u-Annotate: An Application for User-Driven Freeform Digital Ink Annotation of E-Learning Content

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Agenda

- Introduction
- Goal
- State of the Art
- Requirements
- Architecture & Implementation
- $u$-Annotate in Action
- Conclusion and Outlook
Introduction

- The Problem...

- Enter annotations
  - Metadata-driven vs. Mark-up annotation
  - „Freeform digital ink“ annotations
  - Why annotate?

- Personalization & Meaning in context
  - Just the right content, to just the right person, at just the right time, on just the right device, in just the right context, and just the right way (Hodgins, 2000)
  - The ability on the part of the learner to interact with the content, the way she deems fit.

Authors enrich
Learners extend teaching material
Mode of communication
Goal

- **u-Annrate** = user-driven Annotations
- **u-Annrate** the result of our endeavor to “develop a system conducive to enabling the corporate learner and the academic learner to annotate the e-Learning content, delivered as HTML Pages, with freeform digital ink with the aid of alternate input/pointing devices in order to achieve personalized learning”
- **Cooperation betwixt**
  - Informatik V, RWTH Aachen
  - bureau42 GmbH, Cologne
  - F-IT, Bonn
  - Open University, Heerlen, Netherland
State of the Art

YAWAS
(Yet Another Web Annotations System)
(Syscom, Université de Savoie, France)

Avaya Prototype (Avaya Labs Research, USA)

iMarkup ®
(http://www.imarkup.com)
Requirements from u-Annotate

- Freeform Ink Annotation
- Browser Overlays
- Input devices support
- Exchangeable Annotations
- Tools on Offer (customizable)
- Hiding Annotations
- Browser Dependence
- Deliverables
### Tools
- Overlay implementation
  - Adobe Systems Flash
- Backend Storage
  - Flash Local Shared Objects
  - XML File storage

### Browser Compatibility
- All browsers

### Deliverable
- Flash SWF file
- JavaScript file
- Configuration file *(config.xml)*
u-Annotate in Action
**Conclusion and Outlook**

- *u*-Annotate: An application for user-driven freeform digital ink annotations of e-Learning content.
- Focus on replacing the dependence of the learner on paper and pen for her note-taking needs.
- Extend the prototype with audio-visual annotations to e.g. support learners with special needs.
Thank You!