

Web Usability Interfaces

Leih Re-Design

ZHDK
Interaction Design Semester 2
Stefano Vanotti

April 2011

Eva Seliner
Sebastian Pape
Michael Zimmermann

Web Usability Interfaces

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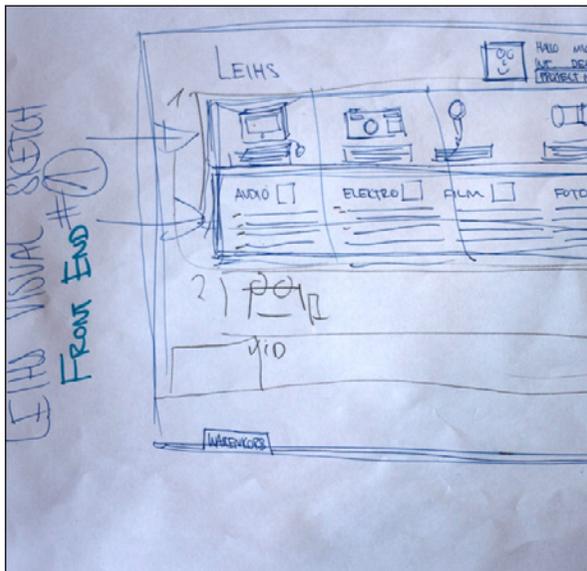
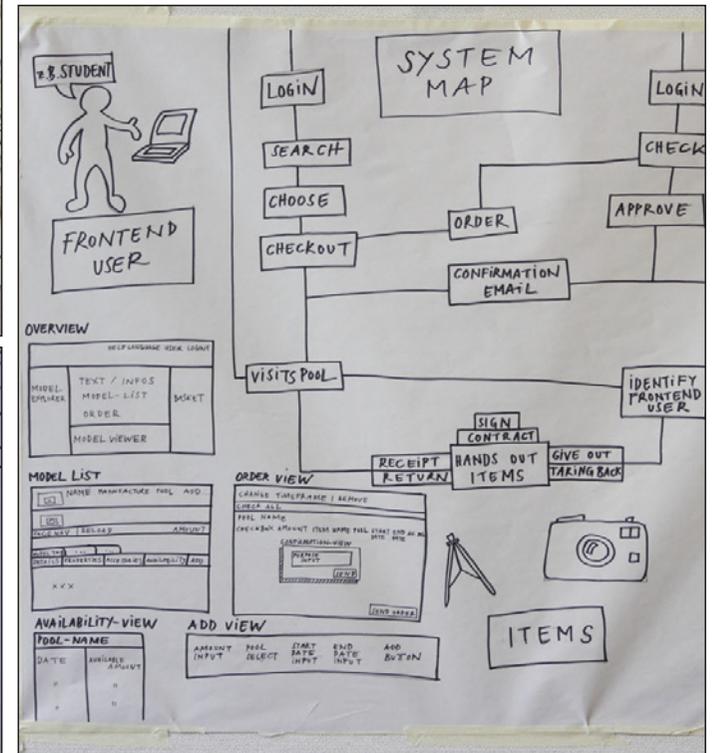
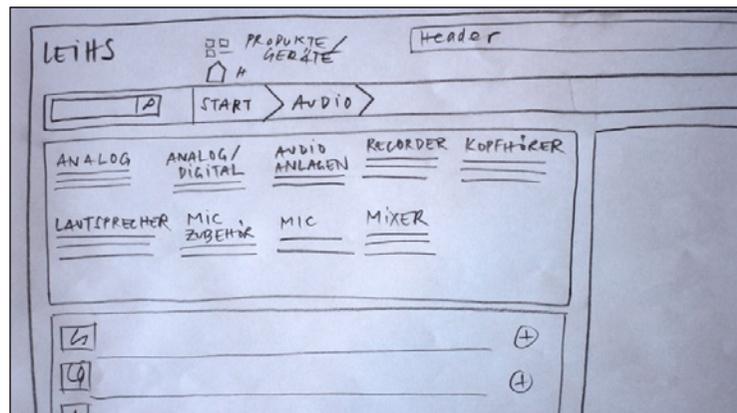
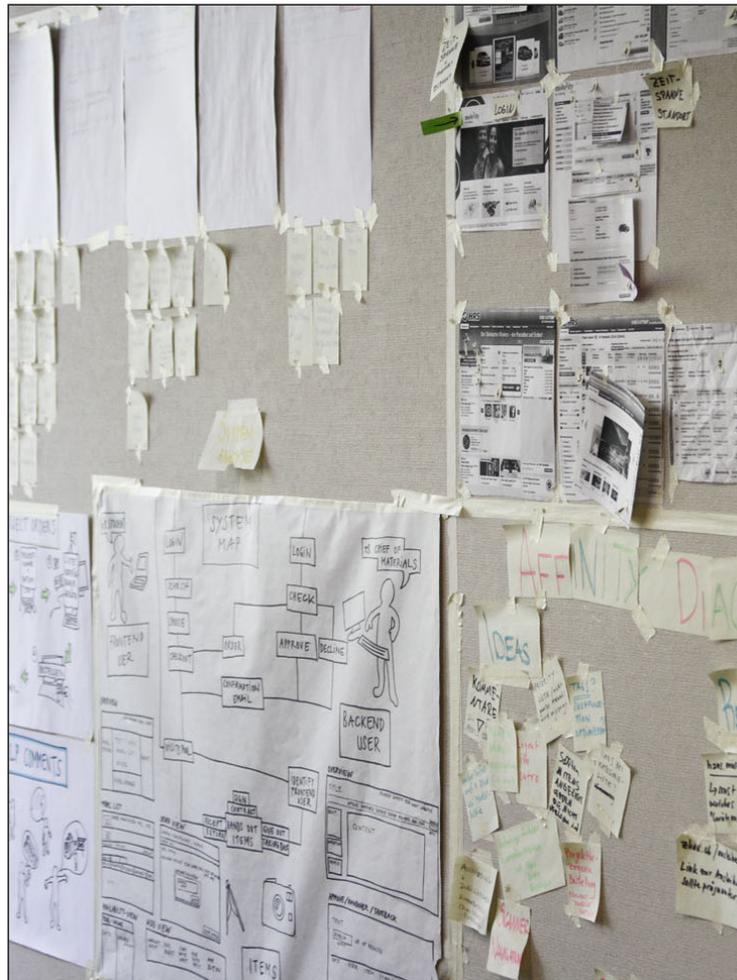
(Back End)

Findings And Tips

Brainstorming & Concepts

The main ideas presented here were found during a short but intensive brainstorming week in which we thought about the system in place and what its strengths and weaknesses were. Through ideas and usage models we slowly came closer to a solid idea for a new re-designed LeihS.

The pictures show some aspects of this process as well as allow a short insight into the design process.



Leih3 3.0

A following is a simple tour through the improvements in Leih3 3.0

To illustrate the improvements and ideas for the new Leih3, the following PDF introduces the new features through the process of renting an item in the Front End of the Leih3 3.0 system.

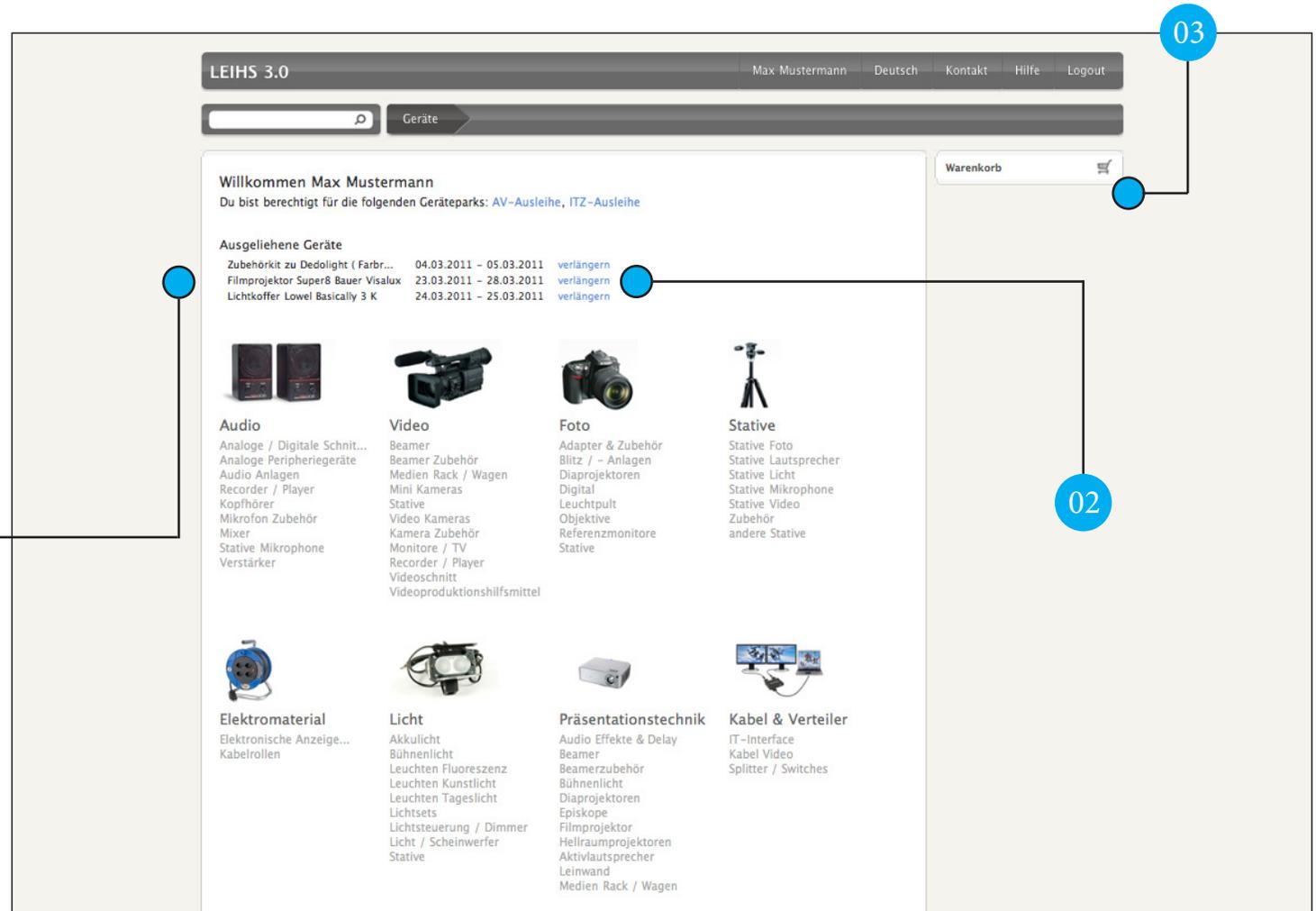
leih3 3.0

Less Clicks, Faster Reservation Process,
streamlined Work-Flow



This is the Leih 3.0 start screen.

The long text has disappeared. We decided to display important information as well as make the function of the Leih system clear with one glance at the interface.



01

User Dashboard with recent Activity

The user sees a listing of the items they have in their possession or next orders when logging into the Leih system.

02

Extend Rent Time

User can extend the time for an object directly from the home screen after logging into the Leih system.

03

Check Out Box

The check out box is seen on the interface from the moment you log on making it clear that it needs to be filled with items! Its always placed on the right side and follows the user while scrolling.

04

 <p>Audio Analoge / Digitale Schnit... Analoge Peripheriegeräte Audio Anlagen Recorder / Player Kopfhörer Mikrophon Zubehör Mixer Stative Mikrophone Verstärker</p>	 <p>Video Beamer Beamer Zubehör Medien Rack / Wagen Mini Kameras Stative Video Kameras Kamera Zubehör Monitore / TV Recorder / Player Videoschnitt Videoproduktionshilfsmittel</p>	 <p>Foto Adapter & Zubehör Blitz / - Anlagen Diaprojektoren Digital Leuchtpult Objektive Referenzmonitore Stative</p>	 <p>Stative Stative Foto Stative Lautsprecher Stative Licht Stative Mikrophone Stative Video Zubehör andere Stative</p>
 <p>Elektromaterial Elektronische Anzeige... Kabelrollen</p>	 <p>Licht Akkulicht Bühnenlicht</p>	 <p>Präsentationstechnik Audio Effekte & Delay Beamer</p>	 <p>Kabel & Verteiler IT-Interface Kabel Video</p>

04

All new Category search with image enhanced interface

As you can see the category search has been completely rethought. Its adopted a new grid like approach while being visually enhanced with product photos making it easier on the eyes and more user friendly in its navigation. The visual ques aid a user in quickly knowing what to expect from each category.

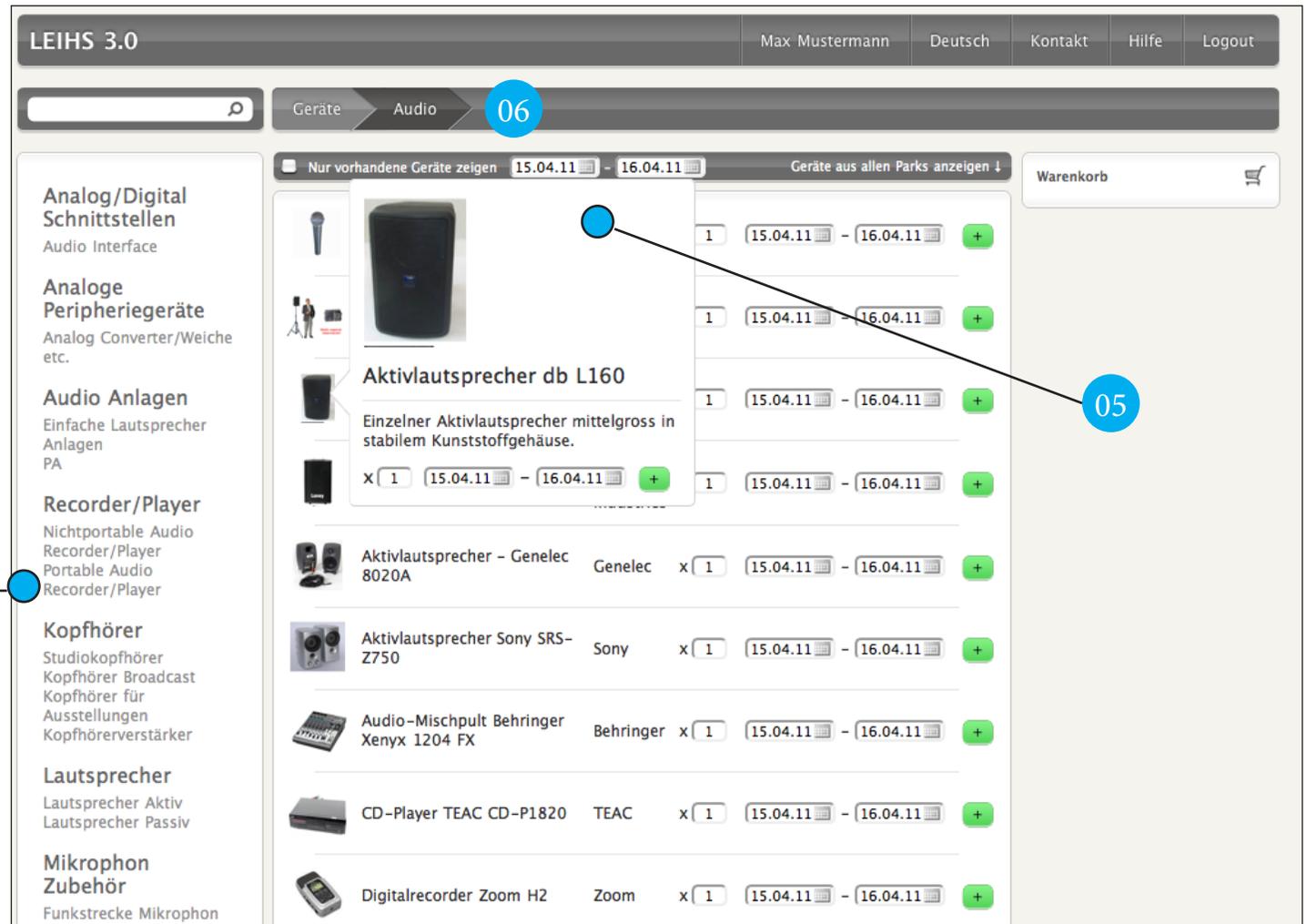
05

The screenshot shows a user profile page for 'Max Mustermann'. At the top, there is a navigation bar with links for 'Deutsch', 'Kontakt', 'Hilfe', and 'Logout'. Below this, a dropdown menu is open, displaying user data: 'Benutzerdaten (verwalten)', 'Unique-ID: e170371|zhdk', 'E-Mail: max.mustermann@zhdk.ch', and 'Telefon: 0800 800 800'. The menu also lists 'Geräteparks' (AV-Ausleihe, ITZ-Ausleihe) and 'Bestellvorlagen (verwalten)' (Fotografiegeräte, Videokurs). To the right of the profile is a 'Warenkorb' (shopping cart) icon. The main content area shows a list of rental periods with 'verlängern' links, and three category cards: 'Video' (Beamer, Beamer Zubehör, Medien Rack / Wagen, Mini Kameras, Stative, Video Kameras), 'Foto' (Adapter & Zubehör, Blitz / - Anlagen, Diaprojektoren, Digital, Leuchtpult, Objektive), and 'Stative' (Stative Foto, Stative Lautsprecher, Stative Licht, Stative Mikrophone, Stative Video, Zubehör).

05

Navigation Info

The top end navigation displays important user information as well as other basic information pertaining to each menu point when you hover over the different links.



04 Category Navigation Sidebar

Once in a category the navigation caters to the subnavigation in the sidebar (for example here for all the sections under Audio). Its clear the user is deeper in the selection process and doubles as visual feedback to enhance the process.

05 Detailed Description & Photo on hover.

The category list has been upgraded to accommodate a hover feature for the photos and text. Making the photo larger and showing detailed item information when hovering over the text.

06 Bread Crumb Navigation

The navigation bar atop (Bread Crumb navigation) allows the user to jump to any category in the system as well as giving visual feedback to one's position in the Leih system.

07

Item Page Enhanced with commentary and suggested items.

When the user clicks on an item in the category list a item page with all the item information is displayed. Information about the item is displayed as well as commentary about the item and suggested items that other users ordered with the displayed item.

Aktivlautsprecher Laney CPC10
Laney / BLT Industrie

Kleiner PA-Aktivlautsprecher. Ursprünglich in Kombination mit Basslautsprecher konzipiert. Für kleine und mittlere Vorführungen geeignet.

Leistung 65W
Eingänge Line in 1 (mit Lautstärkereger): Chinch Stereo, Jack 6.3mm; Mic/Line in 2 (mit Lautstärkereger): XLR (mic), Jack 6.3mm (Line)
Ausgänge Line Out: Jack 6.3mm; Ext.Speaker out (8Ω min): Jack 6.3mm
Zusätzliche Regler: Höhen, Tiefen

x - [zur Bestellung hinzufügen](#)

Max Mustermann
Vertiefung Interaction Design
Das Audio-Mischpult von Behringer funktioniert super mit diesem Aktivlautsprecher!!!

Maike Muster
Vertiefung Cast
Als Mischpult würde ich immer auf ein Behringer zurückgreifen...

Maik Mann
Vertiefung Sound Design
Denkt drann immer gleich mehrere bestellen!!!

Digitalrecorder Edirol R-1
Audio-Mischpult Behringer Xenyx 1204 FX
Audio-Mischpult Behringer Xenyx 1204 FX
Audio-Mischpult Behringer Xenyx 1204 FX

07

08

Simplified Time Frame Filter

Once the first item has been selected and a time frame has been set the time frame is automatically updated on other items. This simplifies and saves time as most items have the same time frame per order.

09

Single Item Time Frame Editing.

The user has the possibility to change the single time frames of each item. This gives you a greater flexibility when ordering. Combined with the time frame filter you are a lot quicker when ordering 10+ items.

10

The screenshot shows a shopping cart interface. At the top, there are two date range filters: "Nur vorhandene Geräte zeigen" (highlighted with a blue circle 10) and "Geräte aus allen Parks anzeigen". The date ranges are "15.04.11" and "16.04.11". To the right is a "Warenkorb" (Cart) button with a shopping cart icon. Below the filters is a list of items, each with a quantity of 1 and a green "+" button. The items are:

Item Name	Brand	Quantity	Time Frame	Action
Mikrophone Shure Beta 58A	Shure	x 1	15.04.11 - 16.04.11	+
Aktivlautsprecher Anchor Explorer PA-2500	Anchor Audio	x 1	15.04.11 - 16.04.11	+
Aktivlautsprecher db L160	dB Tech	x 1	15.04.11 - 16.04.11	+
Aktivlautsprecher Laney CPC10	Laney / BLT Industries	x 1	15.04.11 - 16.04.11	+
Aktivlautsprecher - Genelec 8020A	Genelec	x 1	15.04.11 - 16.04.11	+
Aktivlautsprecher Sony SRS-Z750	Sony	x 1	15.04.11 - 16.04.11	+
Audio-Mischpult Behringer Xenyx 1204 FX	Behringer	x 1	15.04.11 - 16.04.11	+

10

Item Filter

The item filter shows the items available at the chosen time frame by highlighting them grey. This makes it clear which items are available when you need them.

09

11

Shortened Checkout Process

The checkout process has been optimized and shortened. The reason for the order has been moved above the check out button. Once the user clicks on the checkout button they are led to the confirmation page with a listing of important information.

11

12

12

Confirmation Page

The new checkout page has a logout button as that was a problem with the last Leih system. That way the user has a visual request to log out.

Save Orders!

Once an order has been completed the order can be saved so that a user can make the same reservation in the future. Thus saving time for the users and allowing them to create a collection of their favourite orders!

Bestellbestätigung

Deine Bestätigung wurde erfolgreich übermittelt, sie ist aber **noch nicht genehmigt**.

Ihre Bestellung wurde zur Bearbeitung an einen Inventarverwalter geschickt. Dieser wird sie überprüfen und entweder genehmigen, ablehnen oder verändern. Sobald dies passiert, werden Sie per E-Mail benachrichtigt. Sie können Ihre offenen Reservationen auch auf Ihrer persönlichen Liste abrufen (klicken Sie auf Ihren Namen, oben rechts auf dieser Seite).



Aktivlautsprecher Laney CPC10

Laney / BLT Industries

ITZ-Ausleihe

x 1

15.04.11 - 16.04.11

als Bestellvorlage speichern

Wertliste

Logout

Hinweise der Geräteparks

ITZ-Ausleihe

Das ITZ der ZHdK.

Zürcher Hochschule der Künste
IT-Zentrum (Raum SQ3) Ausstellungsstrasse 60 Postfach CH-8031 Zürich

fon +41 43 446 21 21
fax +41 43 446 45 21

<http://ithelp.zhdk.ch>
<http://itz.zhdk.ch>

Öffnungszeiten: Mo-Fr 12-18 Uhr

AV-Ausleihe

- Geräte pünktlich zurückbringen

Zürcher Hochschule der Künste
IT-Zentrum (Raum SQ3) Ausstellungsstrasse 60 Postfach CH-8031 Zürich

fon +41 43 446 21 21
fax +41 43 446 45 21

Öffnungszeiten: Mo-Fr 12-18 Uhr

Back End GUI

The main feature to the back end is the drastically altered dashboard screen.

Consolidating functions and rethinking where navigation made sense was our main goals in the new interface.

The Back End is used by the Leih staff to maintain the system and approve incoming orders as well as to give out and take in items.

Their main tools are the scanner. So it was important to implement it as a tool to navigate the back end.

14

LEIHS 3.0

Ausleihe
Inventar
Admin
Max Mustermann
Frontend
Deutsch
Logout

Genehmigungen
 Aushändigungen
 Rückgaben

	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen Ablehnen Editieren
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen Ablehnen Editieren
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen Ablehnen Editieren
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen Ablehnen Editieren
	Max Mustermann	26 Geräte	15.02.11 - 16.02.11	Zurücknehmen Löschen
	Petra Muster	6 Geräte	17.02.11 - 18.02.11	Aushändigen Löschen
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen Löschen
	Max Mustermann	26 Geräte	17.04.11 - 18.04.11	Zurücknehmen Löschen
	Max Mustermann	26 Geräte	18.04.11 - 19.04.11	Zurücknehmen Löschen
	Petra Muster	6 Geräte	20.04.11 - 21.05.11	Aushändigen Löschen
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Aushändigen Löschen

15

Back End Dashboard

The dashboard is the new heart of the back end. The giving out “zurücknehmehmen” and returning “aushändigen” of items as well as approving new orders are all housed into the same dashboard.

The dashboard is infinite; it is loading all incoming data continuously.

Through visual cues and scanner navigation the Back End is organized and easy to use.

	Genemigungen	Aushändigungen	Rückgaben
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

16

Filter!

The dashboard can be filtered to show the orders that need to be approved or items going out or being returned.

17

Scanner Navigation

Navigation from “Zurücknehmen” and “Aushändigen” have been simplified. There is no longer a click required to reach a certain dashboard. By scanning the item or users card the items on the dashboard are filtered and ready to be taken back or given out by the system.

This makes it much easier to work with the back end because it eliminates the constant clicking between the “zurücknehmen” and “aushändigen” dashboards.



18

Approve Items (Genehmigen)

Items that need to be approved have been shaded grey and do not have a date assigned yet because they are not yet approved to be in the system.

Once requests are approved they receive a date that the user will pick them up and their appearance changes to display their new function and “approved” status.

This way, while remaining on the dashboard and taking in and giving out items the back end user instantly sees new orders coming in and has the possibility to instantly approve them without leaving the dashboard!

In addition the orders are on the top of the list. Once they reach certain amount the items to be approved listing becomes a scroll window to allow space for the other items.

18

LEIHS 3.0		Ausleihe	Inventar	Admin	Max Mustermann	Frontend	Deutsch	Logout
		<input checked="" type="checkbox"/> Genehmigungen	<input checked="" type="checkbox"/> Aushandlungen	<input checked="" type="checkbox"/> Rückgaben				
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Genehmigen	Ablehnen	Editieren		
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen	Ablehnen	Editieren		
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen	Ablehnen	Editieren		
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen	Ablehnen	Editieren		
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Genehmigen	Ablehnen	Editieren		
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Aushändigen	X			
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Aushändigen	X			
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Aushändigen	X			
	Petra Muster	6 Geräte	22.04.11 - 16.05.11	Aushändigen	X			
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			
	Max Mustermann	26 Geräte	15.04.11 - 16.04.11	Zurücknehmen	X			

19

Auto Load

The dashboard is equipped with infinite scroll. So at the bottom of the page there is an autoloading to load the next page.

19

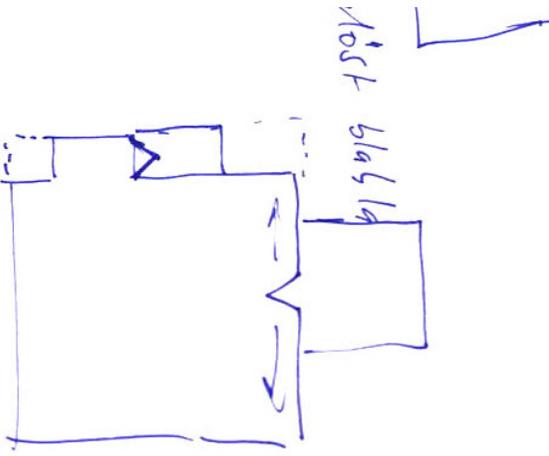
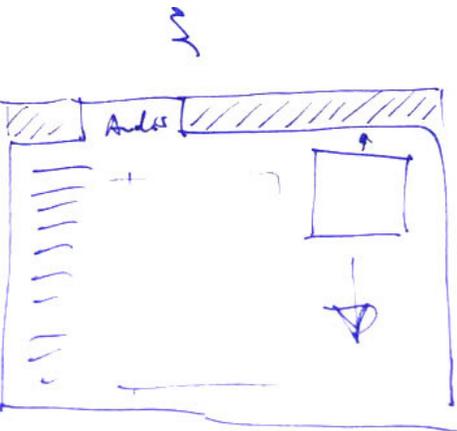
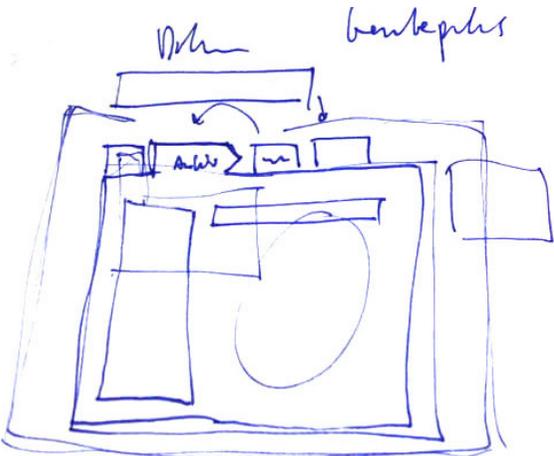
Findings And Tips

I Breadcrumb featuring Tabs

To improve visibility the breadcrumb navigation could be altered into tabs so that the user can see what page you are on and link the page to the navigation.

The tab acts like a title above the users actual page and surrounds this in a clear defined window.

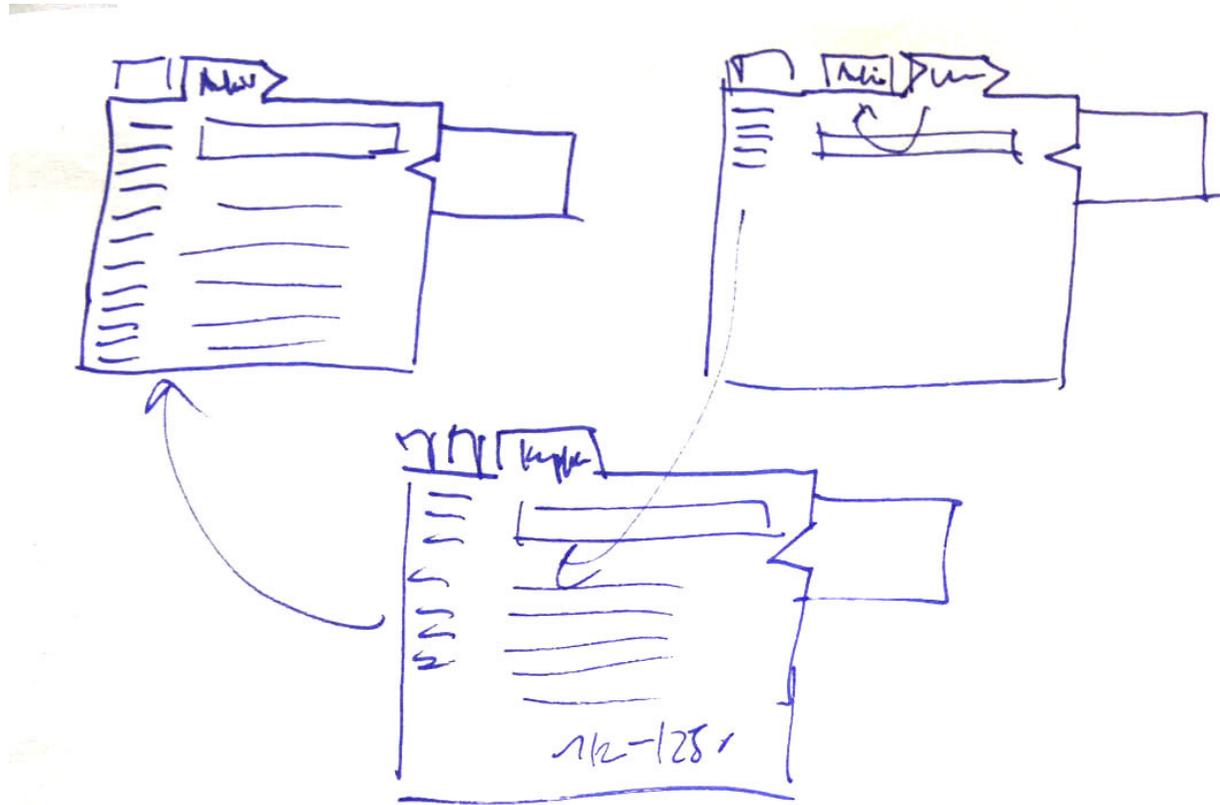
This improvement gives a better overview and navigation in the ordering process, p.ex. "where am I" or "where can I get back to the items".



II Basket On The Side

The check out box has been slightly redesigned into its own tab rendition. Only it is on the side of the content with a little arrow giving it a little more attention from the user.

The navigation is fixed and follows the users in case they need to scroll down on the page.



The screenshot shows the LEIHS 3.0 user interface. At the top, there is a dark header bar with the text "LEIHS 3.0" on the left, and "Max Mustermann", "Backend", and "Deutsch" on the right. Below the header, there is a search bar with a magnifying glass icon and a "Geräte" button. The main content area has a heading "Willkommen Max Mustermann" followed by the text "Du bist berechtigt für die folgenden Geräteparks: [AV-Ausleihe](#), [ITZ-Ausleihe](#)". Below this, there is a section titled "Ausgeliehene Geräte" containing a table of borrowed items.

Ausgeliehene Geräte		
Zubehörkit zu Dedolight (Farbr...	04.03.2011 - 05.03.2011	verlängern
Filmprojektor Super8 Bauer Visalux	23.03.2011 - 28.03.2011	verlängern
Lichtkoffer Lowel Basically 3 K	24.03.2011 - 25.03.2011	verlängern

III User - Startscreen

The startscreen now acts as a welcome screen. It displays user details with item parks and borrowed items from the leihs.

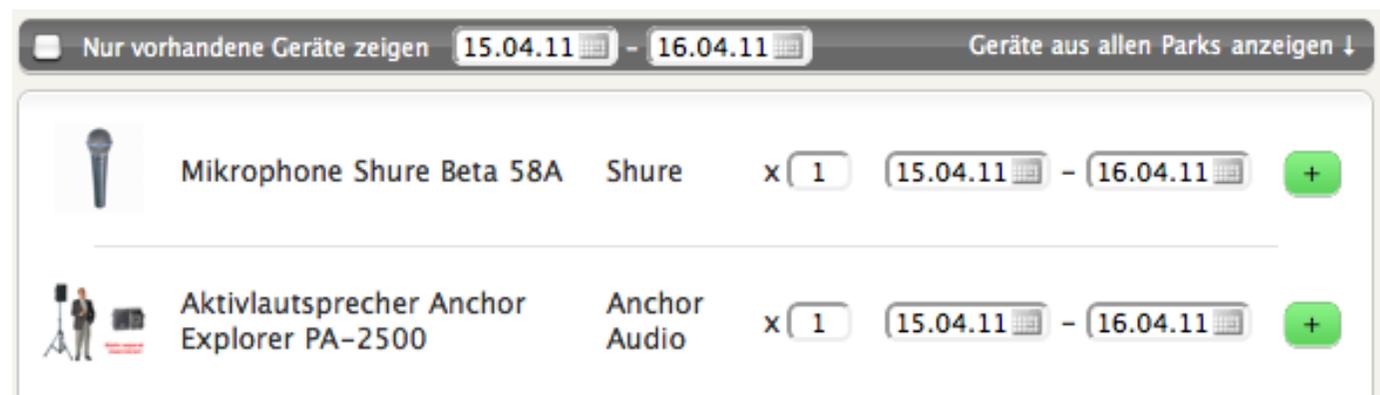
If you navigate through the LEIHS-system and return to the item-overview (which is the same page as the startscreen), this site changes its appearance, which could irritate the user.

To avoid this, a pop-up on the startscreen with user-relevant informations could be used.

IV Modellist - Time Frame Filter

Some of the tested users were insecure about using the time frame filter.

During our system-evaluation we discussed if the two time frames are really necessary or if it is more helpful to show the filter once. Could be discussed.



Warenkorb 

1 Aktivlautsprecher Laney
CPC10 

Zweck

Bestellung abschicken

V Name Options

Because it is a lending-system, the definition "Warenkorb" could get misunderstood, you don't BUY things here.

Some alternative definitions:

-Leihliste (our favourite, because it is related to the name "Leih".)

-Bestellübersicht

-Checkout Basket



Aktivlautsprecher Laney CPC10

BEHRINGER Industrie

65W-Aktivlautsprecher. Ursprünglich in Kombination mit Basslautsprecher konzipiert. Für mittlere Vorführungen geeignet.

65W

Line in 1 (mit Lautstärkeregler): Chinch Stereo, Jack 6.3mm; Mic/Line in 2 (mit Lautstärkeregler): XLR (mic), Jack 6.3mm (Line)

Line Out: Jack 6.3mm; Ext.Speaker out (8Ω min): Jack 6.3mm

Regler: Höhen, Tiefen

15.04.11 - 16.04.11

[zur Bestellung hinzufügen](#)

Behringer
Interaction Design

Das Audio-Mischpult von Behringer funktioniert super mit diesem Aktivlautsprecher!!!

Behringer
Cast

Als Mischpult würde ich immer auf ein Behringer zurückgreifen...



Digitalrecorder



Audio-Mischpult
Xenyx



Audio-Mischpult
Xenyx



Audio-Mischpult

VI Order Process

Could this process be optimized?

With more time, alternative solutions could be discussed by focussing on "as few clicks as possible".

The detailed function of "Zweck" (Reason) should be re-evaluated by the ZHdK Rechtsdienst for further improvements.

Warenkorb 

1 Aktivlautsprecher Laney CPC10 

Zweck

[Bestellung abschicken](#)



Aktivlautsprecher Laney CPC10
Laney / BLT Industrie

Kleiner PA-Aktivlautsprecher. Ursprünglich in Kombination mit Basslautsprecher konzipiert. Für kleine und mittlere Vorführungen geeignet.

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Ausgänge	Line Out: Jack 6.3mm; Ext.Speaker out (8Ω min): Jack 6.3mm
Zusätzliche Regler	Regler: Höhen, Tiefen

x - [zur Bestellung hinzufügen](#)

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Digitalrecorder Edirol R-1



Audio-Mischpult Behringer Xenyx 1204 FX



Audio-Mischpult Behringer Xenyx 1204 FX



Audio-Mischpult Behringer Xenyx 1204 FX

VII Commentary and Suggested Items

This function should be further researched with more user tests. Do they really know what the suggested items are for and understand or need the commentary?

Willkommen Max Mustermann

Du bist berechtigt für die folgenden Geräteparcs: [AV-Ausleihe](#), [ITZ-Ausleihe](#)

Ausgeliehene Geräte

Zubehörkit zu Dedolight (Farbr...	04.03.2011 - 05.03.2011	verlängern
Filmprojektor Super8 Bauer Visalux	23.03.2011 - 28.03.2011	verlängern
Lichtkoffer Lowel Basically 3 K	24.03.2011 - 25.03.2011	verlängern



Audio

Analoge / Digitale Schnit...
Analoge Peripheriegeräte
Audio Anlagen
Recorder / Player
Kopfhörer
Mikrofon Zubehör
Mixer
Stative Mikrophone
Verstärker



Video

Beamer
Beamer Zubehör
Medien Rack / Wagen
Mini Kameras
Stative
Video Kameras
Kamera Zubehör
Monitore / TV
Recorder / Player
Videoschnitt
Videoproduktionshilfsmittel



Foto

Foto

Adapter & Zubehör
Blitz / - Anlagen
Diaprojektoren
Digital
Leuchtpult
Objektive
Referenzmonitore
Stative



Stative

Stative Foto
Stative Lautsprecher
Stative Licht
Stative Mikrophone
Stative Video
Zubehör
andere Stative

Warenkorb

1 Aktivlautsprecher Laney CPC10 x

Zweck

[Bestellung abschicken](#)

VIII Drag & Drop

By using a drag&drop function on the startscreen, one can get the requested item immediately:

Users can grab f.ex. a camera and the system will display the three most common cameras.

This function would be a great improvement for people that are not used to lending items online.