



HOME CONTACT SEARCH



WEB LAYOUT PITFALLS & SOLUTIONS

JÖRG NEUMANN | ACLUE
ROBIN MÜLLER | ACLUE



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Handling Formular mit Masken

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Handling Formular



LADEN

JÖRG NEUMANN

THEMEN

- Frontend Technologies
- Mobile Development
- Machine Learning
- Consulting, Coaching, Training

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- Frontend Technologies
- Java Fullstack
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SLIDES



<https://tinyurl.com/48xhcmmr>

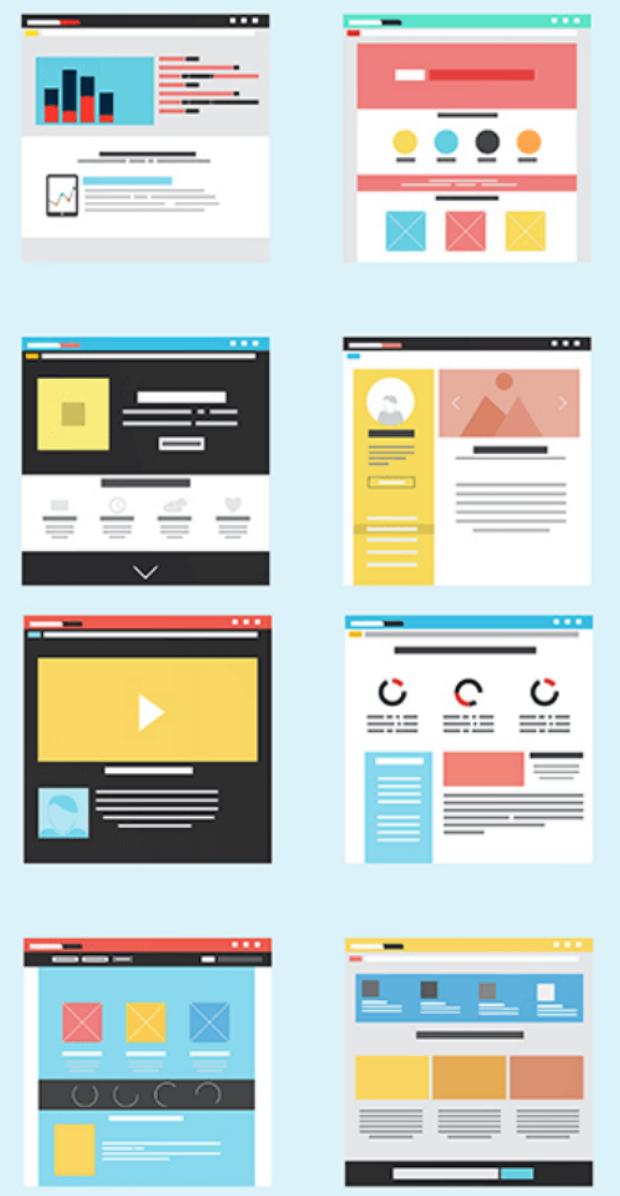
WEB DESIGN PATTERNS

PRINCIPLES

- Predictability
- Consistency
- Responsiveness

PATTERNS

- Anatomy Patterns
- Composition Patterns



WEB DESIGN PATTERNS

SINGLE COLUMN LAYOUT

This is your **last** free member-only story this month. [Upgrade for unlimited access.](#)

Matthew McFarlane
Apr 26 · 6 min read ★ · Listen

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AI Will Soon Put Creators Out of Work. How Should We Adapt?

A review of Daniel Susskind's 'A World Without Work'

A WORLD WITHOUT WORK
Technology, Automation, and How We Should Respond
DANIEL SUSSKIND

Cover Design by [Nicolette Seebach](#)

It wasn't long ago that "creati... 66 | 2 | ... ion would finally validate our life choices. Those of us who chose to major in the liberal or fine arts would

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Legendäres 3:1 der DFB-Elf: Vor 50 Jahren ging Englands Fußball in Wembley (gegen Deutschland) zugrunde Vor 3 Min

Ehemaliger CDU-Generalsekretär: Polenz fordert Kommission zu Aufarbeitung von deutscher Russlandpolitik Vor 9 Min

Teures Tanken, Heizen und Einkaufen: Inflationsrate steigt im April auf 7,4 Prozent Vor 32 Min

Teues Tanken, Heizen und Einkaufen

Inflationsrate steigt im April auf 7,4 Prozent

Lieferengpässe, Corona und Russlands Krieg in der Ukraine: die Preise gehen nach oben. Im April klettert die Teuerungsrate laut Statistischem Bundesamt weiter auf 7,4 Prozent – der höchste Wert seit 41 Jahren.

1 Min

Russisches Gas und Europas Energieversorgung

Deutschland muss sich laut Scholz auf plötzlichen Gas-Stopp aus Russland einstellen

Kremlchef Wladimir Putin hat Polen und Bulgarien den Gashahn zugeschraubt. Das geschieht schon bald auch Deutschland passieren, warnte Olaf Scholz. Und

1 Anschläge in Transnistrien: Das neue Pulverfass in Putins Krieg

2 Putins Angriffskrieg: Rückendeckung für die Front – wie die deutsche Panzerhaubitze 2000 der Ukraine helfen könnte

3 Ukraine-Militärs: Es ist unverhindert

WEB DESIGN PATTERNS

CARD-BASED LAYOUT

The screenshot shows the YouTube homepage with a grid of video cards. Each card includes a thumbnail, title, channel name, and view count. The cards are arranged in a grid pattern with some spacing between them. The interface features a dark header bar with navigation links like 'Start', 'Entdecken', 'Abos', 'Mediathek', and 'Verlauf'. A search bar and a login button are also visible.

Card Examples:

- Mom at my age VS me by TheMermaidscales (5 Mio. Aufrufe)
- Deutscher Gasspeicher in russischen Händen by ZDFheute (70.244 Aufrufe)
- Reds stehen mit großem Zeh im Finale: Liverpool - DAZN UEFA Champions L... by DAZN (672.018 Aufrufe)
- Ed Sheeran, Martin Garrix, Avicii, Kygo, Dua Lipa, The... by Wonder Deep (5092 aktive Zuschauer)
- 20 UPDATE IDEEN, die MINECRAFT UNBEDINGT... by EinfachGustaf (6667 Aufrufe)
- Lucki rastet aus - Käufer geht direkt wieder! Bares... by Dieter Da (12 Mio. Aufrufe)
- Funny Animal Videos 2022 - 🐶 - Funniest Dogs And... by Funny Animals' Club (2,9 Mio. Aufrufe)
- Boogie Woogie Queen Shows Up For An Epic Jam by Brendan Kavanagh (2,8 Mio. Aufrufe)
- Gänsehaut-Moment für den Frieden! by sportstudio (6:59)
- ICH WILL NICHT ALLEIN BLEIBEN by doku (44:08)
- ANGST by Rammstein (0:30)
- Steigt SCHALKE jetzt noch auf? 🤔 BREMEN... by FC Schalke 04 (19:20)

Trends:

- Borussia Dortmund – Dynamo Kiew Highlights |...
- Hartmut der Hypochondier und der Tod | WDR Doku
- Rammstein - Angst (Official Trailer)
- Steigt SCHALKE jetzt noch auf? 🤔 BREMEN...

HERO LAYOUT

The screenshot shows the Apple website product page for the iPhone 13 Pro. The top navigation bar includes links for 'Store', 'Mac', 'iPad', 'iPhone', 'Watch', 'AirPods', 'TV & Home', 'Only on Apple', 'Accessories', 'Support', and a search icon. Below the navigation is a large hero image of the iPhone 13 Pro. The text 'iPhone 13 Pro' is displayed above the hero image. To the right of the hero image, there is a call-to-action button labeled 'Buy'.

Text Elements:

- Save on your new iPhone with special carrier deals at Apple. [Find your deal >](#)
- iPhone 13 Pro
- Oh. So. Pro.

Product Image:

BEISPIEL: MASTER-DETAIL LAYOUT

The screenshot shows a Jira Software interface with a master-detail layout. On the left, the main area displays a backlog for 'SAFe Team A Scrum' under the 'Backlog' tab. The backlog is organized by sprints: 'Team A Sprint 1' (7 issues) and 'Team A Sprint 2' (3 issues). Each sprint item includes a thumbnail, a title, a status, and a summary. To the right of the backlog, a detailed view of a selected story is shown in a sidebar. The sidebar header is 'SAFe Team A / STMA-2'. It contains information about 'Team A Story 2', including an estimate of 12. Below this is a 'Structure' section with a 'SAFe Overview' table. The table has columns for 'Key' and 'Summary', with rows for 'SPF-3', 'SPR-11', and 'STMA-2'. A red arrow points from the bottom of the sidebar to the sidebar icon in the main backlog area.

SAFe Team A Scrum

Backlog

QUICK FILTERS: Only My Issues Recently Updated

VERSIONS

EPICS

Team A Sprint 1 7 issues ACTIVE

19/May/16 2:03 PM • 02/Jun/16 2:03 PM Linked pages

STMA-1 Team A Story 1 1.0 - Team A SAFe Epic 11 15

STMA-2 Team A Story 2 1.0 - Team A SAFe Epic 11 12

STMA-6 Team A Story 6 1.0 - Team A SAFe Epic 10 25

STMA-7 Team A Story 7 1.0 - Team A SAFe Epic 4 9

STMA-5 Team A Story 5 1.0 - Team A SAFe Epic 5 12

STMA-4 Team A Story 4 1.0 - Team A SAFe Epic 5 15

STMA-3 Team A Story 3 1.0 - Team A SAFe Epic 6 19

Team A Sprint 2 3 issues Start Sprint

Linked pages

STMA-8 Team A Story 8 1.0 - Team A SAFe Epic 2 15

SAFe Team A / STMA-2

Team A Story 2

Estimate: 12

Structure

SAFe Overview

Key	Summary
SPF-3	SAFe T
SPR-11	S
STMA-2	

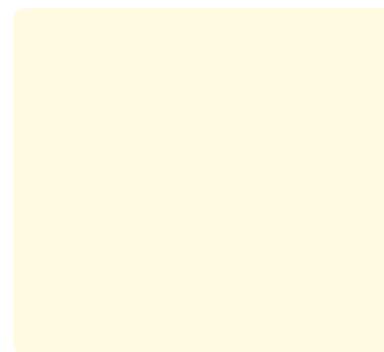
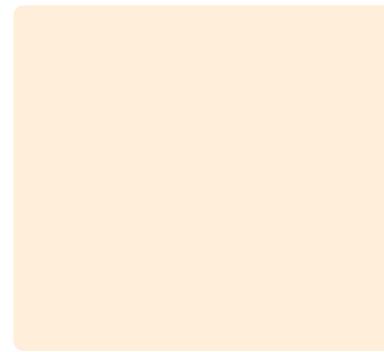
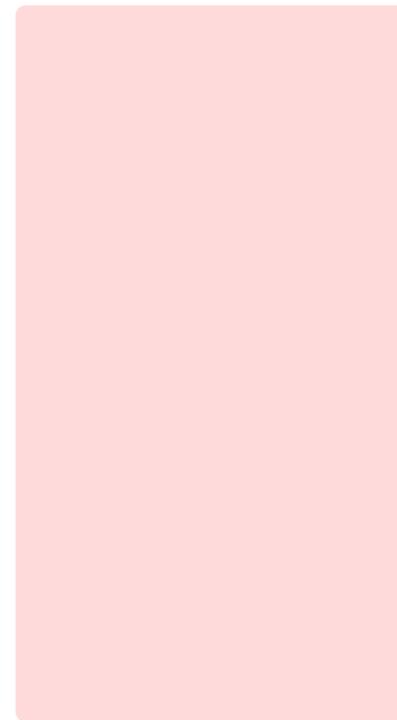
4 items Open Info



Objects

Name	Type	Show Details
{ } Object 1	Generic	
{ } Object 2	Generic	
{ } Object 3	Generic	
{ } Object 4	Generic	
{ } Object 5	Generic	
{ } Object 6	Generic	
{ } Object 7	Generic	
{ } Object 8	Generic	

Object 1



DEMO

Master Detail Layout

https://github.com/aclue-de/WebLayoutTalk_master-detail-app

Header

Master View

Detail View

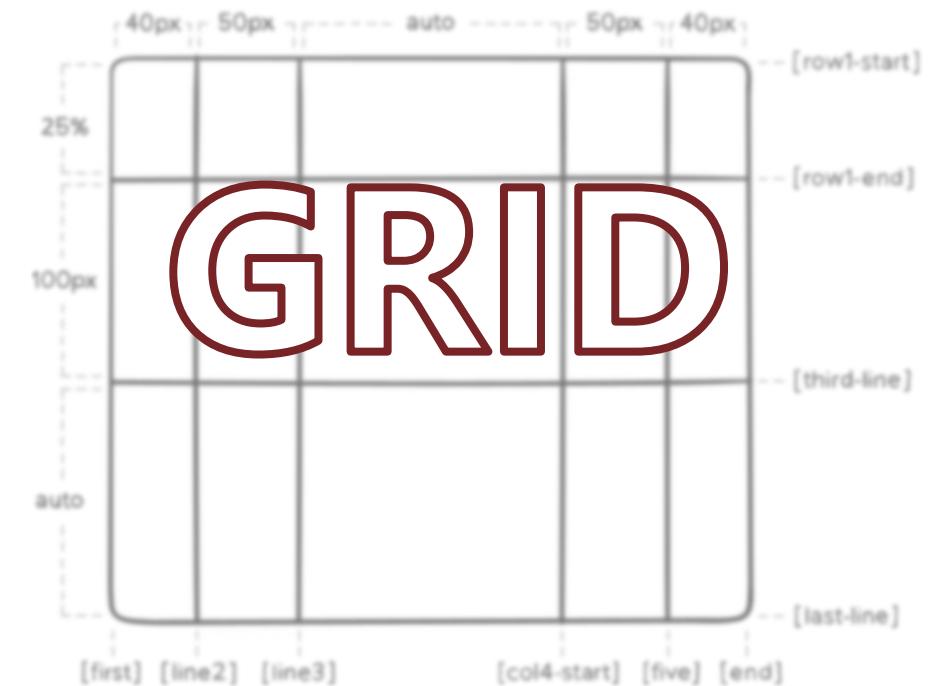
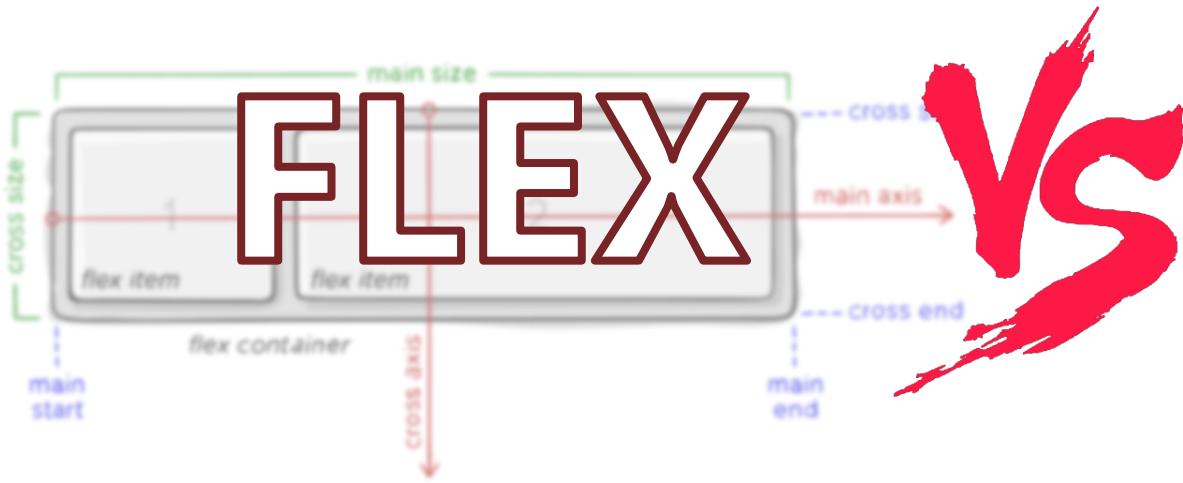
The diagram illustrates a user interface for managing objects. At the top, a header bar contains icons for back (blue triangle), forward (green triangle), and user profile (person icon). The main area is divided into two sections: the Master View on the left and the Detail View on the right.

Master View: This section displays a list of objects. A red border surrounds the entire list area. The title "Objects" is at the top. Below it is a table with columns: Name, Type, and Show Details. The "Name" column lists "Object 1" through "Object 8", all of which are "Generic". The "Type" column also lists "Generic" for all objects. The "Show Details" column contains a blue magnifying glass icon for each row. The background of this section is white.

Name	Type	Show Details
Object 1	Generic	
Object 2	Generic	
Object 3	Generic	
Object 4	Generic	
Object 5	Generic	
Object 6	Generic	
Object 7	Generic	
Object 8	Generic	

Detail View: This section shows detailed information for a selected object. A yellow border surrounds the detail area. The title "Object 1" is at the top. To the right is a close button (an "X"). The background of this section is white. The detail view is currently empty, represented by four colored boxes (purple, pink, orange, and yellow) arranged vertically.

TECHNISCHE UMSETZUNG



DEMO

Flex und Grid

https://github.com/aclue-de/WebLayoutTalk_master-detail-app

POSITIONIERUNG



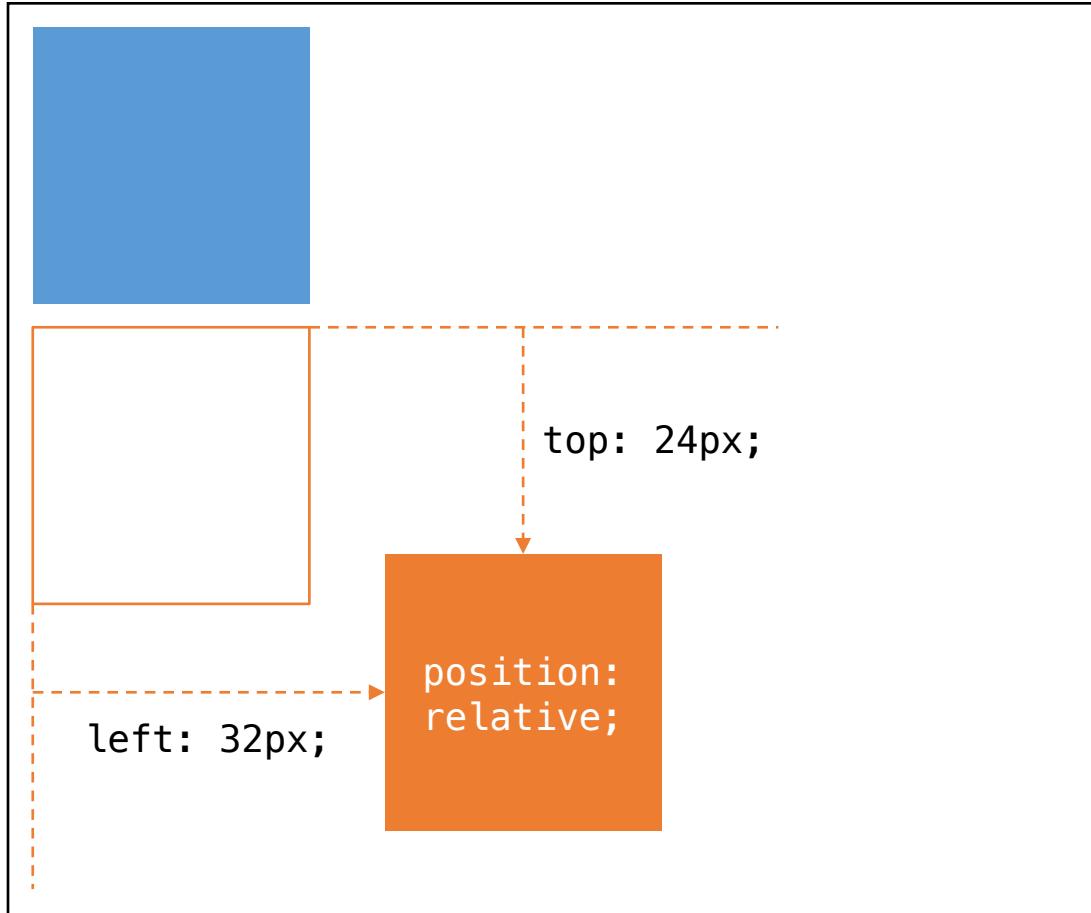
```
position:  
static;
```

A solid orange rectangular box containing the CSS declaration "position: static;".

STATIC

- Default Zustand
- Folgt dem normalen Flow der Seite

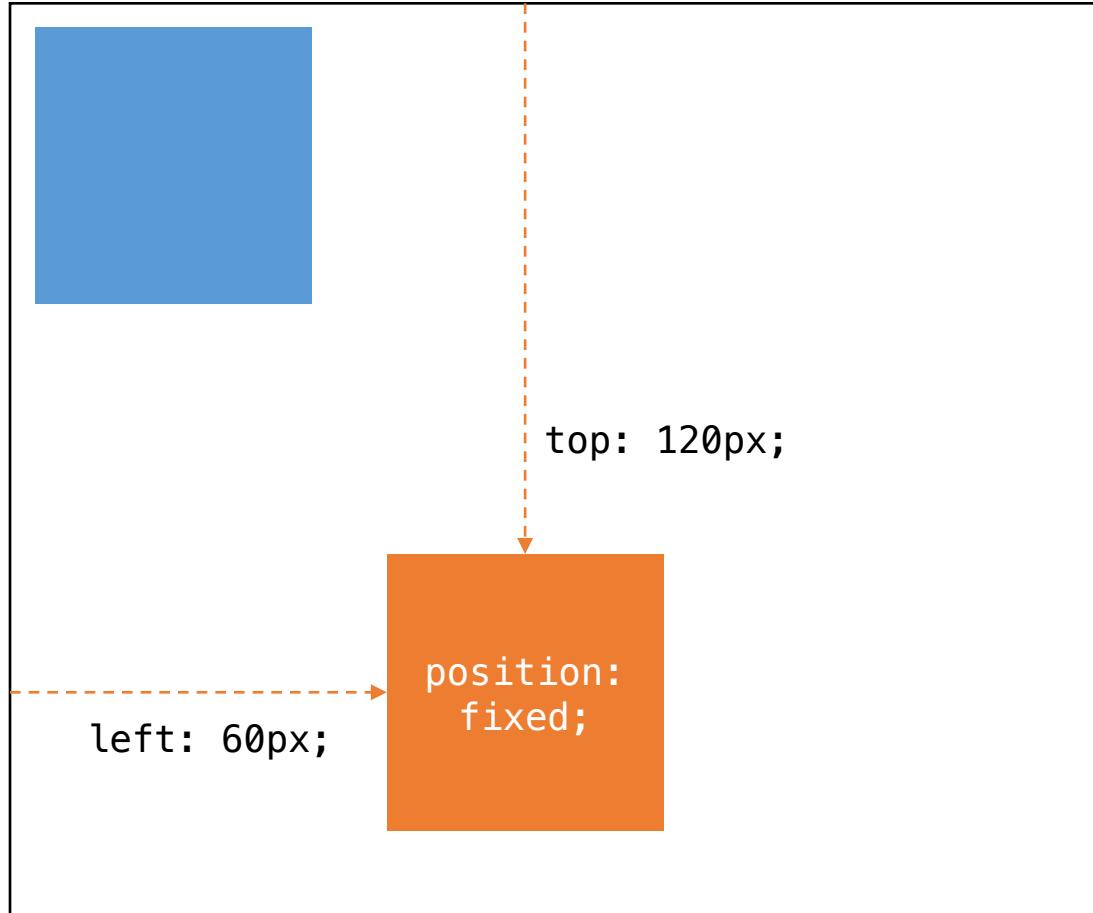
POSITIONIERUNG



RELATIVE

- relativ zur eigentlichen Position im Flow
- kann über top, left, bottom und right positioniert werden

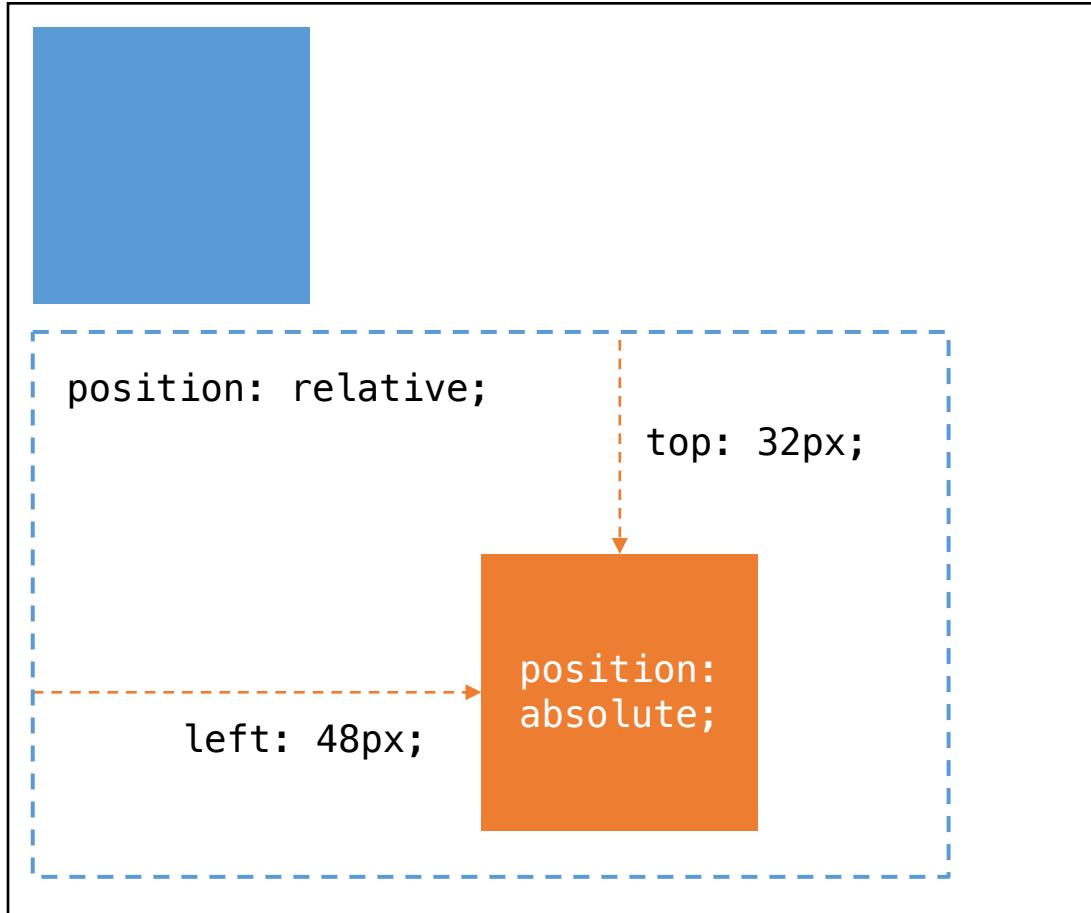
POSITIONIERUNG



FIXED

- unabhängig vom eigentlichen Flow
- relativ zum Viewport positioniert (scrollt nicht mit)
- kann über top, left, bottom und right positioniert werden

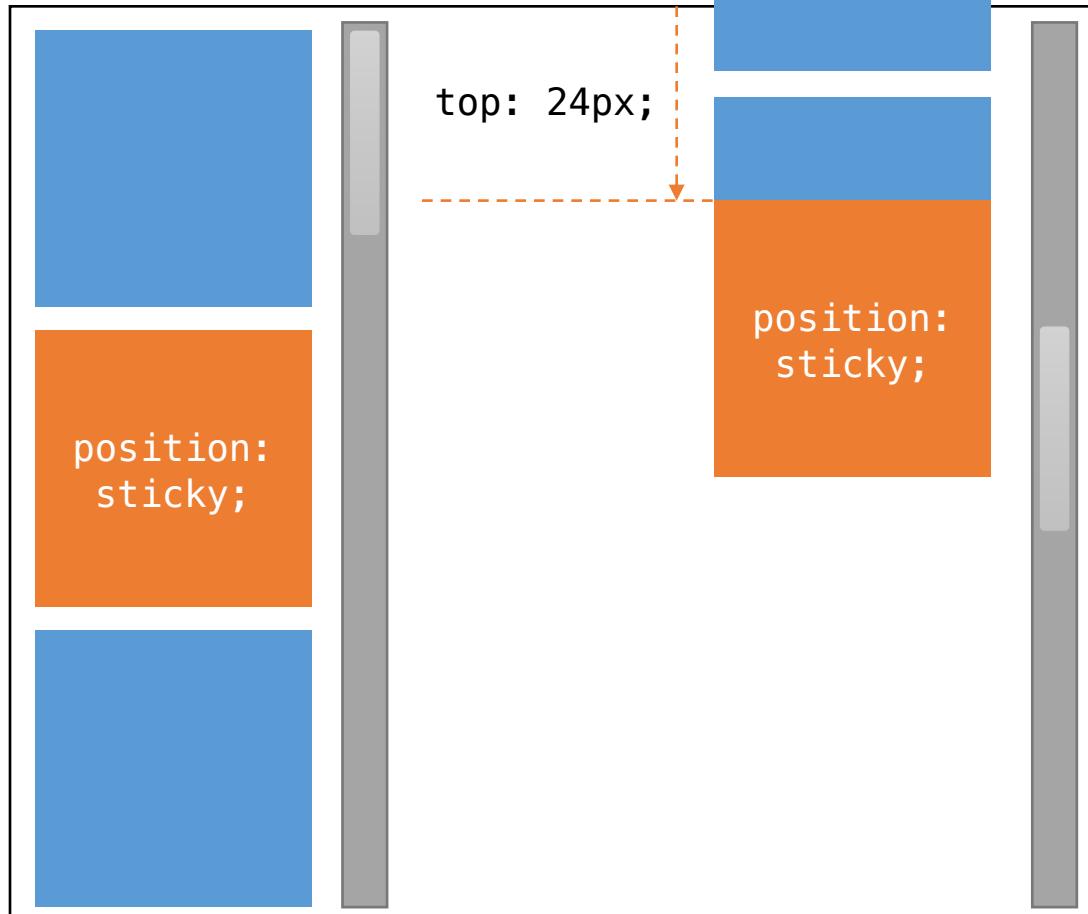
POSITIONIERUNG



ABSOLUTE

- unabhängig vom eigentlichen Flow
- relativ zum nächsten positionierten Vorfahren im DOM oder zum Body (wenn nicht vorhanden)
- kann über top, left, bottom und right positioniert werden

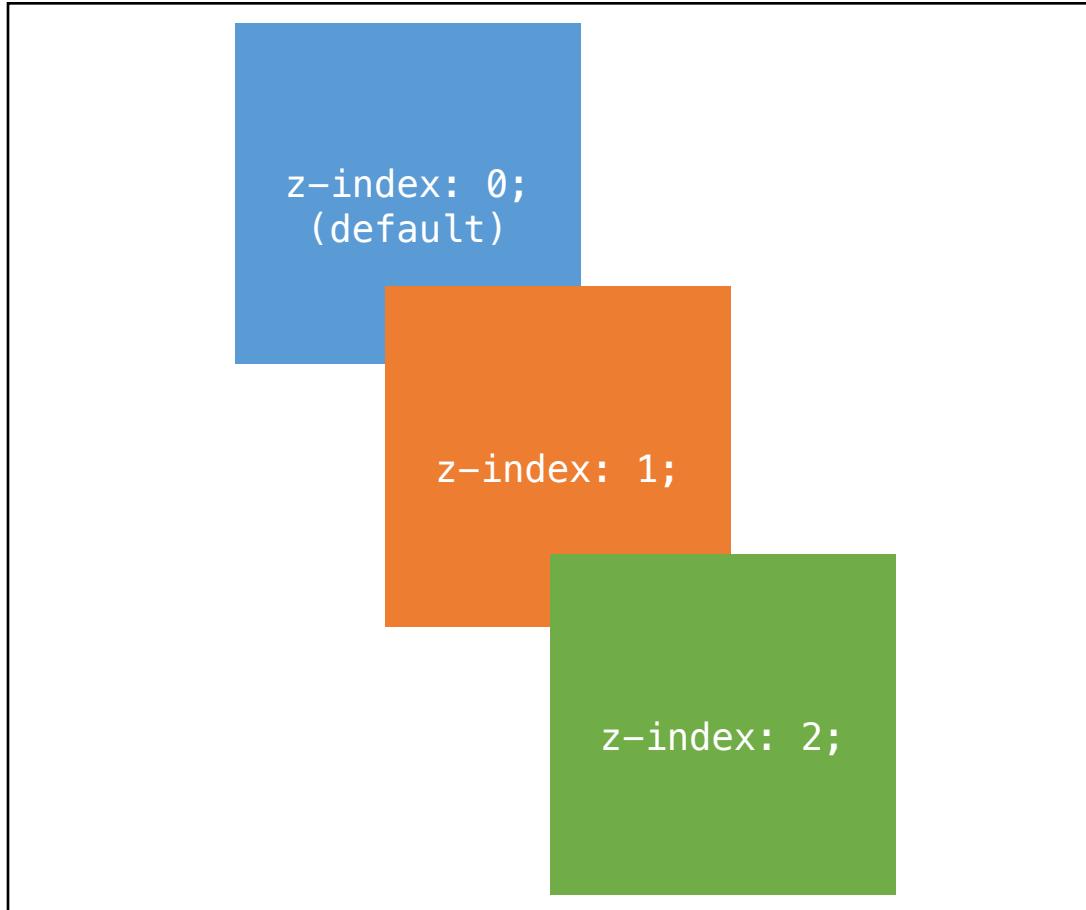
POSITIONIERUNG



STICKY

- unabhängig vom eigentlichen Flow
- relativ zur Scroll-Position
- Wechselt von relative zu fixed, wenn der angegebene Offset erreicht wurde
- Offset kann über top, left, bottom und right definiert werden

POSITIONIERUNG



Z-INDEX

- Positionierte Elemente können auch übereinander liegen
- z-index gibt die Reihenfolge überlappender Elemente an
- z.B. für Overlays

DEMO

Positionierung

https://github.com/aclue-de/WebLayoutTalk_master-detail-app

RESPONSIVENESS

- RESIZE
- REFLOW
- REPOSITION
- REDESIGN



RESPONSIVENESS

MEDIA QUERIES

```
@media screen and (max-width: 600px) {  
    /* styles in here */  
}
```

- Media Type (optional)
- Media Features (height, width, orientation, ...)
- Verknüpfung durch logische Operatoren (not, and und only)

RESPONSIVENESS

```
● ● ●  
/* HTML */  
<div class="container">  
  <div class="card"></div>  
</div>  
  
/* CSS */  
.container {  
  container-type: inline-size; ←  
  container-name: card-container; ←  
}  
  
.card {  
  background: blue;  
}  
  
@container card-container (min-width: 500px) {  
  .card {  
    background: orange;  
  }  
}
```

CONTAINER QUERIES

- Seit 2023 für alle gängigen Browser verfügbar
- Queries auf einzelnen Elementen
- Container Type (size, inline-size, normal)
- Container Name (optional)

DEMO

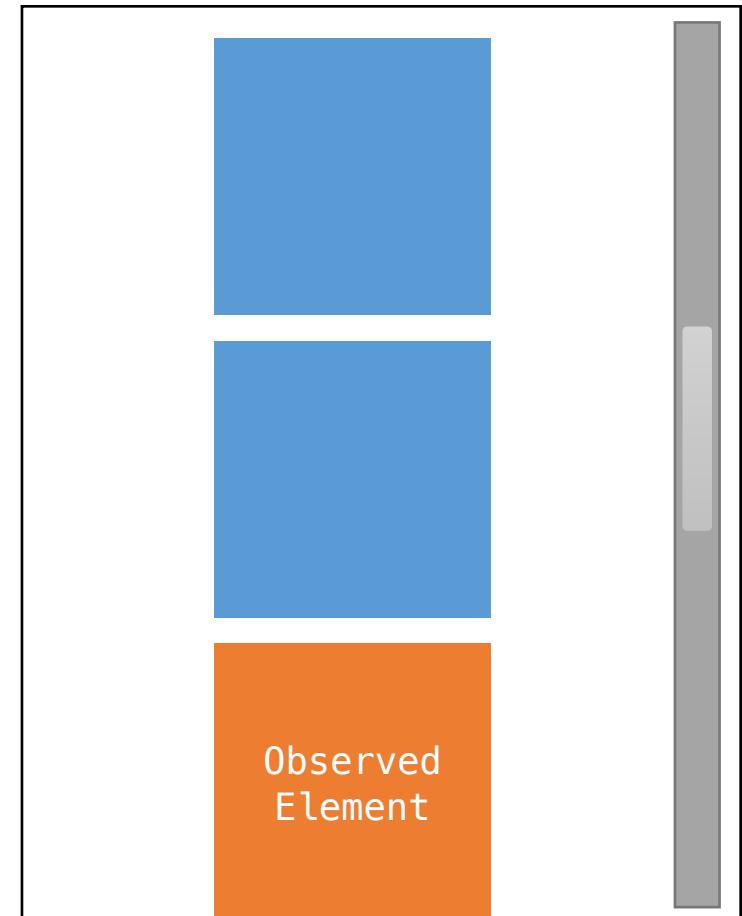
Responsiveness

https://github.com/aclue-de/WebLayoutTalk_master-detail-app

INTERSECTION OBSERVER

SZENARIO

- Es soll etwas passieren, wenn ein Element im Sichtbereich erscheint



INTERSECTION OBSERVER API

FUNKTIONSWEISE

- Callback der ausgelöst wird, wenn ein Element im Viewport erscheint

INTERSECTION OBSERVER API

```
let options = {
  root: window.document,
  rootMargin: "0px",
  threshold: 0.5,
};
let observer = new IntersectionObserver(callback, options);
```

```
let callback = (entries, observer) => {
  entries.forEach((entry) => {
    // Each entry describes an intersection change
    // for one observed target element:
    //   entry.boundingClientRect
    //   entry.intersectionRatio
    //   entry.intersectionRect
    //   entry.isIntersecting
    //   entry.rootBounds
    //   entry.target
    //   entry.time
  });
};
```

```
document.querySelectorAll("*").forEach(element => {
  observer.observe(element);
});
```

DEMO

Intersection Observer API

<https://codepen.io/joergneumann/pen/LYgeozm>

CSS LAYOUT API

HINTERGRUND

- Mit eigener Logik in den Layout-Prozess eingreifen
- Logik wird in Form von Worklets implementiert und registriert

W3C STATUS

- Status: [First Public Working Draft](#)

Ausprobieren in Chrome

- chrome://flags/
Feature: "Experimental Web
Platform features" einschalten

Engine	Google Chrome	Microsoft Edge	Opera	Samsung Internet	Mozilla Firefox	Apple Safari	Spec
Layout API (Explainer Demos)	Blink		Gecko	WebKit	-		
	Partial support (Canary) Details	Partial support (Canary) Details	Partial support (Developer) Details	No signal	Under consideration Details	Under consideration Details	First Public Working Draft Spec

DEMO

CSS Layout API

FAZIT

LAYOUT IST VIELSCHICHTIG

Q & A

RESSOURCEN

- Houdini Specifications
<https://drafts.css-houdini.org>
- Google Chrome Labs Houdini Samples
<https://github.com/GoogleChromeLabs/houdini-samples>
<https://googlechromelabs.github.io/houdini-samples>
- CSS Properties & Values API
<https://web.dev/css-props-and-vals>
- CSS Paint Polyfill
<https://github.com/GoogleChromeLabs/css-paint-polyfill>
- Tutorials & Worklet Library
<https://houdini.how>