Towards Cognitively Accessible Web Pages

Inclusive content and services

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Outline

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Introduction

Intellectual impairments

Development process

Challenges

Example

Results

Conclusion and outlook

Questions

Introduction

Inclusive design of static and dynamic web pages
- Content and web applications
- UI and functionality (look and feel)

Accessibility

Usability

Cognitive/intellectual impairments
- Limitation of one's mental capability
- Huge user group

Intellectual impairments

Focus and attention span

Learning and problem solving, orientation

Memory

Linguistic comprehension

Visual comprehension

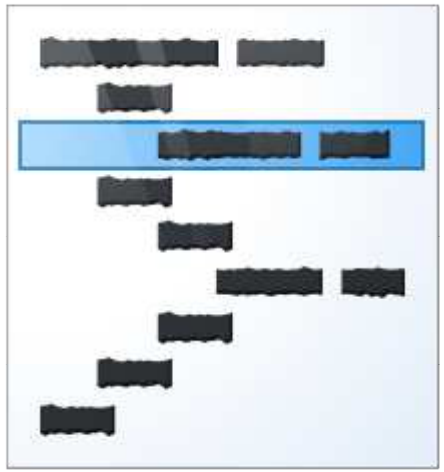
Development process

Incremental prototyping
- Development cycles/iterations

Requirements specification
- Definition of needs

Implementation
- Coding, styling

Testing
- Scenarios/walk-throughs
- Personas/role plays
- Expert panel
- Users (qualitative studies, interviews)



Challenges

Research on mobility and sensory disabilities

Heuristics and educated guesses

Diversity/broad definition of user group

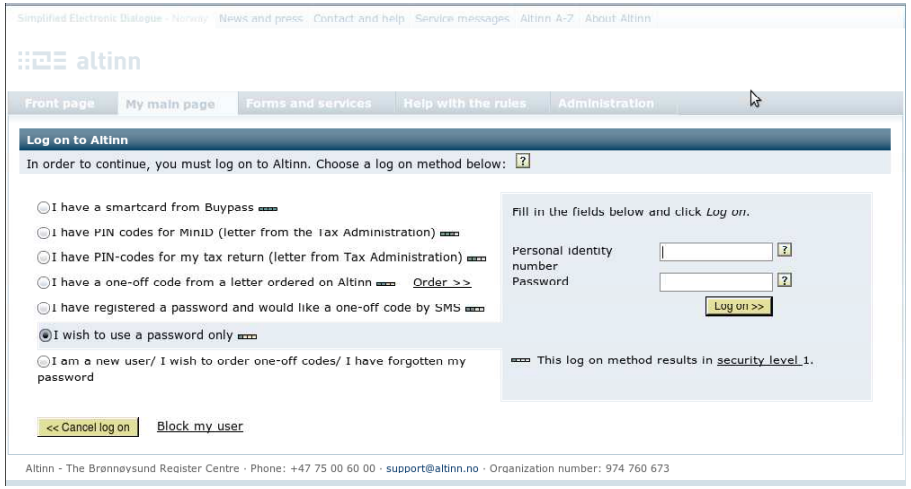
- Degree of severity of impairment
- Lack of knowledge: orientation

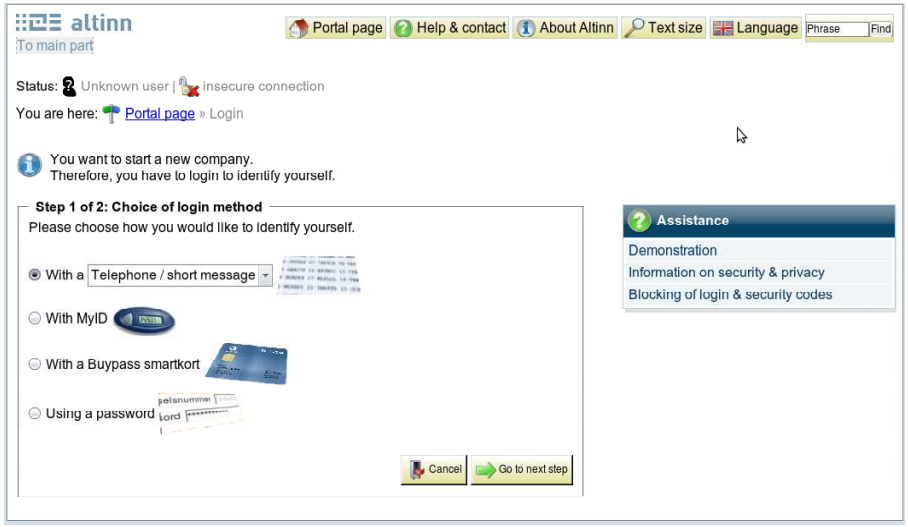
Balance

- Vague vs concrete recommendations
- Applicable vs invalid guidelines

Example

Norwegian public service provider Altinn.no





Results

More accessible login solution

Number of concrete design recommendations per functional classification

- Memory, attention span, etc.

Development and style guide at http://iktforalle.no/ (design for all, in Norwegian)

- Guidance for developers and designers
- Background, methodology, and development process
- Coding and style

Conclusion and outlook

Helpful design guidelines

Better usability for all

Need for quantitative research

Reflection of cognitive impairments in universal design

Reflection of cognitive impairments in standards

Translation of http://iktforalle.no/

Questions

Thank you for your attention!

Questions and comments

Other information

Project site http://nr.no/pages/dart/project_flyer_kognett

Till Halbach: http://nr.no/~halbach