Web Technology 2015

Lecture 1. Start-up

Staas de Jong

Where are we?

- You have come a long way in the "obstacle run" that is the "course year".

- After this: the "project year".

- This course is actually the last course of the curriculum.

Introductions: about me...

- Name: Staas de Jong

  - MSc Computer Science, Vrije Universiteit Amsterdam

  - MSc Media Technology, Universiteit Leiden

- Currently: PhD candidate at LIACS, Universiteit Leiden

  - *Subject:* Computed fingertip touch
    for the instrumental control of musical sound

Introductions: about you...

- Please briefly tell:

  - your name

  - your background/experience
    - (non)technological ?
    - internet technologies ?

  - an aspect of internet technology that fascinates you

  - what do you expect of this course ?

Introductions: this course...

- **Q:** What do *you* think Media Technology is about ?

- My personal answer: *about area where science, art, and technology overlap*.

  ⇒ Fit: *internet* technology

break

Course overview, structure and topics

Let's have a look at the

course webpage >

Don't miss the lectures...

- Why?

  - This course used to have a lab... not anymore.

  - Now: real-time examples during the lecture.

  - Some examples require your participation.

  - Some discuss code that may return in the exam.

  - Explanatory power is lost if you only view slides afterward.

"Degree of freedom" offered to students

- **Web Technology Reports:**

  - Written report, following a provided, fixed structure.

  - Main points are delivered and presented in class during 30-minute sessions.

    - Follows a free structure.

    - Including clear overview of component "get-to-work-in-10-minutes".

  - ⇒ Subject list open to student suggestions.

Web Technology Reports

- Why?

  - To make the course more engaging for students.

  - Flexible approach to follow contemporary web technologies (building change into the curriculum).

  - Opportunity to pursue individual interests.

  - Enables covering a broad range of subjects.

  - Final grade now also based on research done already during the course.

  - End result: a repository of useful information.

Let's take a look at the

repository >

(Find it on the course website,
under today.)

How to write a Web Technology Report ???
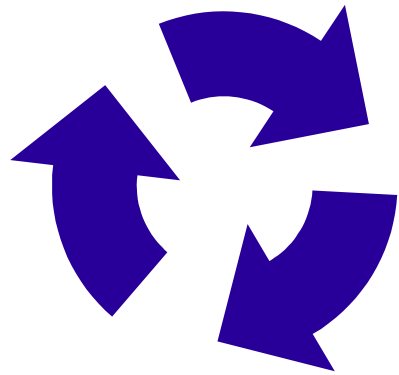
A note on plagiarism...

- ...copying other people's work – of course is not accepted.

- It leads to failing the *course*.

Let's instead have a look at the

template >

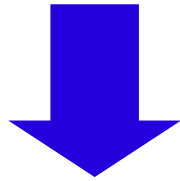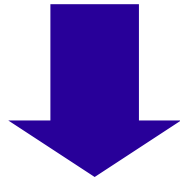(Find it on the course website, under today.)

The writing process and team roles

everyone: research & writing

editor: whittles down content,
creates consistent whole

proofreaders: final error checking

Done!

A note on proofreading

- Student suggestion: *What about doing the proofreading across team boundaries?*

- (+) Great: more likely to catch errors.

- (!) Possible issue: non-team-members are made responsible for an aspect of paper quality.

- ⇒ Proposed approach:
  - Please do proofread eachother's papers!
  - However: the proofreaders in the original team remain responsible.
  - ⇒ *swapping* proofreaders between teams therefore comes down to trust in eachother's abilities...

Quality...

- Your WTR has to be *good* :-)
  - 3 persons, 7 weeks, *4-page* paper...

- A good WTR is *concise:*
  - correct
  - complete
  - short
  - as easy to read as possible

 ⇒ Always be to the point – and select the best points
    you can make!

WTR topic selection and distribution

- General points:

  - Previously: no mandatory topics ended up in the repository!

  - This year: no a priori mandatory topics.

  - Opportunity to propose suitable subjects.

  - Next Tuesday: deadline for student suggestions

    (by mail, to Staas – address is on the course website).

WTR planning and time slots

- Writing the WTR: 3 team members, 7 weeks.

- Hand-in deadline is June 12 (exam being June 17).
  - By student majority request (instead of June 5)
  - *Consequence:* make sure to start your exam prep. early on

- NB: half the teams present May 27; the other teams, June 3.

- *presenting on May 27:*
  - (-) team work on report begins earlier
  - (+) more time to incorporate presentation feedback
          before hand-in

- *presenting on June 3:*
  - (+,-) symmetrically opposed to ↑

WTR planning and time slots

- *Observation:* student presentations actually need 30, not 20 minutes.

  - Last year: every team went over 20 min.

  - No one was cut off, due to content and level of preparation.

- ⇒ The presentation sessions need to be expanded...

- **Q:** How would you like to solve this?

  - Add 50% time to both final 2 sessions?
  - Add afternoon session to one of the 2 sessions?
  - Start earlier ? End later ?

WTR topic selection: **brainstorm coming days (1/2)**

Possible topics:

+ sensors and actuators over the internet: Open Sound Control (OSC)
    ...and audio synthesis?
    e.g. via SuperCollider, Max, Pd...
+ online data representation: XML – specific interesting types?
+ programming libraries for building applications with Transport Layer Security
+ Stem: Library for writing scripts and applications that interact with Tor
+ developing mobile web apps on native OSes: e.g. Android, iOS
+ developing mobile web apps directly in web standards: e.g. html5, PhoneGap
+ developing applications incorporating social networking: the Facebook APIs
+ online stored & streaming media: the YouTube APIs

Possible topics?

? web device input APIs: Geolocation, Orientation, Motion, ...
? standards for touch (smell?) over the internet?
? web APIs for processing audio/video
? image-based image search see e.g.
http://www.comptalks.com/top-10-reverse-image-search-engines/
? sound-based sound search?
? does the Wayback Machine have an API?
? programming languages for the web (e.g. Ruby?)
? technologies for free, turn-key web servers
? technologies for private & public clouds, e.g. OpenStack ?
? frameworks for collaborative artistic creation over the web? FMOL...
? web-based automatic translation: the Google Translate API ?
? automatic manipulation of forums / blogs / wikis? botnets?
? any interesting/unknown Google APIs?
? VR and the web: something other than the Oculus Rift ?
...