

A Tool for In-Video Feedback: Design and Evaluation

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Place: LCI Lab: <https://lci.idi.ntnu.no/>

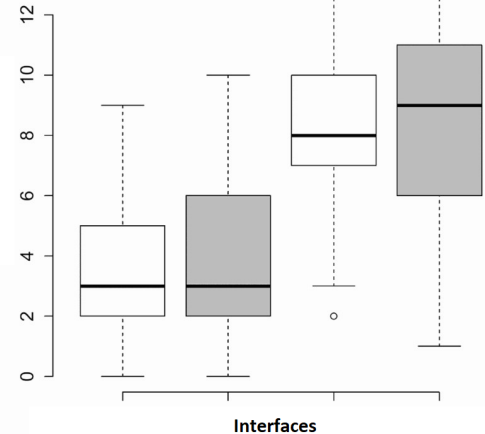
Suitable for: One or Two students

Introduction

The focus of the thesis is to develop a proper interface and visualization technology to support struggling students in the video lectures.

Thesis Description

In a first step, the student needs to review the literature and familiarize himself/herself with the different feedback systems in video-based learning. Then, the candidate will design interface and visualization feedback, based on the students' navigation in the video. Afterwards, the candidate will conduct a user study in order to empirically test the proposed interfaces and feedback mechanisms. Finally, the candidate will analyse the collected data and write up his/her thesis.



Requirements

The ideal candidate will have a background in user experience and interface design. Solid front-end programming skills (JavaScript and React) and an interest in hands-on development and experimentation is also a requirement.

Programming skills: JavaScript, React, MongoDB.

Expected Project Work Packages

1. **WP:** Literature study on feedback in video-based learning technology.
2. **WP:** Setting up the working environment and getting familiar with the StackOverflow API.
3. **WP:** Implement interfaces to improve learners' experience and utilize systems features.
4. **WP:** Conduct user studies, collect empirical data and analyze them.
5. **WP:** Write-up the thesis.

Thesis grading scheme

Grade	Description of the evaluation criteria
A	The candidate demonstrates excellent judgement and a high degree of independent thinking. Significantly exceeded expectations with original contribution.
B	The candidate demonstrates sound judgement and a very good degree of independent thinking. A very good performance, the candidate has exceeded expectations.

C	A good performance in most areas. The candidate demonstrates a reasonable degree of judgement and independent thinking in the most important areas, the expectations are met but not surpassed.
D	A satisfactory performance, but with significant shortcomings. The candidate demonstrates a limited degree of judgement and independent thinking.
E	A performance that meets the minimum criteria, but no more. The candidate demonstrates a very limited degree of judgement and independent thinking.
F	A performance that does not meet the minimum academic criteria. The candidate demonstrates an absence of both judgement and independent thinking.