Welcome! Designworkshop II Winter Term 18/19
What are we doing here?
User-experience design

Information architecture

Communication design

User Interface engineering

Interaction design

Usability engineering

Human-computer interaction

Human factors

Industrial design

source: [11]
User Experience Design

Technology

Business

UX

Design/Architecture

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http://semanticstudios.com
User Experience Design

- useful
- usable
- valuable
- findable
- desirable
- accessible
- credible

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Getting the right Design and the Design right...

Bill Buxton - Sketching User Experiences

source: [1]
The Purpose of User Studies

- Research Symmetry, Reliability, and Validity
- Research Methods and Experimental Designs
- Ethical Considerations
- Related and Practical Information for Your Own Studies
- Interpretation of Data and Presentation of Results

Front Stage

Back Stage
User Interface  

*Visible*

*Behind the Scenes*

- Capturing
- Connecting
- Combining
- Transferring
- Coordinating
- Storing
- Contextualizing
Double Diamond
Double Diamond

Why? and How?

source: [8]
Double Diamond

DISCOVER | DEFINE

DESIGN | DELIVER

What?

source: [8]
We focus on

DISCOVER

DEFINE

DEPLOY
Overview

DISCOVER

DEFINE

Research

Innovate

Prototype

source: [8]

© A study of the design process - Design Council London
Overview

Research

Get to know your problem/subject
Gather insights about the user and their life
Collect artefacts & impressions
Record tasks
Audi A4 Series Cockpit

Audi R15 Racing Cockpit

http://2.bp.blogspot.com/_SM9A_sqV/GgM/S8XONR6_WS/AAAAAAAAADw/w/c/1600/Audi+R15+Plus+Cockpit.jpg
Different usage contexts, user types and usage frequency will require dedicated solutions.
Overview

Make sense of your data
Identify important facets
Keep all players in mind
Collect and prioritise ideas
Develop & validate solutions
Concept generation

Iterative: General overall concepts
Granularity: General overall concepts
Iteration 1 exploratory
Coarse significant alternatives
Iteration 2 clarification
Medium intermediate development
Iteration 3 resolution
Fine detailed refinement

Further addition
Further reduction
Further addition
Further reduction
Further addition
Further reduction
Further addition
Further reduction

Initial number of concepts
New ones added
Convergence
Generation
Concept selected

source: [1]
Overview

Research

Innovate

Make sense of your data

Identify important facets

Keep all players in mind

Collect and prioritise ideas

Develop & validate solutions
Portfolio Wall
Competitive Analysis

Four different adjustments
just to make AC right the way you like it.

Too many buttons
Buttons could be simplified and grouped further.

AC adjustments
do not show up on navigation screen.

Turning Knob
for the screen on top is far back; Poor ergonomic.

Buttons with simple icons are centralized at a convenient location.

What is working?
- Screen does not need to be at the same place as control.
- Tactile feel of button/Button grouping
- Use of color, materials, textures, and lights can improve information hierarchy.

What is NOT working?
- Appropriate position for frequently used buttons is important.
- Too many buttons are intimidating.
- Buttons are scattered and not intuitive position.
- Touchscreen requires too much attention.
- Buttons rely on small icons/text which is hard to read.
Competitive Analysis/Car Trends

Trends Insight
- More wireless connectivity to information and to others.
- More seamless integration between digital and physical world.
- Devices are more content driven and user-centric.
- Better customization capabilities and mobile computing is more prevalent.

Interior Comforts

Communication between Driver and Passengers
Taking the comfort to the next higher plane, models like the 2007 Ford Expedition have ensured better communication between passengers from first to third row by using insulated materials in the carpet and other features.

Sound Insulation from Exterior
The 2007 provides more insulation behind the dashboard and door panels, thick glass and a sealed roof panel, thus preventing itself from blocking the sounds.
22/10 Portfolio Wall
05/11 Storyboards
26/11 Initial Scenarios (Lo-Fi)
21/02 (Hi-Fi) Interactive Scenario
04/02 Final Presentation
18/03 Final Deliverables
Literaturrecherche

Google / Google Scholar
http://scholar.google.de

ACM Digital Library
http://portal.acm.org/dl.cfm -> BibTex, Referenzen, Verweise

Citeseer
http://citeseer.ist.psu.edu/cs

IEEE Xplore
http://ieeexplore.ieee.org/Xplore/guesthome.jsp
Literaturrecherche

Zugriff auf diverse Literaturdatenbanken (ACM, IEEE) über LRZ-VPN und -Proxy: http://www.lrz-muenchen.de/services/netzdienste/proxy/browser-config/
Zugriff auf das ACM Portal und IEEE über LRZ-Proxy: https://docweb.lrz-muenchen.de/cgi-bin/doc/nph-webdoc.cgi/000110A/http/portal.acm.org/portal.cfm
Zugriff auf Zeitschriften: http://docweb.lrz-muenchen.de/
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References: