETHZ, BFH, HQ)</td>
</tr>
<tr>
<td>Apr 2020</td>
<td></td>
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</tbody>
</table>
People involved and tasks

Andrew Madden (Catalyst IT)  Development
Daniel Schneider (ETHZ)  SEB main developer
Dmitrii Metelkin (Catalyst IT)  Development, integration, testing
Hina Khan (Moodle)  UI Design and strings wording
Jake Dallimore (Moodle)  Integration, testing
Kristina Isacson (ETHZ)  User stories, wireframes, testing
Luca Bösch (BFH)  Initiation, fundraising, financial accounting, user stories, wireframes, testing, documentation
Marco Lehre (ETHZ)  Project lead, user stories, wireframes, testing
Matt Porritt (Catalyst IT)  Catalyst lead
Michael Röthlin (BFH)  User stories
Nicholas Hoobin (Catalyst IT)  Development
Sander Bangma (Moodle)  Moodle product manager
Thomas Korner (ETHZ)  Initiation, contract negotiations, fundraising, communication
Tim Hunt (OU UK)  General consultation
Questions

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