



## Project 2: Accessibility for mobile users



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IMT2551 Mobile Systems Fundamentals



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<http://www.ansatt.hig.no/kjellr/imt2551>



# WHERE WE ARE NOW

1	No lectures
2	Course introduction
3	General background on mobile devices and solutions including context awareness
4	Self-study - "Mobile first"
5	Being a professional developer of mobile software (Audun Vaaler)
6	HTML5 and CSS3
7	JavaScript and Javascript frameworks for mobile web/app developers (Jayson)
8	Project 1: Designing and building a mobile webpage/webapp
9	Project 1: Guidance
10	Project 1: Designing and building a mobile webpage/webapp
11	Project 1: Designing and building a mobile webpage/webapp
12	Project 1: Designing and building a mobile webpage/webapp
13	Accessibility and mobile devices
14	Easter holiday
15	Easter holiday
16	Project 2: Mobile accessibility
17	Project 2: Guidance
18	Project 2: Mobile accessibility
19	Project 2: Mobile accessibility
20	Mobile systems and devices in media production 1 (Emil?)
21	-
22	-
23	Week 23 June 8 Exam (written, 3 hours from 09.00-12.00). Room number will be announced in StudWeb.

## 🎯 TODAY'S GOAL

After this lecture and its activities, you should be able to:

- Have insights into how some of the students have solved their web projects
- Have enough background information to get started on the next project

# PRESENTING PROJECT #1: BUILDING SOLUTIONS FOR MOBILE

# PROJECT #2: MOBILE ACCESSIBILITY

# BACKGROUND

- The notion of accessible surroundings comes from us adapting our physical surroundings so that we all can use it and participate
- Originally a topic for product designers, architects and engineers
- Universal design principles
  - <http://en.wikipedia.org/wiki/Accessibility>

# SHAPING VIRTUAL SURROUNDING

- Equally important to think about accessibility for software/web designers
- Same principles apply to designers and engineers of physical surroundings (web services)

## HOW DO WE DO THIS?

- Read up on accessibility challenges and solutions
- Rules and regulations with regards to accessibility on the (mobile) web
- Measuring accessibility in HTML and CSS
- <http://coi.gov.uk/guidance.php?page=134>
- <http://egovernments.wordpress.com/2010/08/11/remaining-challenges-of-measuring-the-accessibility-of-web-sites-according-to-wcag-2-0/>
- <http://www.w3.org/WAI/mobile/>



# MOBILE ACCESSIBILITY CHALLENGES

- Small screen, finger input, gestures
- Follow established interface paradigms, including ways to browse (swiping from view to view or scrolling up and down)
- Two way scrolling of a page a big no-no
- Publishing XML data without user interface, using built in software
  - Calendar data: iCal
  - Subscribed video/audio: rss
  - Address book data: vcard

# COMMON PROBLEMS FOR MOBILE USERS

- Layout of page not suited for small screen
- Multi column text
- Line-spacing too small to allow for finger clicking
- Form fields do not put up a context specific keyboard
- Navigation: The user do not know where he/she is

# THE PROJECT

This project should - using resources you find online, answer the question - To what extent is hig online services accessible to most users of modern smartphones and what can be done to improve the situation? To do this, we want you to:

1. Explain the term accessibility in the context of modern smartphones
2. Discuss why should designers adapt web sites for smartphones?
3. What are relevant quantitative and qualitative evaluation methods to measure accessibility in web apps/mobile apps?
4. Choose two online web services at hig ([http://www.ansatt.hig.no/kjellr/misc/20120130\\_hig\\_no/](http://www.ansatt.hig.no/kjellr/misc/20120130_hig_no/)).  
Use email or twitter hashtag #imt2551 to make sure that you haven't chosen a service that someone else has chosen
5. Provide information on what technology was used to build/host the site and how that is likely to influence the accessibility of the site.
6. Measure the two sites you have selected using your selected methods
7. Identify accessibility challenges and suggest improvements, primarily with reference to how the interface could improve.

This should be a 8+ page report saved as a pdf and delivered in fronter within May 11 at 11:59AM. The grading of these reports will be based on the following criteria:

- Relevant discussions and suggested solutions
- Use of references and methods that are relevant (URLs and references to physical publications)
- Usefulness to the owner of the site so that your report can be used to improve it
- Quality of the form and structure of the text and illustrations



## ASSIGNMENTS

- Suggested work
  - Experiment with creating web pages for mobile devices using a text editor
  - Use validation services to ensure that pages adhere to standards
  - Create a page that adapts to a small screen



## RESOURCES

- HTML5 validator, <http://validator.w3.org/>
- CSS3 validator, <http://jigsaw.w3.org/css-validator/>
- Accessibility,
  - <http://achecker.ca/checker/index.php>
  - <http://www.smartlabsoftware.com/wai-validator.htm>



## RESOURCES

- [http://www.mediawiki.org/wiki/Mobile\\_browser\\_testing](http://www.mediawiki.org/wiki/Mobile_browser_testing)
- [Help each other out with testing sites on mobile browsers](#)



## CONTACT INFORMATION

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