



Multiscreen Toolkit

Towards fast prototyping

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1st of October 2013

About Noterik

General:

- More than 10 years in online video (since January 2001)
- 10 fixed employees and a freelance network
- Research, development and implementation related to online video

Development focus:

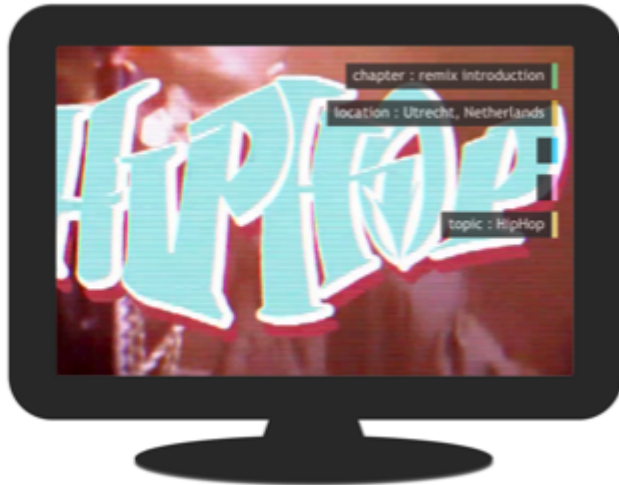
- On-demand video / cultural heritage
- Fragment-based storage (time-based metadata)
- Rapid prototyping / Multiscreen

Some of our clients/partners:



Second screen example from LinkedTV

MAIN
SCREEN



video (7 min):

<http://www.noterik.nl/products/multiscreentoolkit/?id=secondscreen>

SHARING &
BOOKMARKING

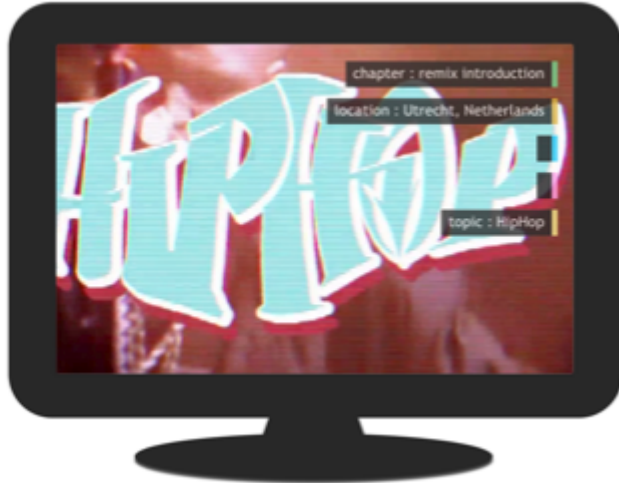


RELATED
INFORMATION

- Multiscreen / Second screen
- Interaction between users / share - bookmark
- Adaptive HTML5
- Touch screen interaction swipe, drop, share

Focus areas around Multiscreen

MAIN
SCREEN



SHARING &
BOOKMARKING



RELATED
INFORMATION

- Remote controlling from the second screen
- Annotation / tagging using the second screen
- Sharing / group watching using multiscreen

A lot of questions around Second Screen

which screen is the main screen?

which touch gestures are convenient?

how to handle live signals and delays?

how many screens?

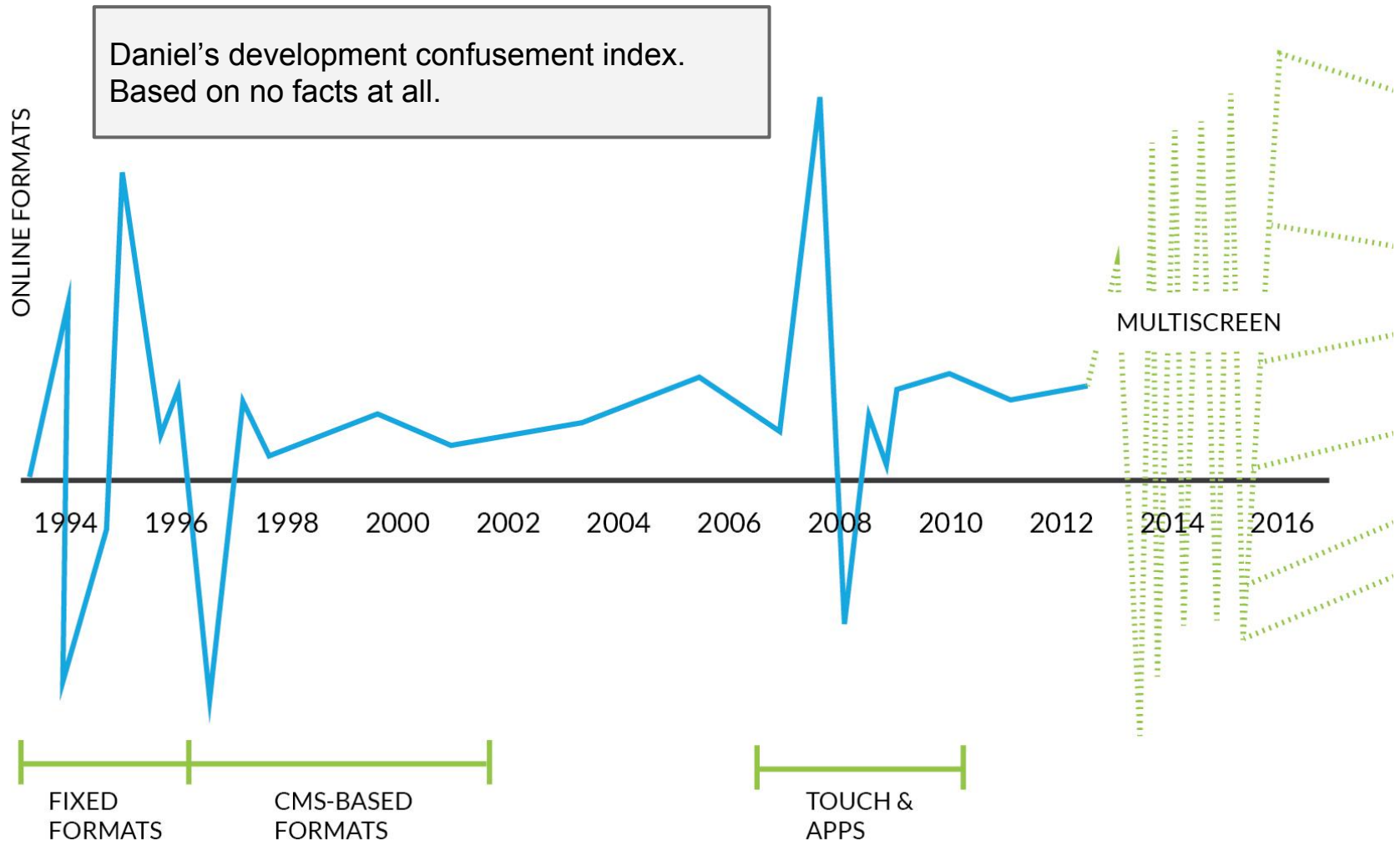
do people watch together?

how do user interact around fragments?

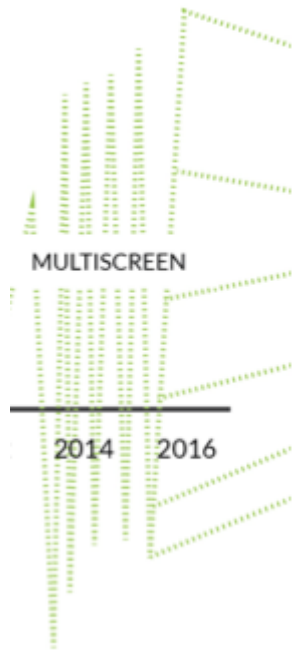
will users produce content / metadata?

what interfaces work?

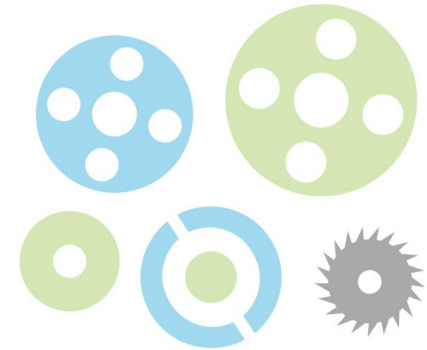
Déjà vu feeling - Confusement



Search for new formats/concepts

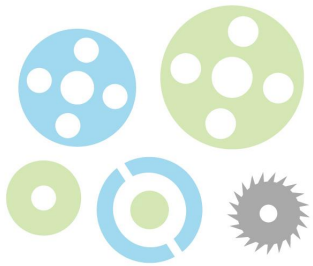


Multiscreen Toolkit



In this phase you better *get experience with prototypes* instead of investing in large scale project

Functionalities Multiscreen Toolkit

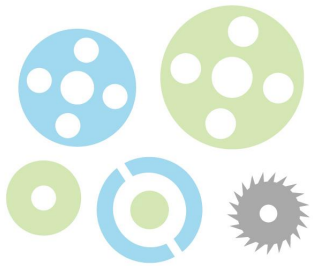


Provide the basic infrastructure for Multiscreen Prototyping

The Multiscreen Toolkit will give:

- Support for multiple screens and devices
- Supports all major browsers, iOS, Android
- Support for multiple users and groups
- Different interaction modes (Web UI, remote, touch screen)
- Options to easily move content across devices and users
- Bookmarking and sharing of videos / fragments
- Support HbbTV mode options

Facilitate Prototyping

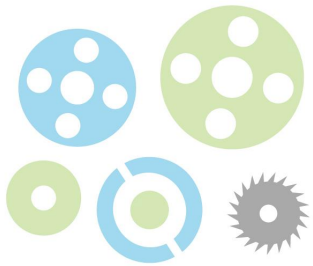


The Multiscreen Toolkit is intended for format developers, interaction designers and technical developers.

The Multiscreen Toolkit is developed to:

- Make fast prototypes on an existing infrastructure
- Develop together with the client (co-design / co-creation)
- Change 2000 lines of code to 50 working with APIs
- Create open development, others can also work with it
- Get as a producer experience with a new format
- Collect user feedback based on a working prototype

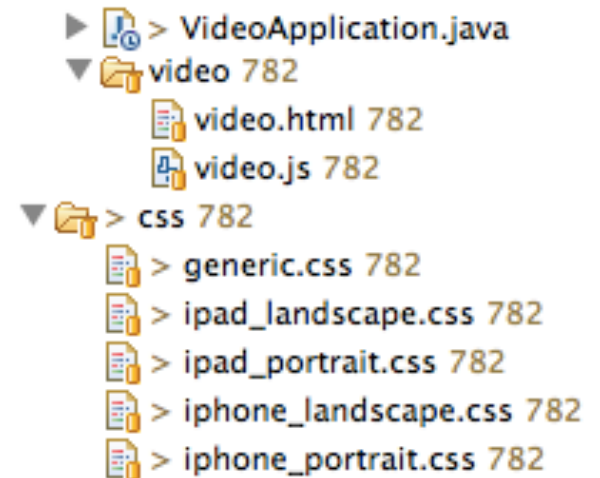
Development cycle



It's easy to get up and running as applications can be deployed on top of a clustered hosting platform.

All you need to build an application:

- Server side Java component
- Client side HTML template
- Client side JavaScript
- Some CSS for styling
- Deploy as war file



Deploy applications on top of the Toolkit

192.168.1.30:8080/lou/domain/webtv/user/daniel/html5application/dashboard

Logged in as: admin

Welcome admin please use with care

open apps available apps user manager

Available applications :

id	versions	production	development	status	details
helloworld	13	31-Aug-2013-23:00 (1)	31-Aug-2013-23:00 (1)	100%	show
search	4	24-Aug-2013-10:40 (1)	24-Aug-2013-10:40 (1)	100%	show

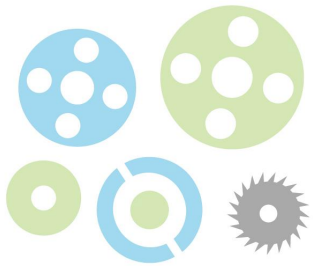
192.168.1.30:8080

open apps available apps user manager

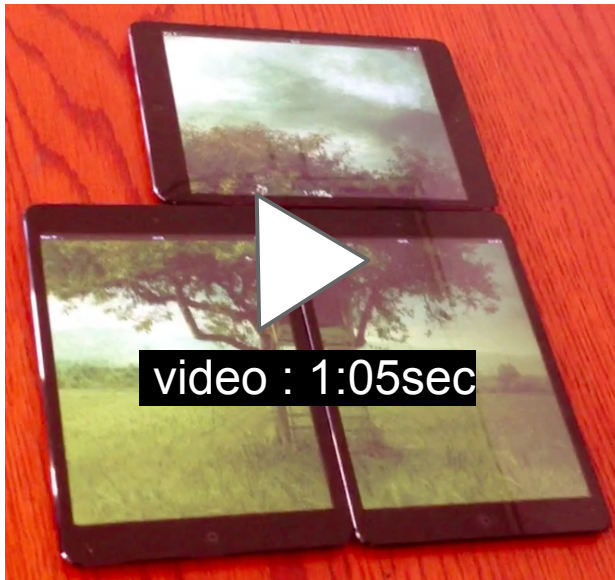
id	versions	produc
helloworld	13	31-Aug-2013
search	4	24-Aug-2013

Sun Sep 01 13:18:11 CEST 2013

Deploy applications on top of the Toolkit



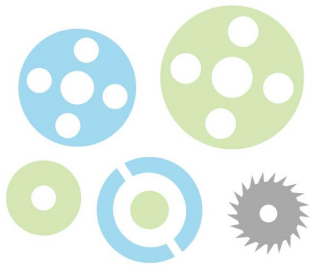
Applications are build as a Java war file that can be deployed on a Springfield cluster.



Web based dashboard that allows to:

- Deploy an application
- Cluster support
- Separate production/development mode
- Versioning support
- Live debug options

Demo application based on our Toolkit

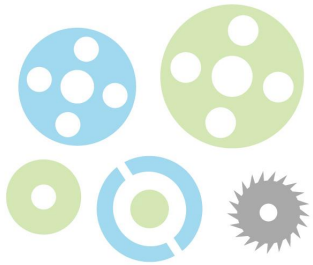


Multi-user / Social TV as default behaviour

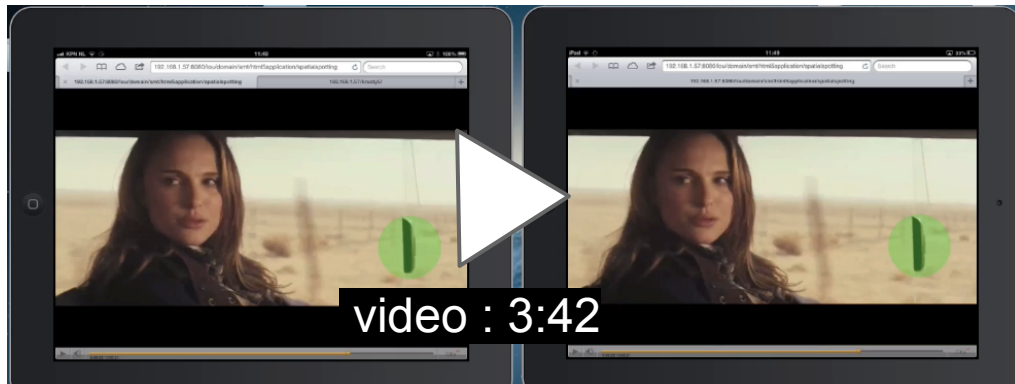


- login
- user profile
- user management
- bookmark
- share
- beam to TVs

Demo application based on our Toolkit



Spatial Spotting live demo:
www.noterik.nl/spatialspottingdemo/



- semi-sync viewer
- pointer functionality
- group viewing
- multiple locations
- 100% Web-based

Concluding remarks:

- A lot of second screen development is still unclear
- Better make small prototypes than large investments
- Still searching for the added value, not focus on technical possibilities.
- There is a lot of value inside **watching together** (which doesn't have to be live TV)

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www.noterik.nl/multiscreentoolkit/

www.noterik.nl/video