Types of Usability Testing or Usability Inspection

User-Based Testing

○ Primary interest:
  Users and collecting
  data from users

Usability Inspections

○ Main focus of chapter 10.3

○ Usually performed before
  Usability Testing.

Usability Testing include

Usability Testing

- <u>User</u>-Based Testing
  - Representative users
  - Representative tasks
  - In development process

Usability Inspections

- <u>Expert</u>-Based Testing
  - Interface experts
  - Structured inspections
  - Obvious flaws
- <u>Automated</u> Testing
  - Software created by experts
  - Series of guidelines

Section 10.3.1

Expert-based testing

What is Expert-Based Testing?

- Interface experts
  - Should be unfamiliar and representative testers to the interface
  - Not the prototype interface developer (bias)
- Structured inspections

- Obvious flaws
  - Unclear wording
  - Inconsistent layout
  - Color inconsistency

Relevance to user-based testing

Expert-based testing

- Always comes first
- Uncovering obvious interface flaws
  - Get them fixed **before** user testing

- Interface experts
  - Experts in *interfaces*
  - Non-experts in *the task*

User-based testing

- Find the deeper, more granular and task-related interface flaws

- Representative users
  - Experts in *the task*
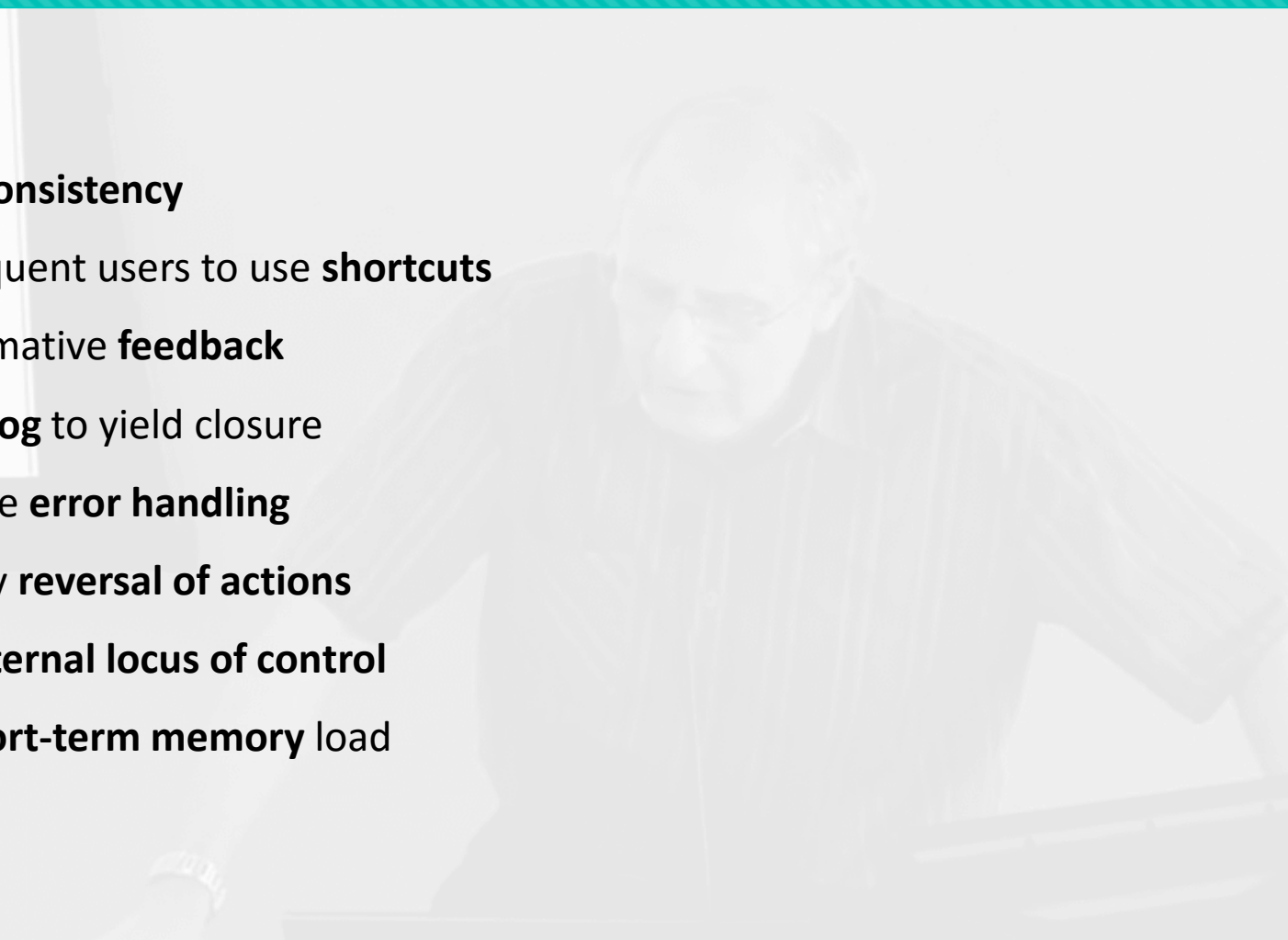 - Non-expert in *interfaces*

Types of Expert Reviews

- **Heuristic**

- **Consistency inspection**

- **Cognitive walkthrough**

- Guidelines review

- *"Expert Reviews"* syn.:

  - *"Expert Inspections"*

  - *"Usability Inspections"*

Heuristic (expert review)

○ A short set of interface rules

  ○ *Shneiderman's 8 golden rules of interface design*

  ○ Jonathan Lazar, concerned with web usability with user-centred design and accessibility

  ○ In "Interaction Design" we have learned about Jacob Nilsen's "Ten Usability Heuristics"

Schneiderman's
"Eight Golden Rules of Interface Design"

1. Strive for **consistency**

2. Enable frequent users to use **shortcuts**

3. Offer informative **feedback**

4. Design **dialog** to yield closure

5. Offer simple **error handling**

6. Permit easy **reversal of actions**

7. Support **internal locus of control**

8. **Reduce short-term memory** load

Consistency inspection (expert review)

○ Consistency in

    ○ Layout

    ○ Color

    ○ Terminology

    ○ Language

○ Style guidelines are used for an overview of style expression
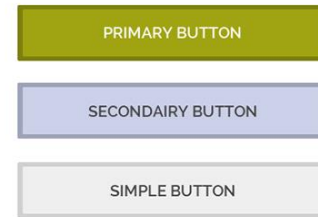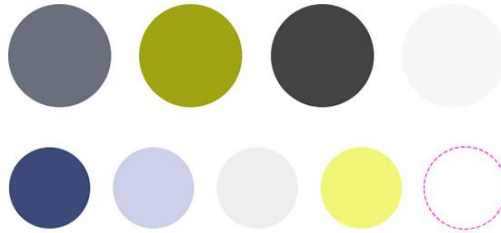
○ WCAG Universal design

H1 THIS IS AN EXAMPLE OF A HEADER #333

H2 HEADER #333

Maecenas convallis elementum libero. Fusce libero felis, ultrices sed, tincidunt vel, auctor id, velit. Fusce pretium. Aliquam gravida ligula bibendum elit. Aenean dignissim diam at risus. Praesent elit lectus, accumsan sit amet, scelerisque in, fringilla ac, velit. Phasellus ac tortor. Nulla rhoncus rhoncus magna. Mauris fringilla sapien quis mi. Cras vitae ante sed odio porta sagittis. Pellentesque et metus non magna viverra fermentum. Aenean at arcu. Morbi ipsum. Aliquam in sapien. Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim. Proin at pede at libero dapibus euismod. Quisque lacinia mollis ligula. Vivamus congue

PT Sans 16px / 1,4 #444

- $title_color
- $text_color
- $menu_background
- $menu_link_hover
- $box_background
- $content_alternate
- $primary_button
- $secondary_btn
- $simple_button
- $highlight
- $link_color
- $link_alternate_color
- $border_color
- $dashed_border_color

Accueil

CMS

Section quelconque

Lien quelconque

Lien quelconque

Lien quelconque

PRIMARY BUTTON

SECONDAIRY BUTTON

SIMPLE BUTTON

H3 Normal box

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

PRIMARY BUTTON

SECONDAIRY BUTTON

H3 Highlight box

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

H3 Zebra box

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

PROMOTIONS

PUBLISHED

10 You

20 Competitors

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

VIEW ALL PROMOTIONS

ADD A PROMOTION

PROMOTIONS

PUBLISHED

10 You

20 Competitors

Praesent in dolor eget odio dapibus pretium. Aliquam lacinia tristique leo. Nam nunc. Curabitur at augue gravida libero vestibulum dignissim.

VIEW ALL PROMOTIONS

ADD A PROMOTION

Design av nettsider - Universitetet i Oslo

UiO : Universitetet i Oslo

For ansatte   English website

Søk i nettsidene til UiO   Søk

| Forsiden | Forskning | Studier | Livet rundt studiene | Tjenester og verktøy | Om UiO | Personer |

Om UiO

Designmanual

Digitale produkter

• **Nettsider**

• **Applikasjoner**

• **Infoskjerm**

• **Powerpoint**

• **Profilbilder Facebook**

Design av nettsider

Offisielle nettsider - grid og layout

- UiOs hovedsider (www.uio.no)   - Sentre
- Fakulteter   - UB og museer
- Institutter

Typografi

- Overskrifter
- Lenker
- Lister

Knapper og søkefelt

- Store knapper
- Små knapper

Tabeller

- Standard tabell
- Standard tabell med sortering

Ikoner

- Størrelse
- Råd om valg av motiver

Spørsmål?

Kontakt nettredaktor@uio.no

Cognitive walkthrough (expert review)

○ Task based method

○ **Interface experts** simulate users,
  "walking through" a series of tasks

   ○ Both high-frequency and rare tasks

○ Typical Artifacts used:
  Scenarios, Use cases, Task analysis, Personas

   ○ (see the Ch. 10, In Interaction Designs)

Guidelines Review (expert review)

○ Similar to Heuristic, but applies interface Guidelines to an existing site

○ Larger set of guidelines (10-200)

Ex. of common guidelines:

- Web Content Accessibility Guidelines (WCAG) *
- OS Interface guidelines docs from Apple and Microsoft
- US government www.usability.gov/pds/guidelines.html
- KDE
- GNOME
- Nielsen Norman Group
- **UiO Library resources***

UiO Library digital resources

- Resources:
  - IEEE Xplorer
  - ACM Digital Library
  - Springer
  - Lecture Notes in Computer Sciences(LNCS)
  - Jstore
  - Gale*

- Reference and citations databases
  - Inspec
  - Web of Science
  - Scopus
  - Google Scholar
  - CiteSeerX

section 10.3.2

Automated usability testing

What is Automated Usability Testing?

○ A software application does the inspection:

  ○ Used when a large number of interfaces need to be examined and little time is available to do human-based reviews

○ Cannot be used to determine the experience of a user

  ○ Ex: If a certain image is clear or useful

Summary

Main take-aways :

Expert Reviews before you do your user-based testing

○ Remove obvious aesthetical errors or flaws

○ User-Based test to uncover finer granular errors that focuses on task based errors.

Exercises

These are to be done with your group instructors for this course during the seminar (**gruppetime**)

Exercise

Automated Usability Testing :

- For measuring certain statistics and loading time of elements on a web page

  - Ex: Page speed insights from Google

  - Link below tests UIO.no

  - developers.google.com/speed/pagespeed/insights/?url=uio.no

  - Orient yourselves with the automation served on the page

Exercise

Automated Usability Testing :

○ Read about WCAG's rules on contrast

   ○ www.w3.org/TR/UNDERSTANDING-WCAG20/visual-audio-contrast-contrast.html

○ Test one page by using the following **Firefox** browser and firefox add-on:

   ○ Install Firefox

   ○ Go to Tools and Add-on and search and install **wcag contrast checker**

   ○ Go to menu **Tool →WCAG CONTRAST**

   ○ Go to a webpage you like to test.

   ○ Alternative : addons.mozilla.org/en-us/firefox/addon/wcag-contrast-checker

   ○ View next slide of what it should look like

○ For other accessibilities tools:

   ○ www.w3.org/WAI/ER/tools

Tool is exposed to left

- WCAG Contrast Checker (Firefox add-on)

Exercise

Digital library to gain specific incite to guidelines to your area:

Looking for 2 external sources for your project?

- Go to www.ub.uio.no

- Search in the text field

  1. Expert Review Methods

     - Sort by most recent articles

  2. Choose advance search and search :

     - "Jonathan Lazar" as author and sorted by date
       Look at the latest article he has published.
       What is it?

UiO ⋮ **Universitetsbiblioteket**
oria

Bestill | Nytt søk | Finn databaser | Finn e-tidsskrifter | Finner ikke? | Hjelp | 🇳🇴 Bokmål⌄

Bøker + artikler ved UiO   Bøker i norske fagbibliotek

Alle felt ⬍	inneholder ⬍	Expert Review Methods	OG ⬍
Alle felt ⬍	inneholder ⬍		OG ⬍
Alle felt ⬍	inneholder ⬍		OG ⬍
Alle felt ⬍	inneholder ⬍		

Materialtype   Alle typer ⬍
Språk   Ingen avgrensning på språk ⬍
Utgivelsesdato   Forrige og inneværende år ⬍
Startdato: År
Sluttdato: År

Søk   **Nullstill**   Enkelt søk

👤 Tilpass trefflisten

Endre

🔲 rss
   Legg hele siden til lagrede
☆ treff

Vis mer

🔲 Vis flere treff (inkluder materiale
   ditt bibliotek ikke har tilgang til)

Vis kun

Resultat 1 - 10 av **1 561** i **Primo lokal database**   Sorter etter: Relevans ⌄   1 2 3 4 5 ➜

☆ **Systematic review of expert elicitation methods as a tool for source attribution of enteric illness**   Vis alle versjoner
Butler, Ainslie J. ; Thomas, M. Kate ; Pintar, Katarina D. M.
Foodborne Pathogens and Disease, May, 2015, Vol.12(5), p.367(16) [Fagfellevurdert tidsskrift]
🟢 **Tilgjengelig online**

Artikkel

Fulltekst ⤴   Detaljer   Bestill kopi

☆ **Shoulder pain within the ICF framework; patient experiences of functioning and assessment methods**
Røe, Yngve
2014

Avhandling

Thank you!

Alexandra, Johanna, Phuoc & Sabah