



Departamento de  
Informática

## Web Application for handwritten presentations Project Proposal

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### Objectives

The goal of this project is to create a web application that allows the creation of handwritten slides and that supports interactive presentations. This would be a system akin to Classroom Presenter [1], an award-winning Tablet PC tool for ink-based teaching presentations and classroom interaction. The web application will support text and maths recognition through the reuse of existing solutions (see e.g. [2,3,4,5]). The work developed within this project has the potential to support research projects that aim to create tools to improve the reliability of software systems (see e.g. [6]).

### Work plan and expected timeline

- T1** Literature review  
(week 1 -> week 3)
- T2** Choose technologies to be used and prepare work environment  
(week 2 -> week 4)
- T3** Gather requirements and define design for the web application  
(week 2 -> week 5)
- T4** Implement and test the web application  
(week 5 -> week 13)
- T5** Evaluation  
(week 13)
- T6** Report writing  
(ongoing throughout the project with the final 2 weeks fully dedicated to report writing)

### Expected Output

1. Project report
2. Web application that supports the creation of handwritten slides and that can be used for interactive presentations
3. Conference Paper (depending on results and time available)

## Bibliography

- [1] Anderson, R., Anderson, R., Chung, O., Davis, K. M., Davis, P., Prince, C., Razmov, V., and Simon, B (2006) 'Classroom presenter - a classroom interaction system for active and collaborative learning', WIPTE (2006)
- [2] MyScript Github Project page, <https://github.com/MyScript/myscript-text-web>
- [3] MyScript Web Demo, <https://webdemo.myscript.com/>
- [4] SESHAT, <https://github.com/falvaro/seshat>
- [5] Web Demo based on SESHAT, <http://cat.prhlt.upv.es/mer/>
- [6] Mendes, A., Backhouse, R., Ferreira, J. F. (2014) 'Structure Editing of Handwritten Mathematics: Improving the Computer Support for the Computational Method', Ninth ACM International Conference on Interactive Tabletops and Surfaces (ITS '14), (available at <https://tees.openrepository.com/tees/bitstream/10149/604208/2/604208.pdf> )