UI/UX-Design Portfolio (2012-2023)

Marcel Ritschel

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Profile
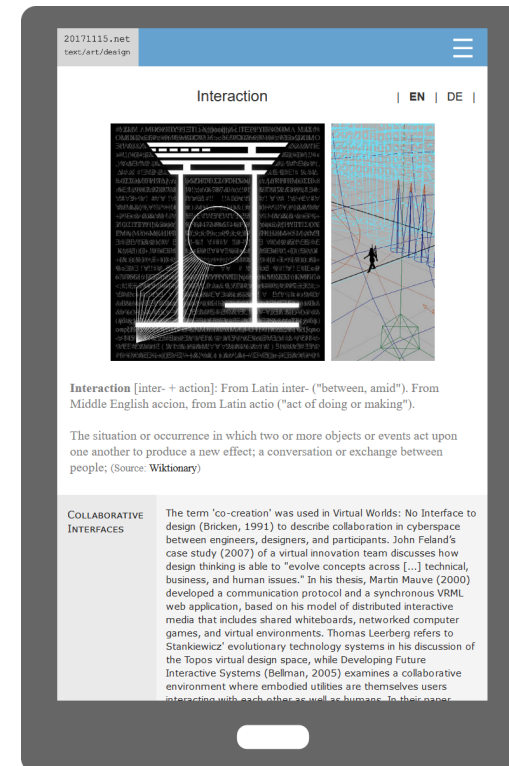
Marcel Ritschel has received a Bachelor of Arts (Degree Major: Art History) from the Australian National University and graduated with a Master of Design from the University of Technology Sydney (Major: Information Design) in 2008. Marcel has worked as a Designer for various companies in Germany, including M&M Software and GMG Color. He is currently employed as UI/UX-Developer at EWS Tool Technologies. Marcel has been a member of the DGTF (Deutsche Gesellschaft für Designtheorie und -forschung) for several years.
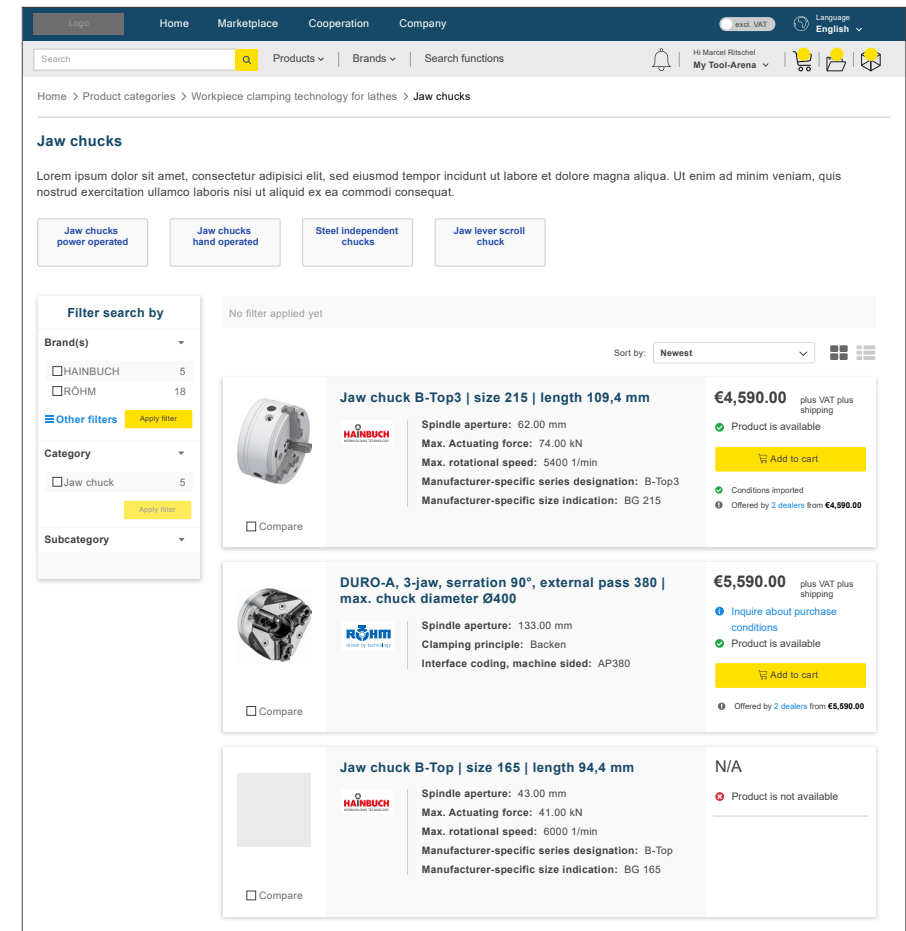
Marcel Ritschel hat Abschlüsse als Bachelor of Arts (Studienzweig: Kunstgeschichte) der Australian National University und als Master of Design (Studienzweig: Informations-Design) der University of Technology Sydney. Er ist bei verschiedenen Firmen in Deutschland als Designer tätig gewesen einschliesslich M&M Software and GMG Color. Aktuell arbeitet Marcel als UI/UX-Entwickler bei EWS Tool Technologies. Marcel ist seit mehreren Jahren Mitglied der Deutsche Gesellschaft für Designtheorie und -forschung (DGTF).

1 User Experience Design

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1.1 B2B Customer Journey

Description: Customer journeys for the Tool-Arena portal, including product selection via 3D- or assembly chart, machine- and application-centred product search, shopping cart and order process.
The project involved designing for end users (dealers, customers) as well as content managers and developers.

Design mockup for the product catalogue.

1 User Experience Design

1.1 B2B Customer Journey (continued)

Tasks

Concept development; Workflows and Interaction Design; Visualisation with Adobe Illustrator; Hi-Fidelity Prototyping with Axure RP; Developer support; Quality management; Usability reviews.
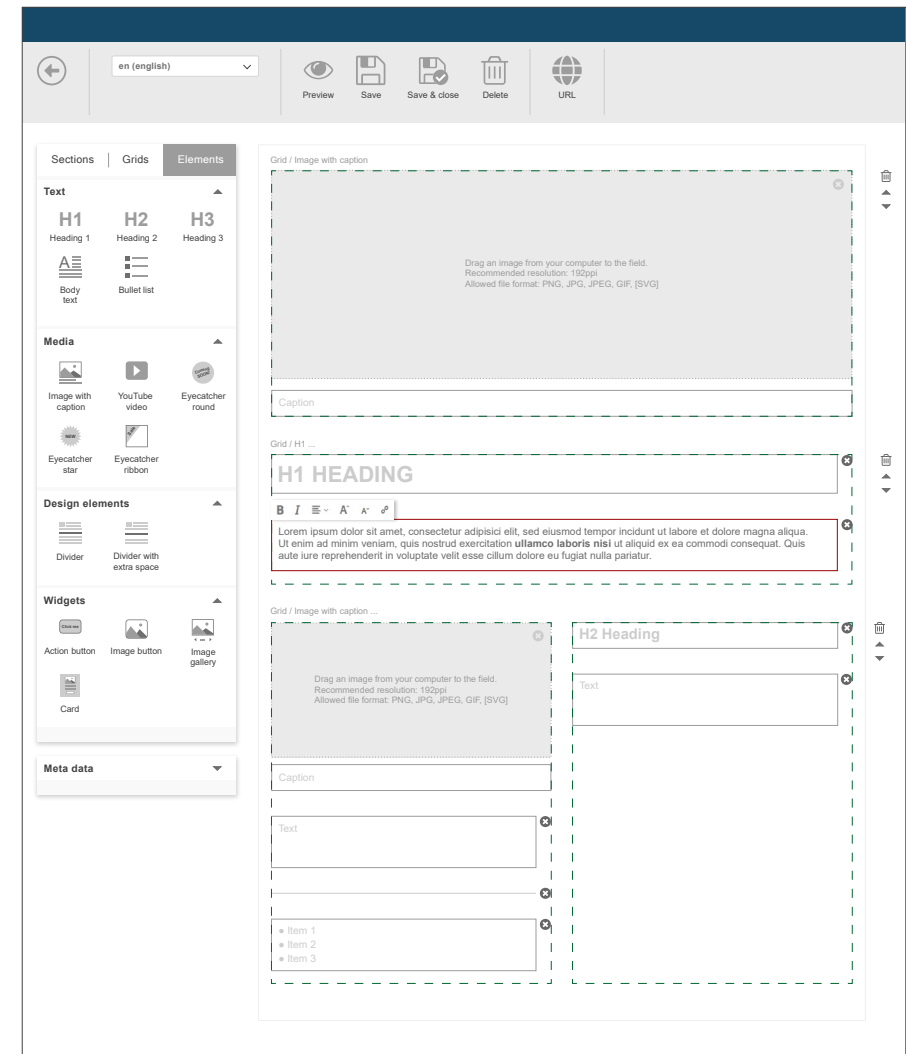
1 User Experience Design

1.2 CMS / Content Editor

Description: Custom content management system for Tool-Arena marketing staff.

1 User Experience Design
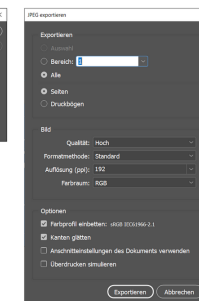
1.3 Living Styleguide

Description: Online UI-Styleguide for Tool-Arena developers and content creators.

UI-Styleguide

Most styleguides communicate essential aspects of a brand or Corporate identity by specifying the correct usage of logos, fonts, colours, layout schemes. A UI-Styleguide must, in addition, describe what the implemented user interface will do in terms of appearance and behaviour.
A UI-Styleguide needs to prepare for the future. It should be powerful enough to preserve an agreed upon look-and-feel; and it should be flexible enough to deal with human- and machine-driven variations.

2 Website Design & development

2.1 Corporate Website

Description: TYPO3-Website for GMG Color. The project involved the development of an interactive frontend prototype from static design mockups, as well as coordinating with a software agency to implement and deploy the site.
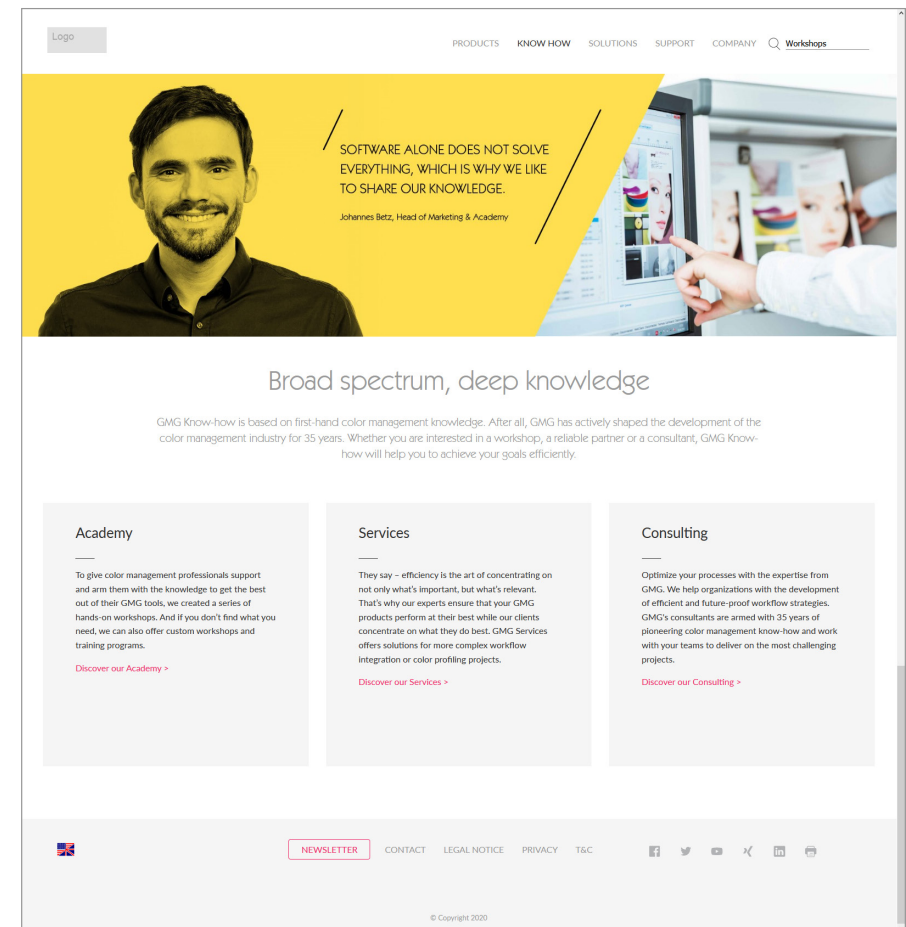
2 Website Design & development

2.1 Corporate Website (continued)

Description: Download centre for the specialist software of GMG Color.

Tasks

Responsive Web Design; Hi-Fidelity Prototyping; Technical Project Management; Design of a UI-Styleguide; Technical documentation.

2 Website Design & development

2.2 User documentation

Description: Documentation of the editorial backend for GMG marketing staff.

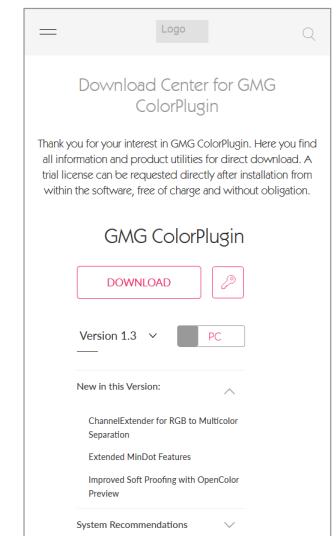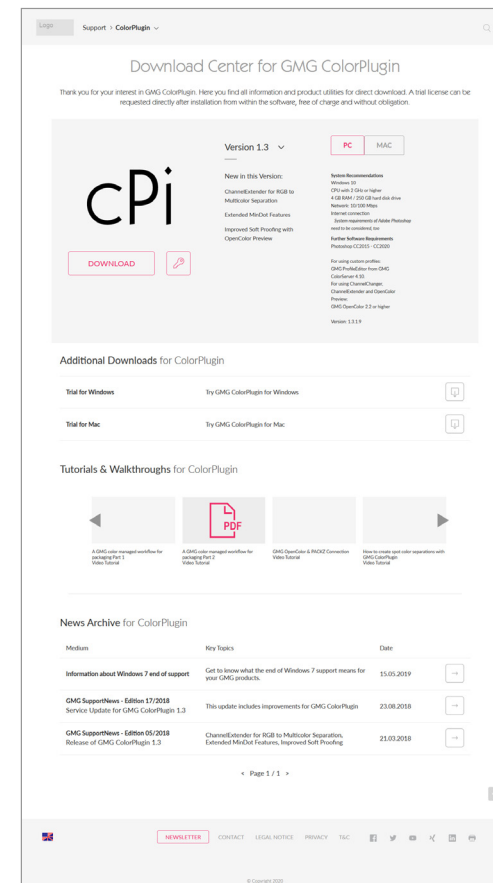**Seite 10** in der Abbildung:

Backend Dokumentation GMG Color

Bildbearbeitung

Editor öffnen

| **Desktop** | **Tablet - horizontal** | **Tablet - Vertical** | **Mobile** |
| Seitenverhältnis: 8:5 | Seitenverhältnis: 10:8 | Seitenverhältnis: 9:10 | Seitenverhältnis: 5:8 |

Abb. TYPO3-Vorschau der gerätetypspezifischen Bildausschnitte

Workflow Bild-Editor

1. **Upload:** Für die Content-Elemente "Graue Box mit Producticons" und "Contentbox weiß mit Bild" werden als Ausgangspunkt Bilder mit einer Breite von circa 900px und einer Höhe von circa 600px empfohlen.
2. **Gerätetyp:** Wählen Sie im rechten Paneel des geöffneten Editors einen Bildausschnitt zum bearbeiten. Das optimale Seitenverhältnis wird als Default bereitgestellt.
3. **Art-Direction:** Im Arbeitsbereich können Sie den Ausschnitt **(a)** verschieben, und/oder **(b)** skalieren. Dabei ist stets zu berücksichtigen, dass der wichtigste Inhalt des Bildes, also der **„Focal-Point"** möglichst vorteilhaft dargestellt werden soll (*siehe* Piktogramm unten).
4. Akzeptieren UND Seite speichern. Das neue Bild im Layout bitte *vor der Veröffentlichung für alle Browser-Breiten testen* und einen unbefriedigenden Bildausschnitt nochmal anpassen.

Jeder Bildausschnitt hat ein voreingestelltes optimales Seitenverhältnis
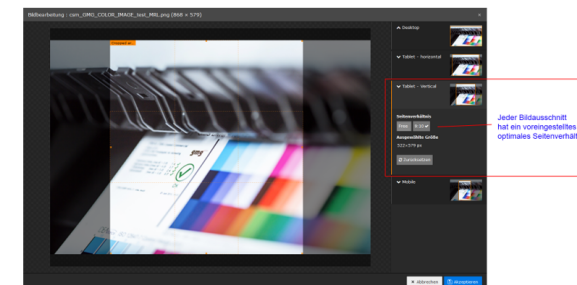
Abb. Bild-Editor mit Ausschnitt „Tablet-Vertical" selektiert

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2 Website Design & development 11

2.3 Online gallery

Description: The digital gallery provides online storage for, and browser access to, a visual portfolio of creative work. It includes a number of photographic studies of modern architectural designs, as well as a collection of analogue and digital artworks.
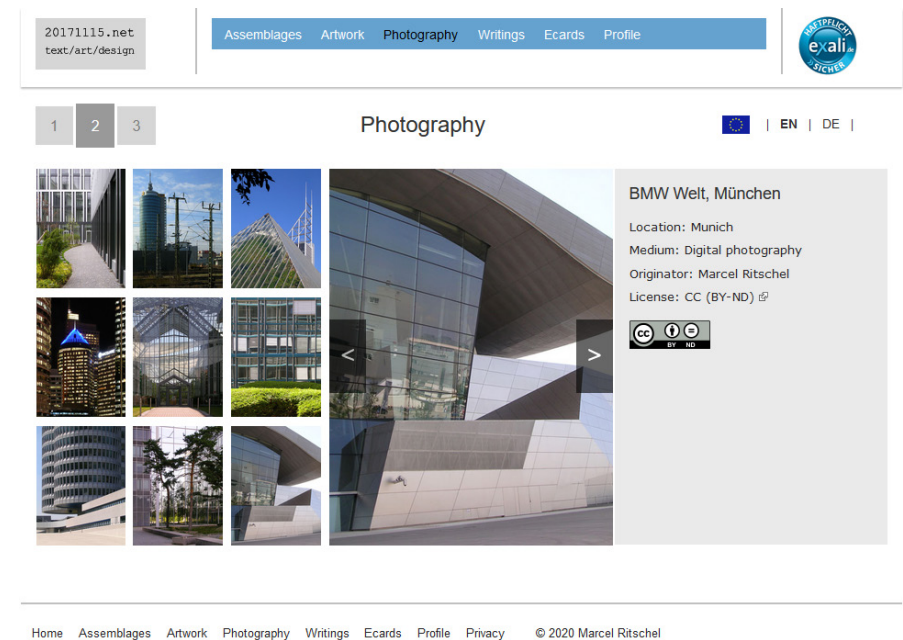
Tasks

Content management; Responsive web design, HTML/CSS/JS; Layout and graphic design using Adobe Creative Suite.

2 Website Design & development

2.4 Electronic greeting cards

Project: Ecard web application with a focus on the natural world, including flowers, gardens, and landscapes. It allows users to browse, customise, preview and send personalised electronic cards to their friends.

Tasks

Interaction Design; Content development; Responsive web design, HTML/CSS/ PERL; Graphic design using Adobe Creative Suite.

Ecards

Ecard systems make digital art objects accessible by combining "a celebratory user mindset" with genuine user choices, an elegant, fast communication tool and creative possibilities. Ecards provide a framework that can help users accomplish social and professional tasks.

3 User interfaces for industrial software

3.1 Wireframes and storyboards

- Interaction requirements are associated with tools, controls and display areas;

- Creation of wireframes and storyboards to render a user scenario.
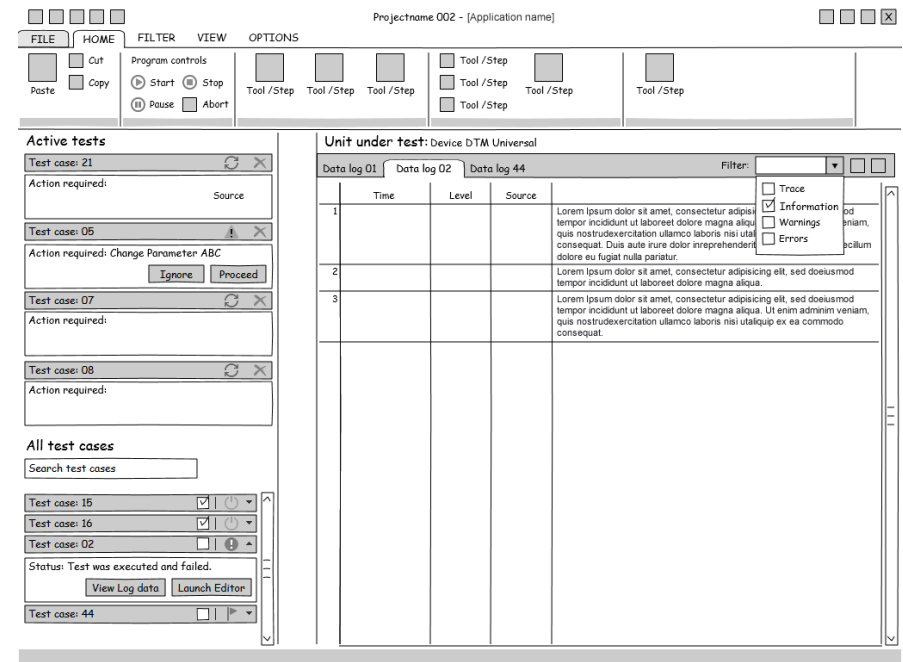
User Scenarios

A scenario describes interactions between personas and the future product. Scenarios help explore representational state and behaviour, e.g. the actions of the user and the reactions of the system.

Wireframes

Conceptual representation of a user interface, usually as a simple line drawing. A wireframe typically consists of several rectangles to represent UI-containers and basic UI-elements.

HMI: The UI indicates a positive end status for *Test case 44*. The red coloured icon for *Test case 02* indicates a negative end status.

User action: The user has flipped open *Test case 02* in order to find out what happened. (Some of the active test are still running.)

HMI: The UI displays a brief status message and relevant options.

User action: The user has clicked the *View Log* data button to study the details.

HMI: The UI opens the data log for *Test case 02* in a new tab [and highlights the line numbers where the complications that lead to this test failure began].

User action: The user has clicked the *Filter* Drop-down in order to reduce the data to the essentials - he is only interested in *Warnings* and *Errors*.

HMI: The UI filters out less relevant data such as *Trace* and *Information*.

User action: The user has clicked the [Launch Editor] button.

HMI: The software [launches an external application].

3 User interfaces for industrial software

## 3.2 Layout design and visual structure

Spatial distribution: The screen area is divided into large vertical and horizontal containers.

Visual hierarchies: UI-elements are weighted by frequency of use and ordered using visual characteristics.

Spatial grouping: UI-elements are grouped by means of identical spacing and frames.

Alignment: UI-elements are positioned consistently according to a scheme.
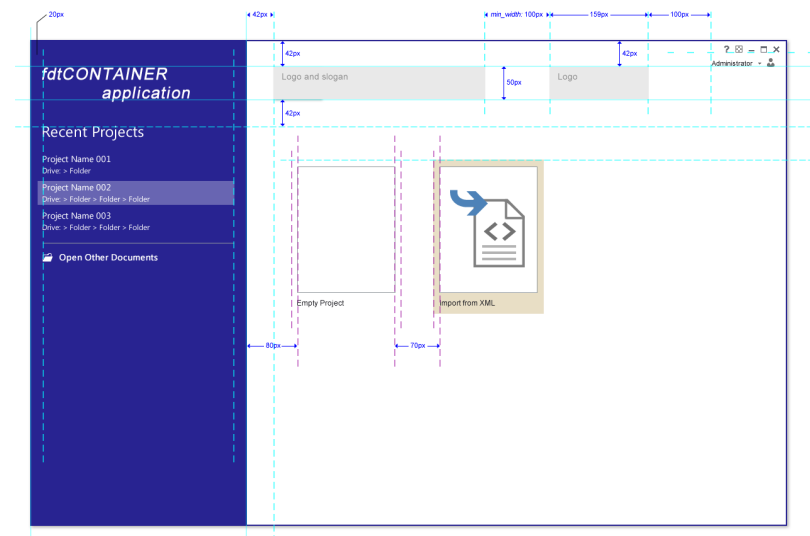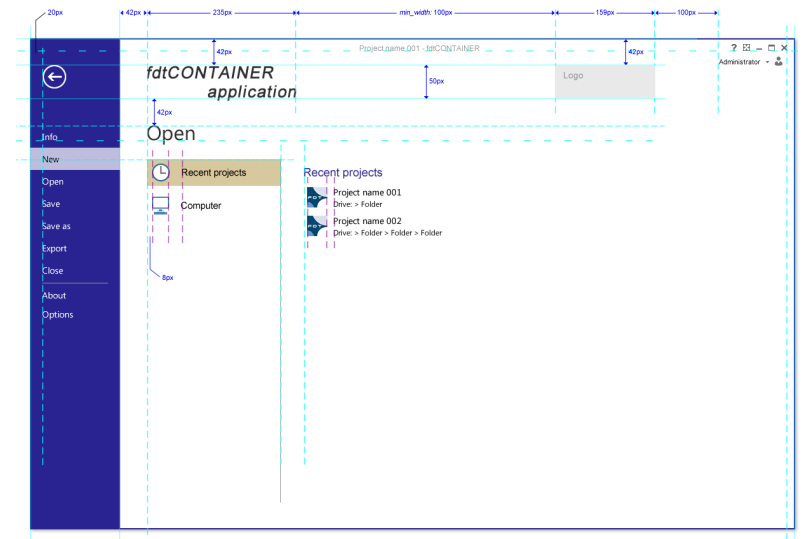
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3.3 Responsive UI Design

Adaptive measures on both design- and technology levels ensure that contents will be loaded as required to match a given view port:

- *Server-side adaptation* may involve CSS media queries which are used to gather relevant device information before sending formatted screen content.
- With *Client-side adaptation*, all contents [HTML, JavaScript, CSS, SVG] can be stored on the server in a device-independent way and then formatted locally by the target device.

Responsive UI Design allows the "simulation" of adaptable layouts and -contents:

- Different layouts to match anticipated screen sizes, navigation structures, and interaction paradigms;
- Creation of static design mockups for the PC, Tablets, and Smartphones.

Responsive Web Design

- Interfaces have to negotiate evermore complex fields of tension between humans and technology.
- Users normally want the best possible interactive experience regardless of the time of day, their position on earth, or the device before them.
- Adaptive Layouting ensures that page contents will be scaled, compressed, or repositioned in order to match the workflow of the user and the capabilities of the technical system.
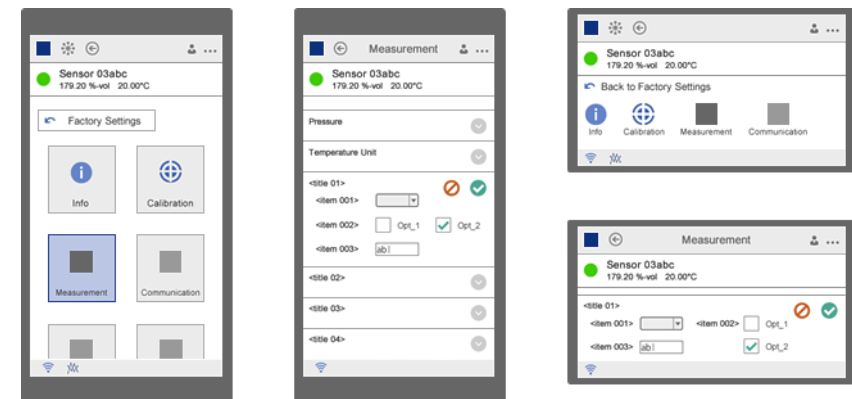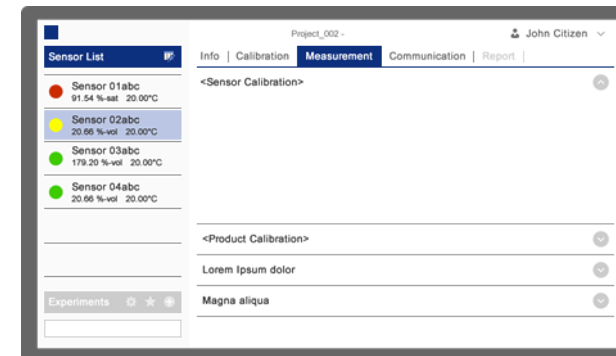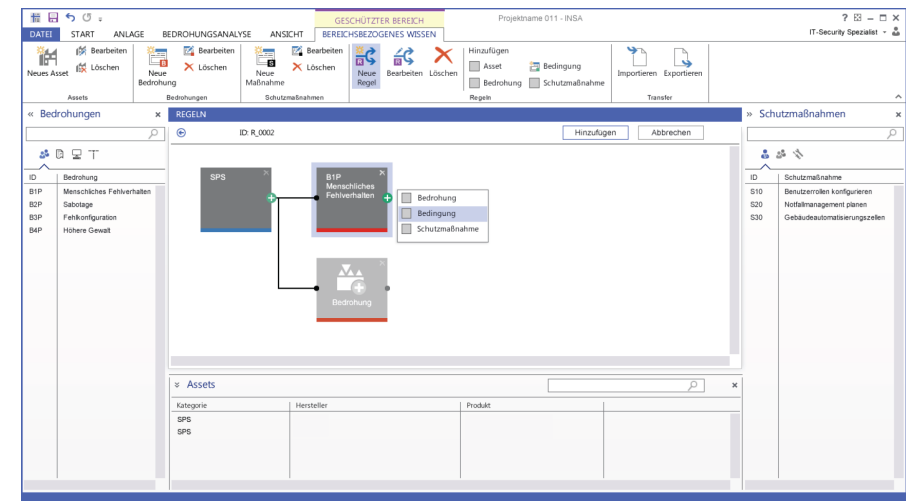

Design mockups for a touch-capable Desktop-UI (*top*), a Mini-Tablet (*left*) and a Smartphone (*right*).
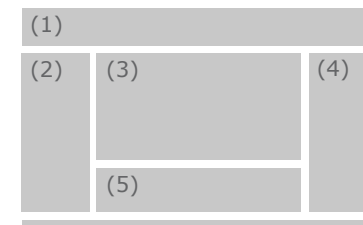
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3.4 Style and branding

Development of a design language and creation of design mockups; The look-and-feel of major user interfaces is worked out with reference to existing wireframes.

Branding

The term Branding refers to the appearance and qualities of a product which are unmistakably associated with the originating company. Brand values may focus on the look, tone, and behaviour of a product but ultimately encompass every human interaction with the company.

(1) Ribbon
(2) Project navigation
(3) Workspace
(4) Options
(5) Catalogue
(6) Status bar

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3.5 Case study: *Device type manager*

Project: With Windows Presentation Foundation (WPF), the design of graphic user interfaces for Device Type Managers (DTMs) was no longer subject to the restrictions imposed by using C++. The project thus involved the development of a suitable design language for a group of digital products - or more precisely, the dtmMANAGER development suite. It was important that branding elements, especially the Corporate colours of M&M Software, be consistently embedded in the UI so as to ensure visual compatibility between all products, while still adhering to (FDT) industry norms. In order to facilitate accurate implementation by developers, a number of design mockups were produced as well as a simple style guide with layout-grids, measurements and hexadecimal colour values.
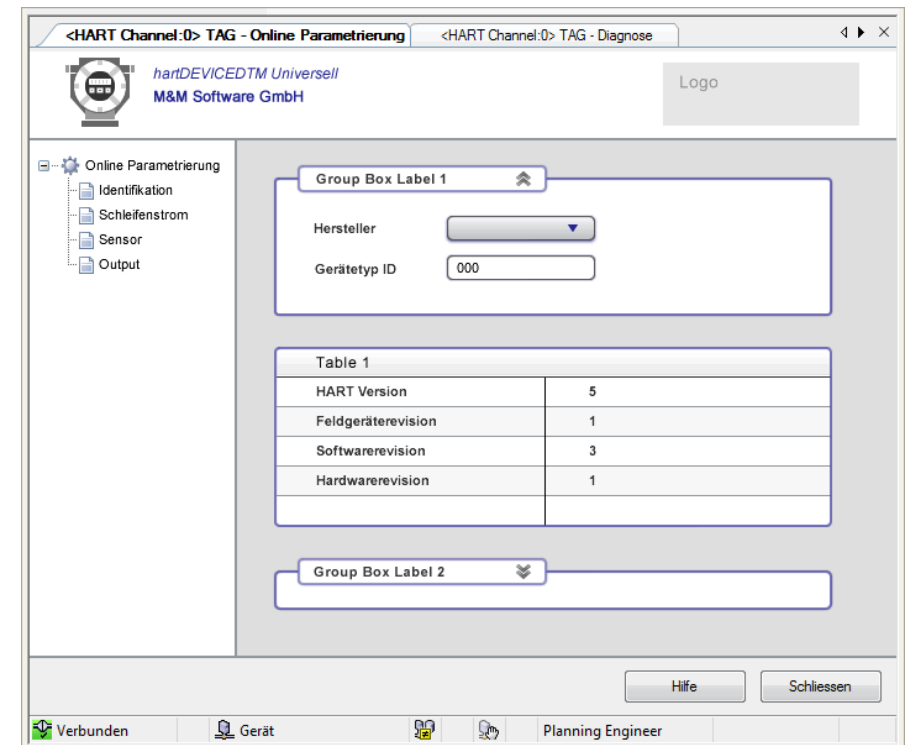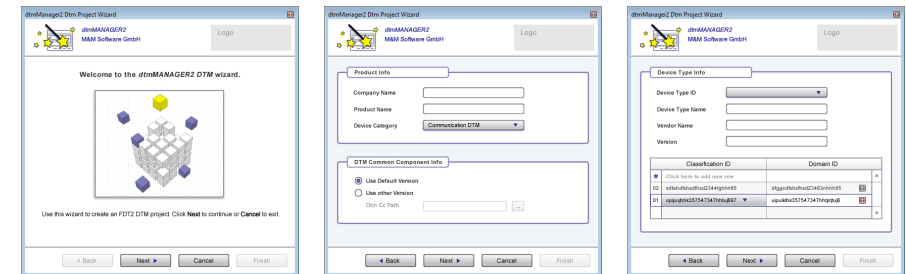
Tasks

Interaction design and wireframes; Layout, mockups, screen-design; Prototyping with Expression Blend; Creation of a styleguide and XAML-based GUI-Library.

dtmMANAGER development suite

The dtmMANAGER is a developers' tool for building device, gateway and communication DTMs. It includes common components, a project wizard, and a tutorial to support device-specific development tasks.

4 Graphic notations

4.1 Concept diagrams
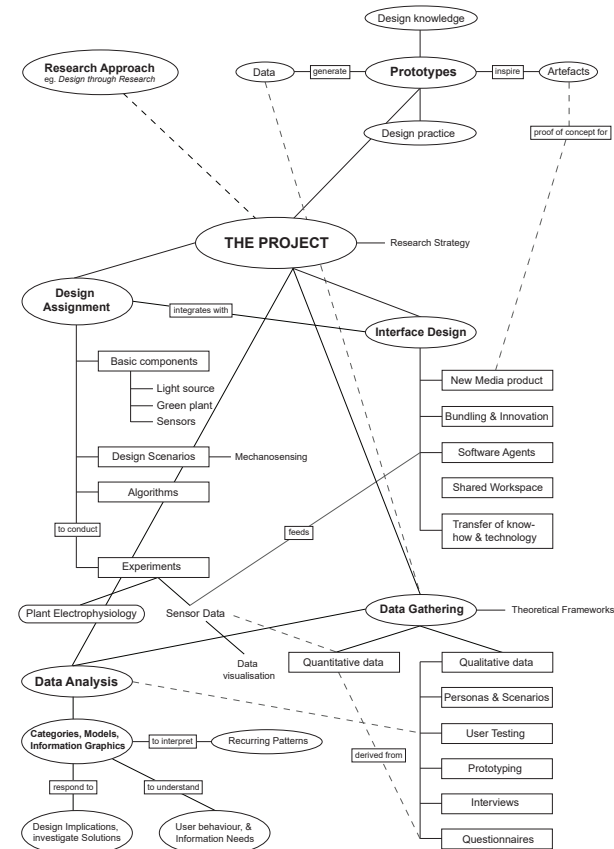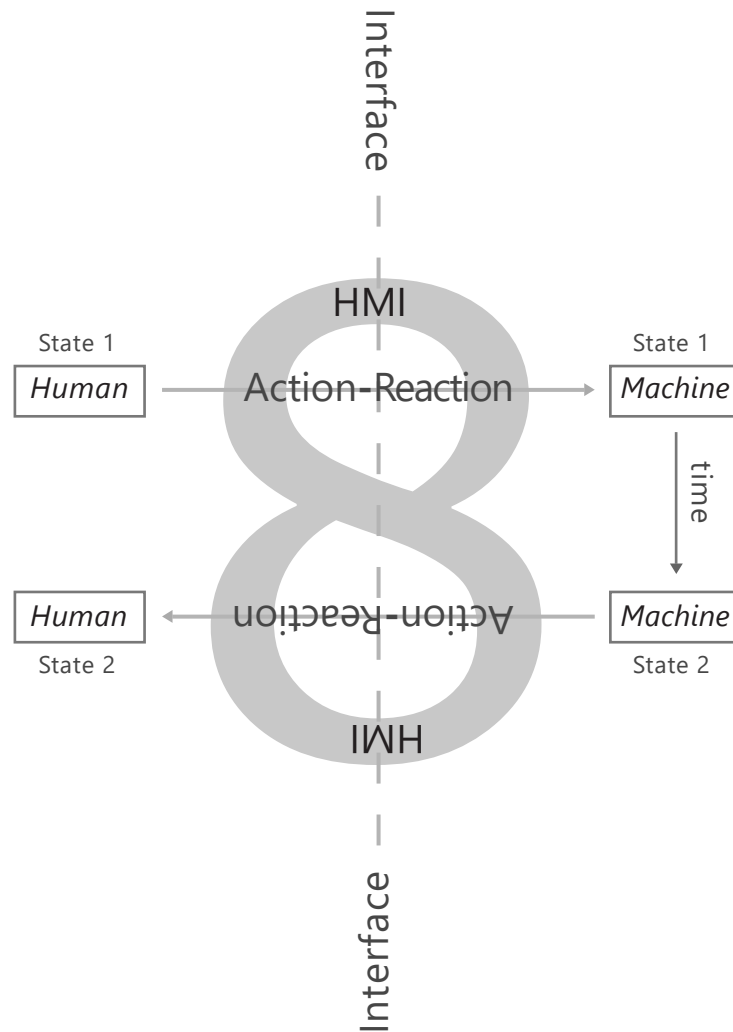
Action-reaction pairs (*left*) and visual representation (*right*) of a research-based design project in terms of non-linear semantics.