## Fixing the Web

Advanced Linking and Transclusion in HTML5

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Fixing the Web

### Intro

#### Goal

- HTML front end for iServer
- Create/render links between html pages
- Without access to page source
- Using only JS and HTML5



# **Problem Description**

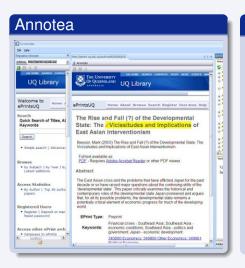
- Get and save user selection on HTML page
- Render previous saved selections
- Author complex links

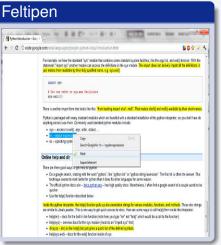
#### Research Question

 Visualise possible large amount of links on same page

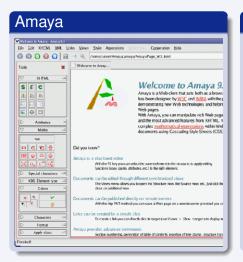


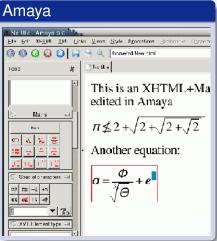
### Related Work



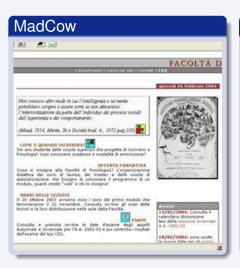


### Related Work





### Related Work





### Possible Solution

#### Visualisation

- Community based Up/Down voting + Normalization logic
- Per user profile based machine learning
- On request rendering on overlay



### **Current Status**

#### What Is Done

- Basis authoring functionality
- Stand alone version (local Database backed)
- API to comunicate with iServer
- 1-1 and 1-\* links (rest should be 'trivial')



#### Issues

- Web security gets in the way (Same origin policy)
  - Disable web security (short term)
  - Create wrapper plugin with elevated permissions
  - Custom policy in new browser
- X-frame-option:deny from server can't be dealt with
- Responsive websites are not reliable
  - Checksum HTML-ranges



## Demo

Demo



# **Planning**

#### Still To Do

- Communication with iServer
- Robust authoring of links
- research/write link filtering logic
- Create graph visualisation of link data

