




Achieving Ownership
Data Collection Reinvented

 [alexander.kirtzel](#)

 [elbwalker/walkerOS](#)

The disclaimer

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```
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- ✓ Distribution
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Who are **you**?

Give me a sign

Business

or

Tech

Expectations **vs.** reality

How data analytics has changed

Event  Destination

Expectations **vs.** reality

How data analytics has changed

Event → Destination



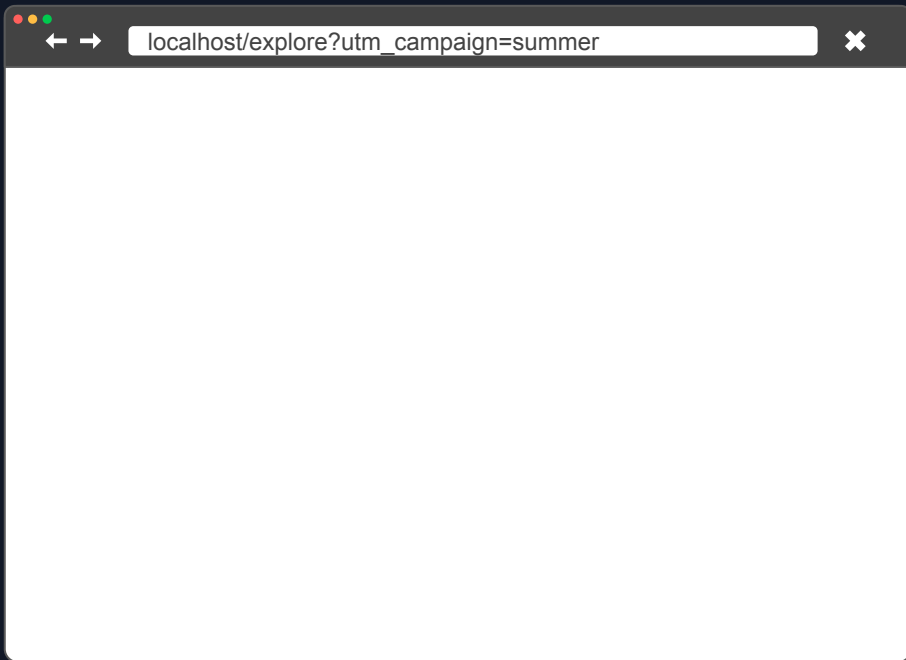
Data collection **interests**

Different people, different interests, but same origin



Data collection **interests**

Different people, different interests, but same origin



**Online
Marketer**

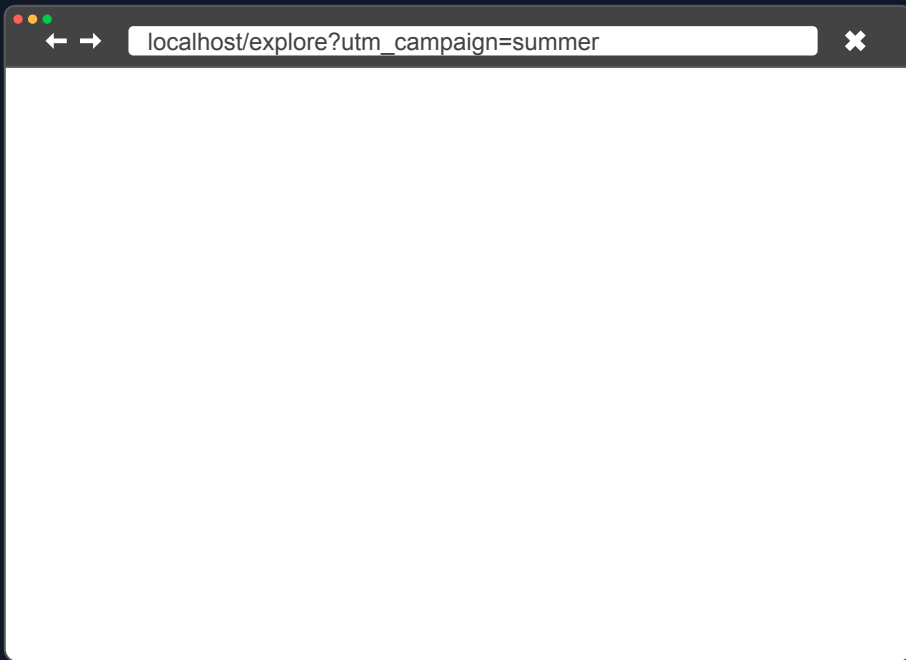
campaign, 3rd party



3rd party

Data collection **interests**

Different people, different interests, but same origin



**Online
Marketer**

campaign, 3rd party



**Data
Governance**

consent, namings



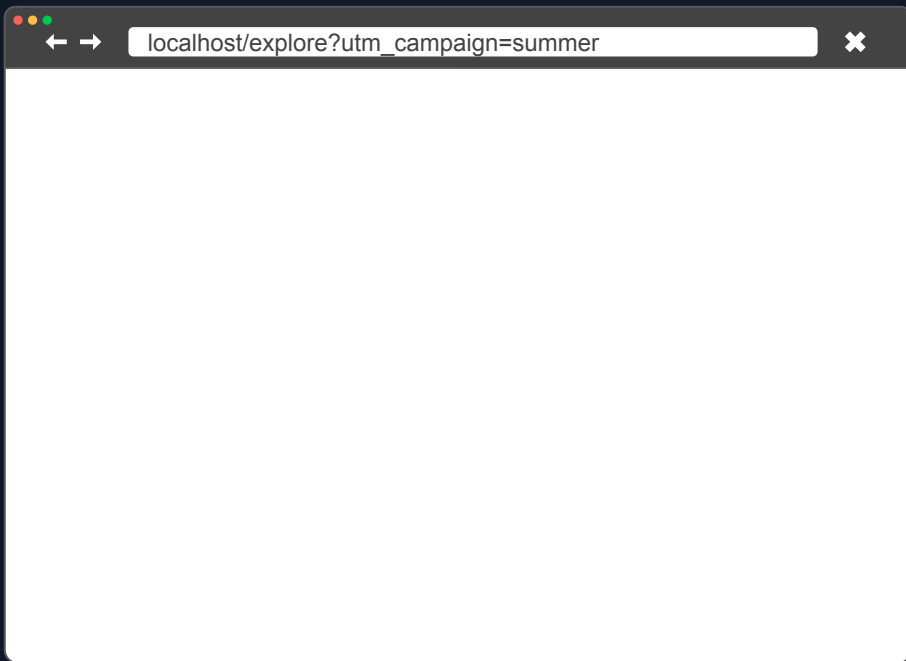
3rd party



consent

Data collection **interests**

Different people, different interests, but same origin



**Online
Marketer**

campaign, 3rd party



**Data
Governance**

consent, namings



**Data
Scientist**

user, config



3rd party



consent



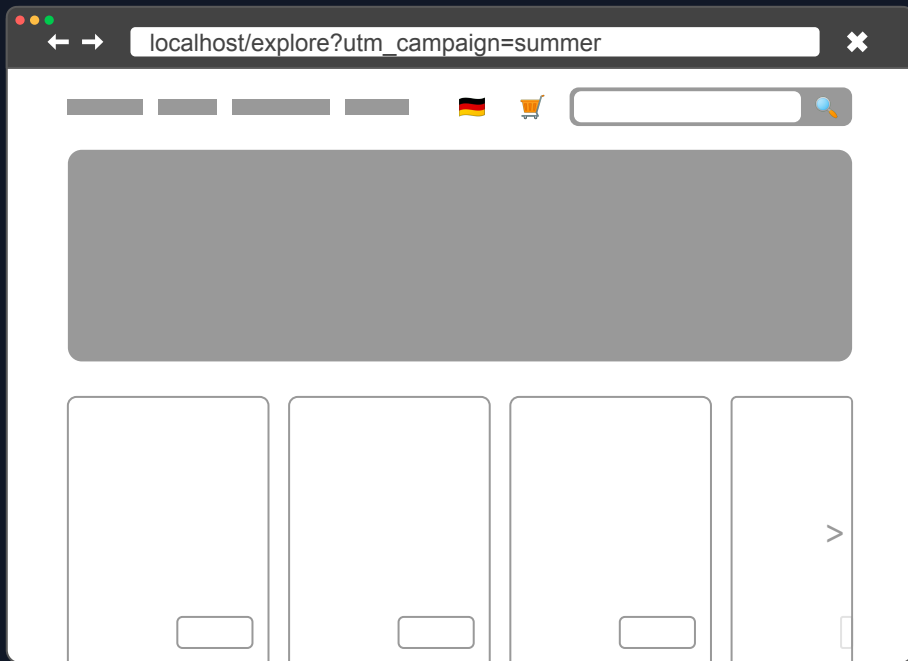
user



config

Data collection **interests**

Different people, different interests, but same origin



Online Marketer

campaign, 3rd party



Data Governance

consent, namings



Data Scientist

user, config



Product Owner

usage, adoption



3rd party



consent



user



config

Data collection **interests**

Different people, different interests, but same origin



Online Marketer

campaign, 3rd party



Data Governance

consent, namings



Data Scientist

user, config



Product Owner

usage, adoption



Data Analyst

events, content



3rd party



consent



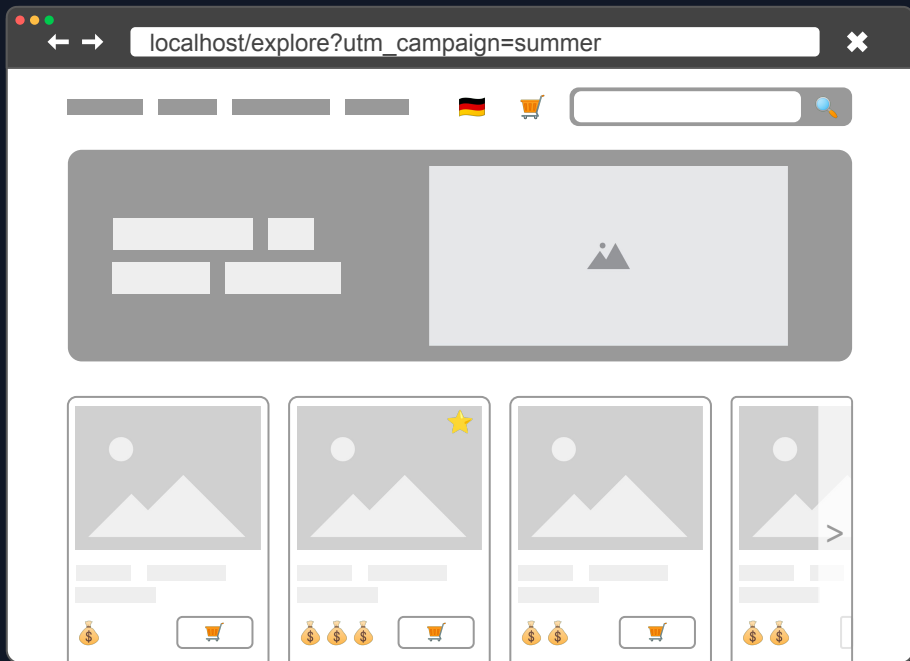
user



config

Data collection **interests**

Different people, different interests, but same origin



3rd party



consent



user



config



Online Marketer

campaign, 3rd party



Data Governance

consent, namings



Data Scientist

user, config



Product Owner

usage, adoption



Data Analyst

events, content

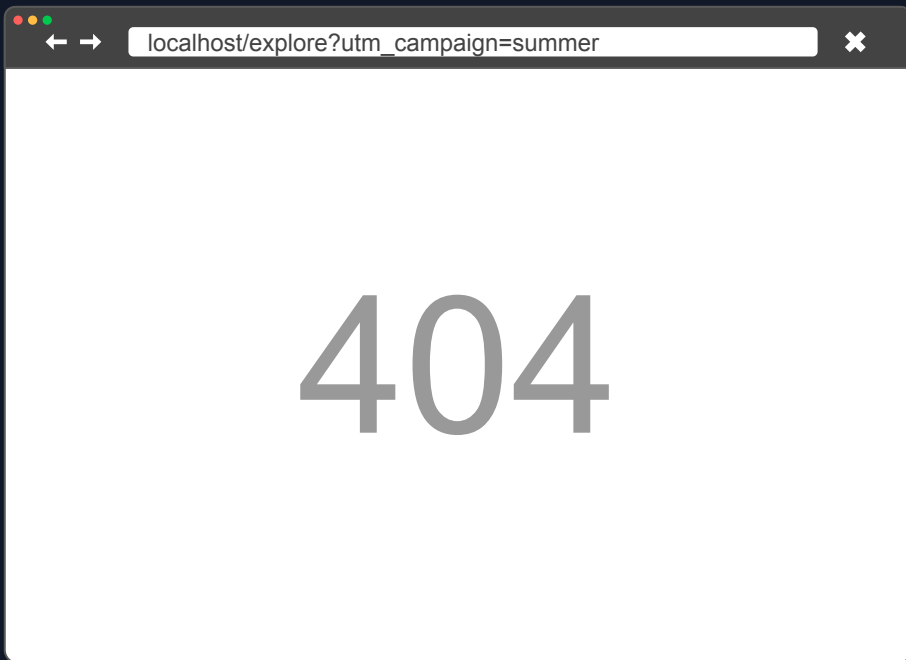


Growth Manager

experiments, behaviour

Data collection **interests**

Different people, different interests, but same origin



3rd party



consent



user



config



Online Marketer

campaign, 3rd party



Data Governance

consent, namings



Data Scientist

user, config



Product Owner

usage, adoption



Data Analyst

events, content



Growth Manager

experiments, behaviour

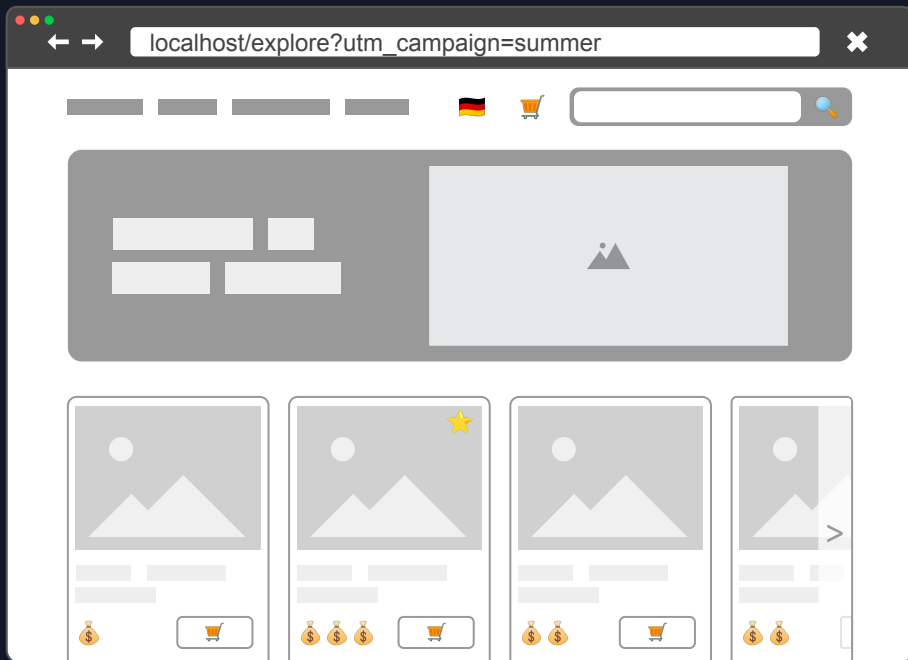


DevOps & Developer

peace of mind

Data collection **interests**

Different people, different interests, but same origin



3rd party



consent



user



config



Online Marketer

campaign, 3rd party



Data Governance

consent, namings



Data Scientist

user, config



Product Owner

usage, adoption



Data Analyst

events, content



Growth Manager

experiments, behaviour

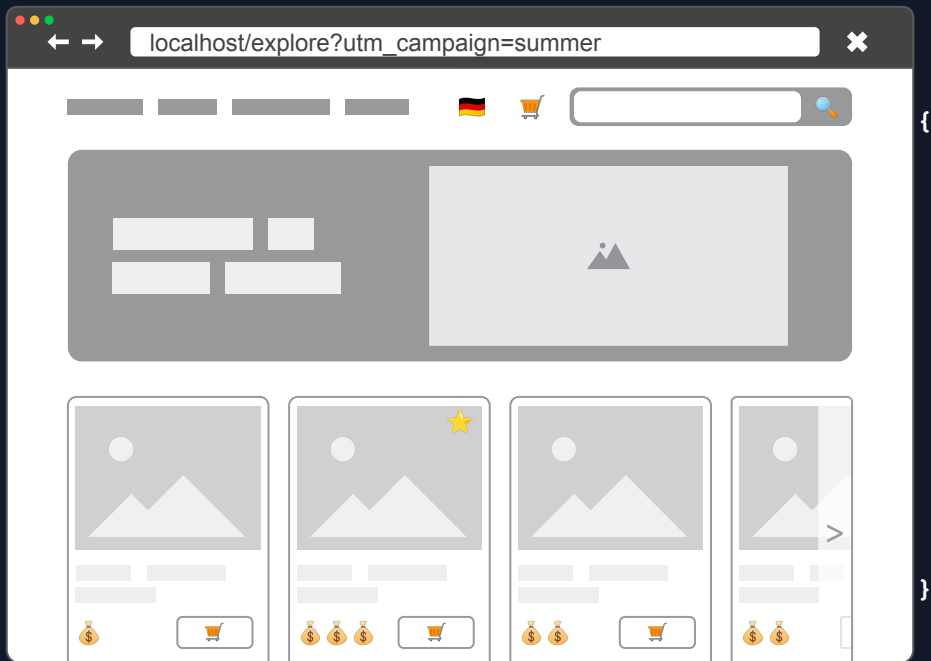


DevOps & Developer

peace of mind

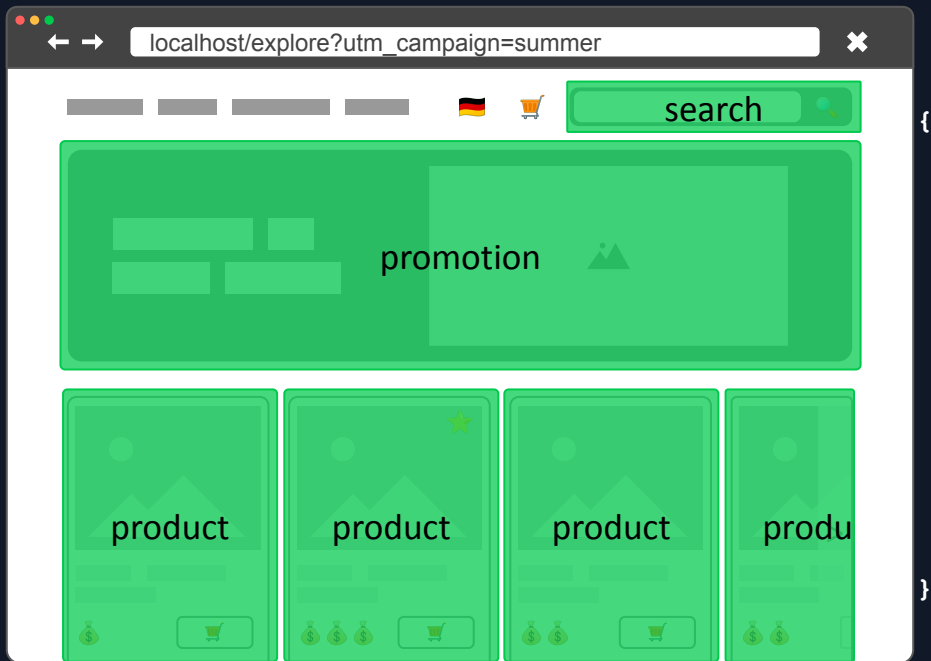
Generic event **structure**

How to describe an event completely



Generic event **structure**

How to describe an event completely



Generic event structure

How to describe an event completely

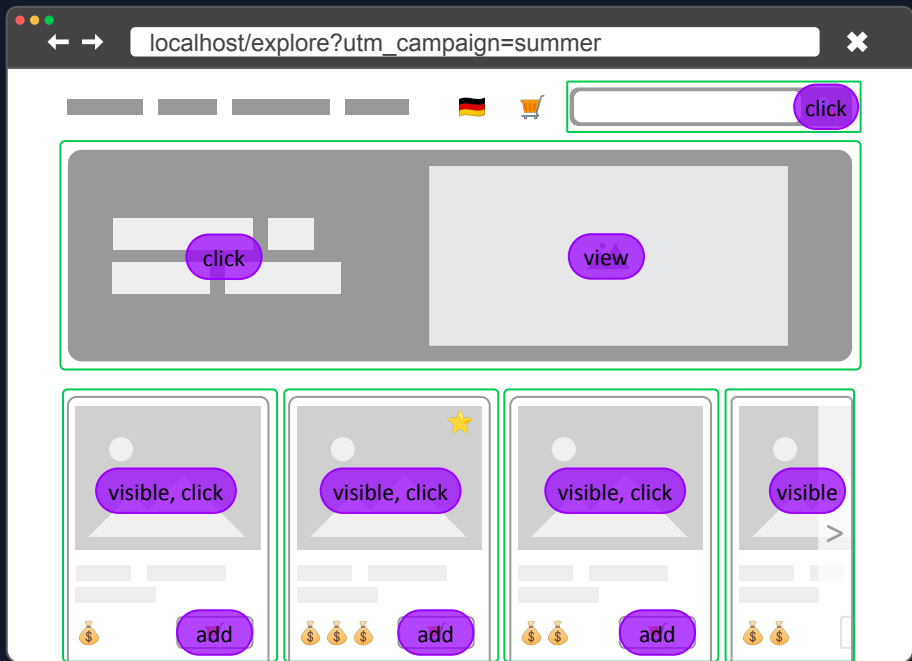


```
entity: "promotion",
```

Entity

Generic event structure

How to describe an event completely

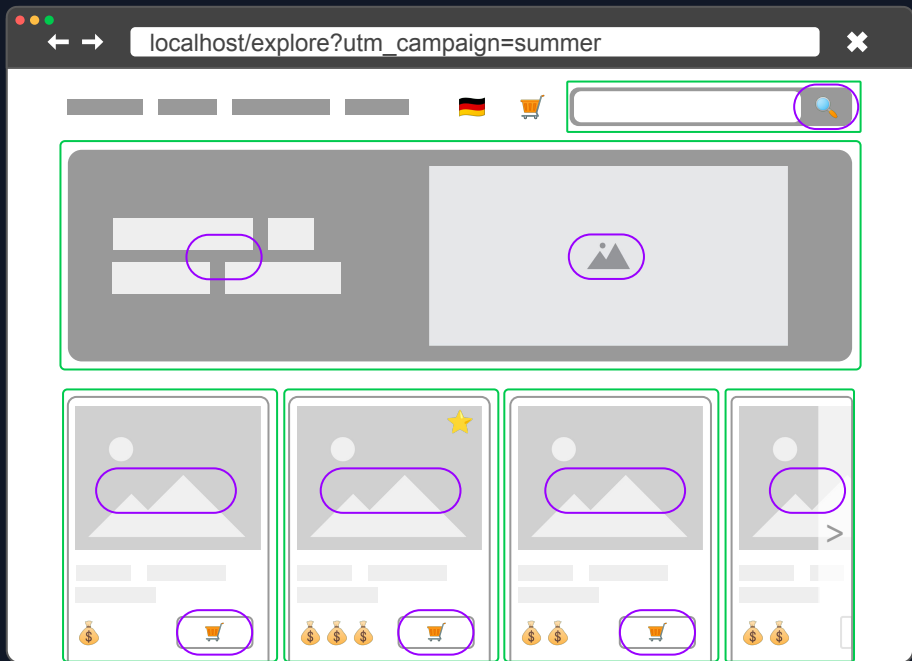


```
entity: "promotion",
```

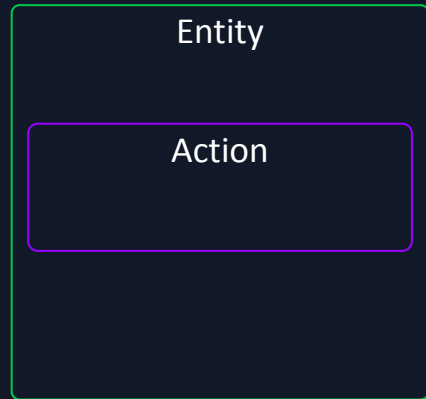
Entity

Generic event structure

How to describe an event completely

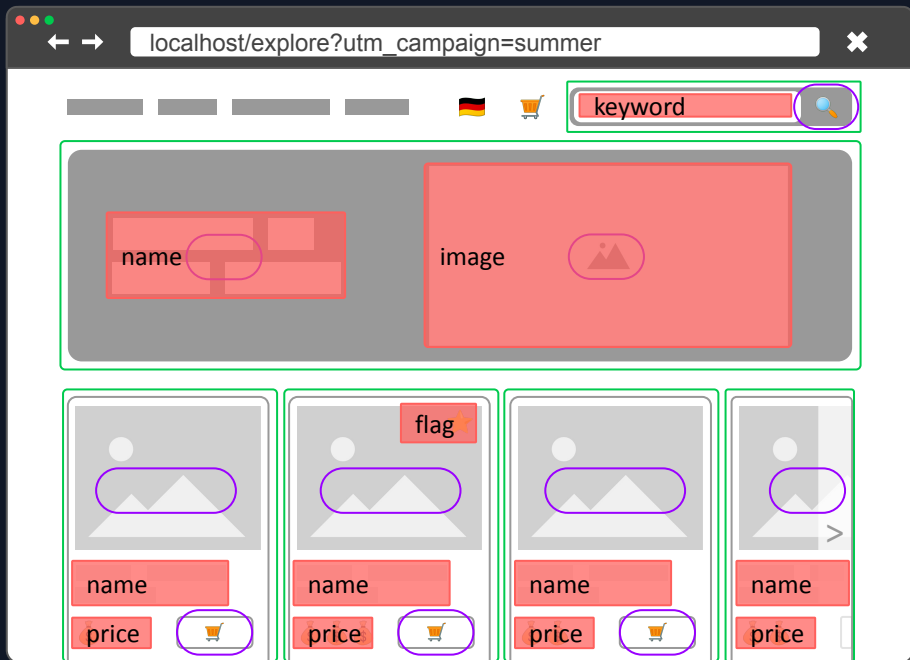


```
entity: "promotion",  
action: "view",
```



Generic event structure

How to describe an event completely



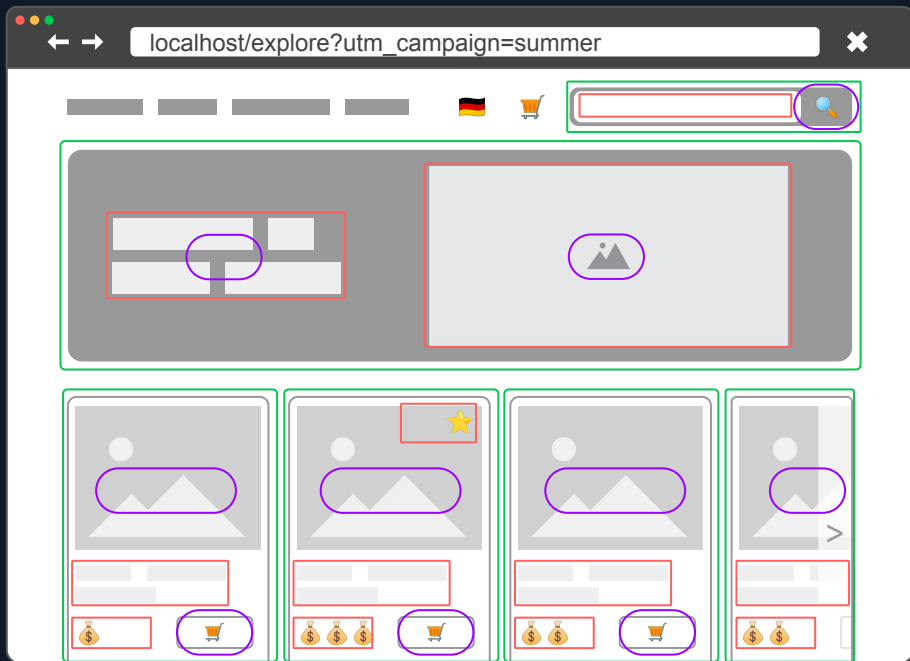
```
{  
  entity: "promotion",  
  action: "view",  
}
```

Entity

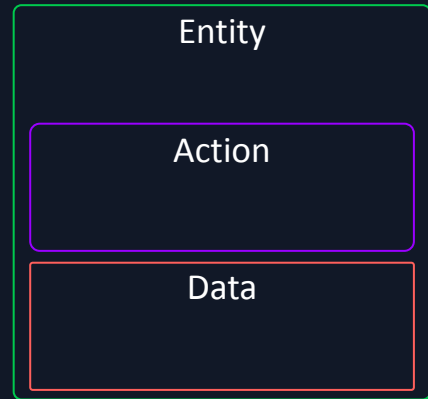
Action

Generic event structure

How to describe an event completely



```
{  
  entity: "promotion",  
  action: "view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  }  
}
```

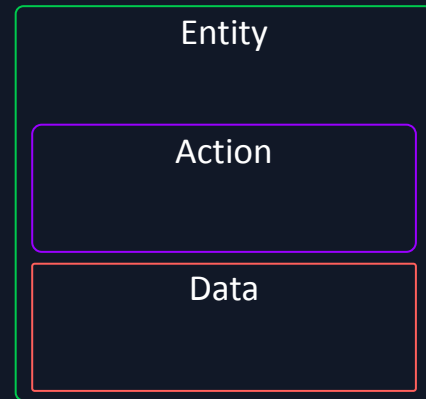


Generic event structure

How to describe an event completely

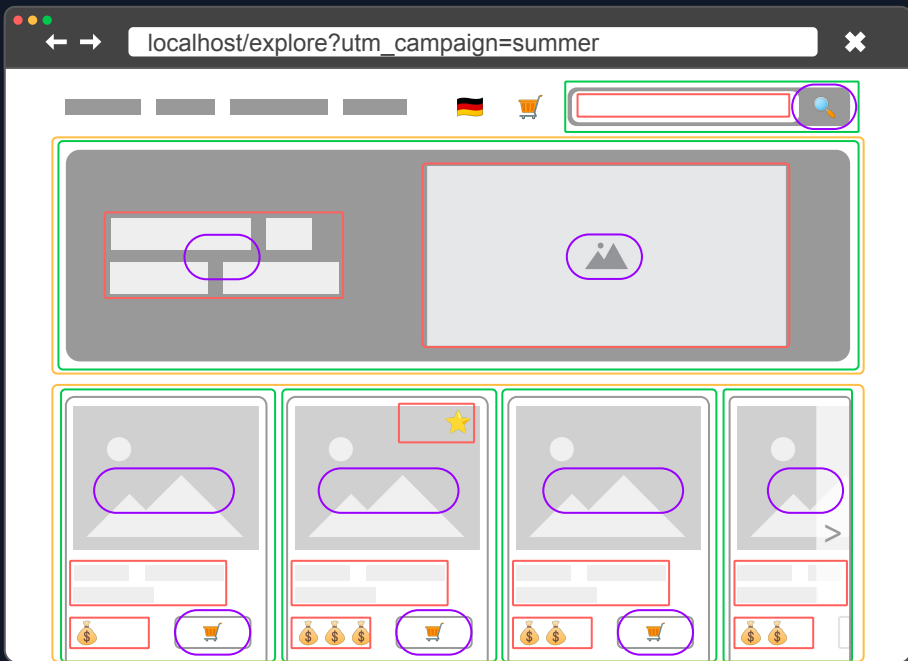


```
{  
  entity: "promotion",  
  action: "view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  }  
}
```

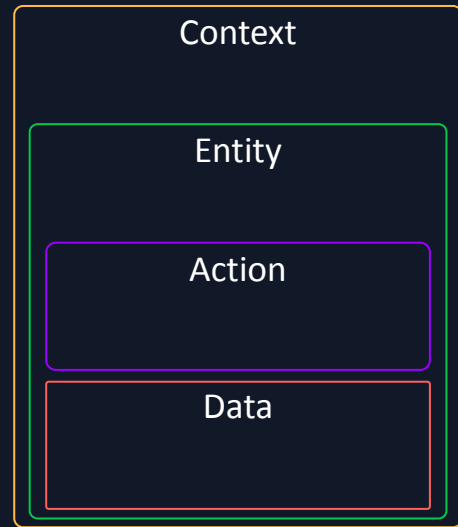


Generic event structure

How to describe an event completely

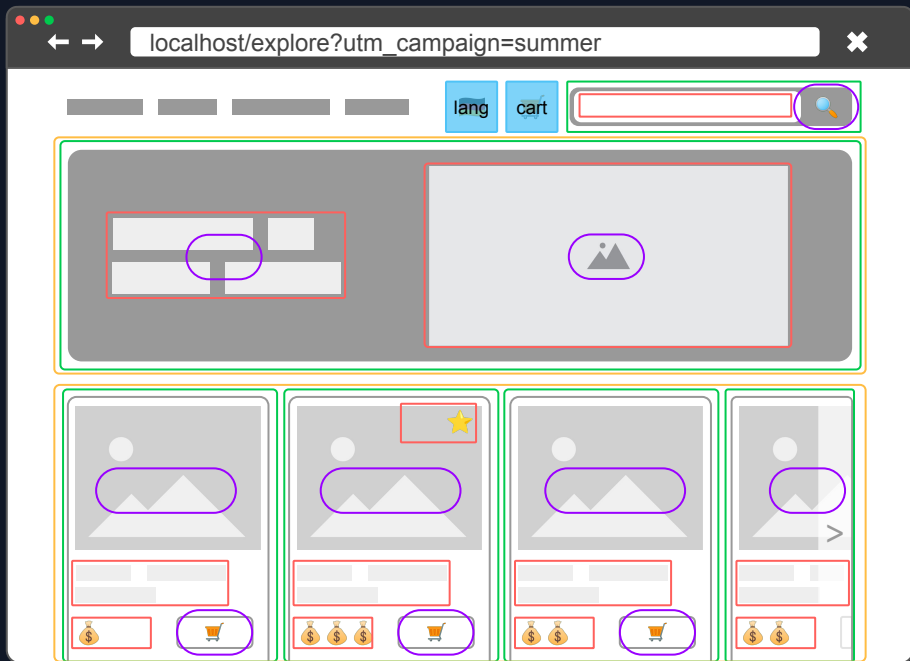


```
{  
  context: {  
    test: ["engagement", 0]  
  },  
  entity: "promotion",  
  action: "view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  }  
}
```

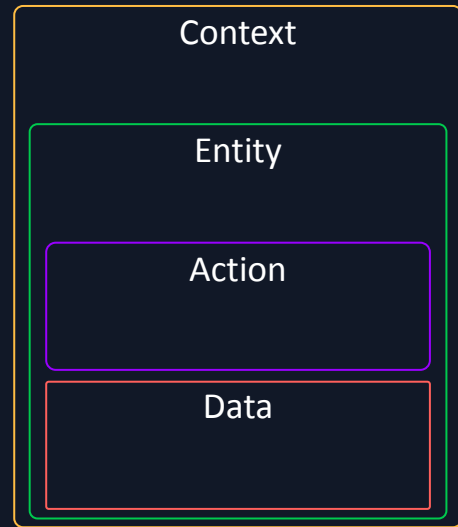


Generic event structure

How to describe an event completely

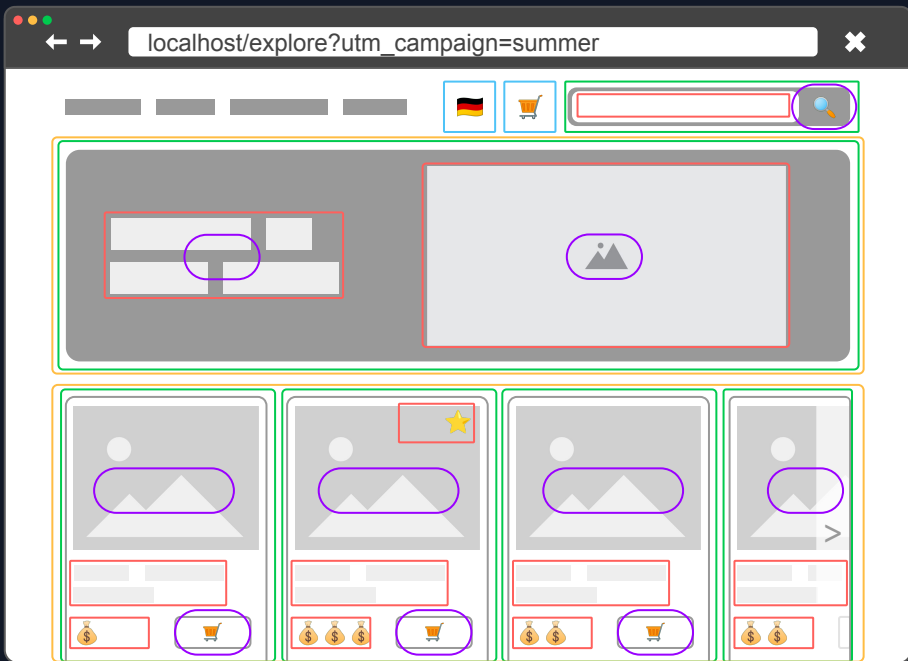


```
{
  context: {
    test: ["engagement", 0]
  },
  entity: "promotion",
  action: "view",
  data: {
    name: "Setting up ...",
    category: "analytics"
  }
}
```

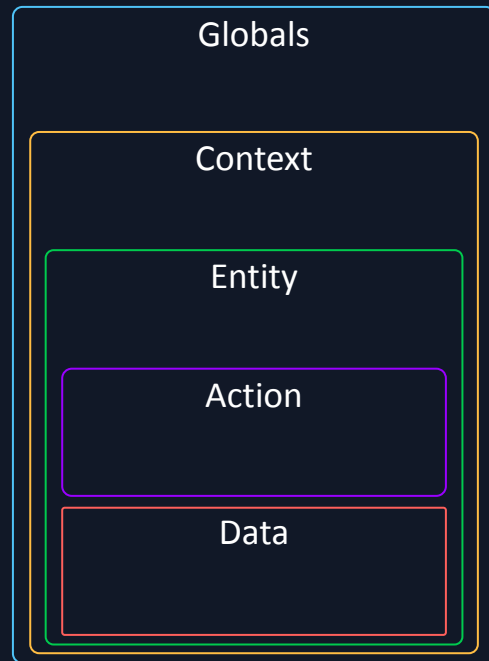


Generic event structure

How to describe an event completely

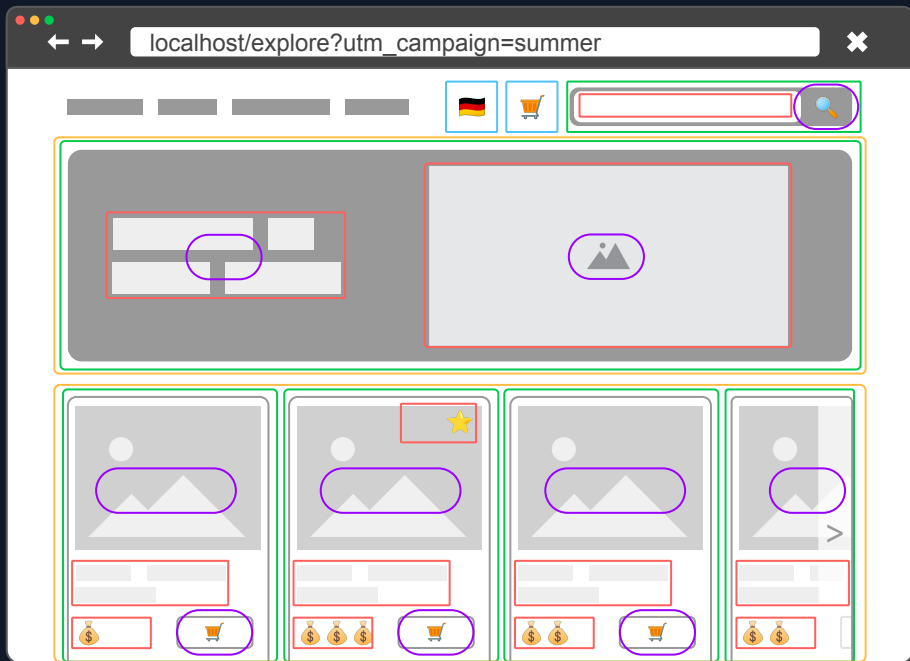


```
{  
  globals: {  
    language: "en"  
  },  
  context: {  
    test: ["engagement", 0]  
  },  
  entity: "promotion",  
  action: "view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  }  
}
```



Generic event structure

How to describe an event completely



```
{  
  globals: {  
    language: "en"  
  },  
  context: {  
    test: ["engagement", 0]  
  },  
  entity: "promotion",  
  action: "view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  }  
}
```

Globals

`<div data-elbglobals="key:value">`

Context

`<div data-elbcontext="key:value">`

Entity

`<div data-elb="entity">`

Action

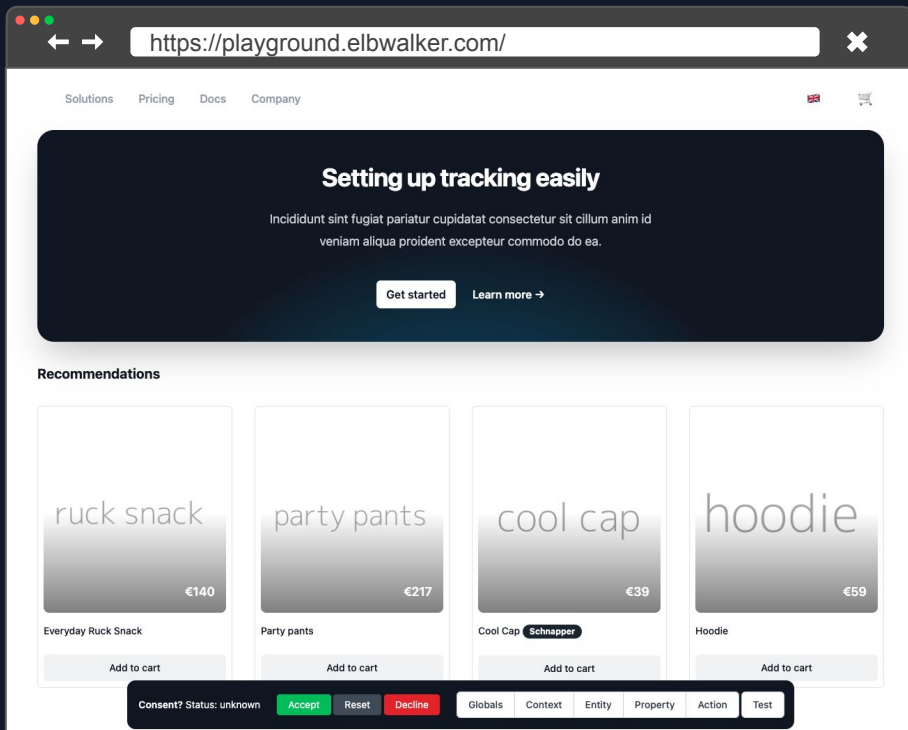
`<div data-elbaction="trigger:action">`

Data

`<div data-elb-entity="key:value">`

Data collection with **walkerOS**

Just try it



Tagging playground

~60 data-elb attributes

Enhanced ecommerce

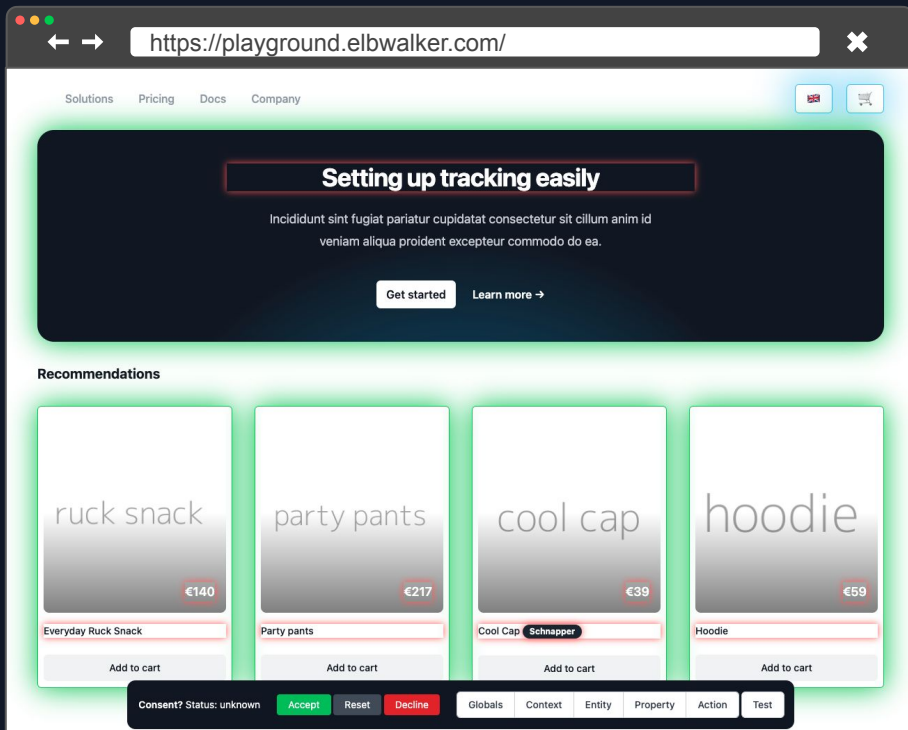
Consent management

User identification

5 Destinations

Data collection with **walkerOS**

Just try it



Tagging playground

~60 data-elb attributes

Enhanced ecommerce

Consent management

User identification

5 Destinations

Only HTML Attributes

How to tag elbish

`data-elb="entity"`

Sets the event scope

product, order

`data-elbaction="trigger:action"`

Initializes a trigger to fire an action

click:add, load:complete

`data-elb-entity="key:value"`

Defines the data of a specific entity

name:Shirt, revenue:9001

Only HTML Attributes

How to tag elbish

`data-elb="entity"`

Sets the event scope

product, order

`data-elbcontext="test:engagement"`

Added only to related events

list:Inspo, shopping:complete

`data-elbaction="trigger:action"`

Initializes a trigger to fire an action

click:add, load:complete

`data-elbglobals="key:value"`

Added to every single event

language:en, pagetype:demo

`data-elb-entity="key:value"`

Defines the data of a specific entity

name:Shirt, revenue:9001

`data-elblink="parent:id"`

For more advanced edge cases

Ask me later...

Only **HTML** Attributes

How to tag elbish

```
data-elb="promotion"
```

```
{
```

```
}
```

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim

Only **HTML Attributes**

How to tag elbish

`data-elbaction="visible:view"`

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim
id veniam aliqua proident excepteur commodo do ea.

Get started

Learn more →

{

}

Only HTML Attributes

How to tag elbish

```
data-elbaction="visible:view"
```

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim
id veniam aliqua proident excepteur commodo do ea.

Get started

Learn more →

```
{  
  event: "promotion view",  
  
}
```



DevOps &
Developer

Only HTML Attributes

How to tag elbish

```
data-elb-promotion="name: ..."
```

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim
id veniam aliqua proident excepteur commodo do ea.

Get started

Learn more →

```
{  
  event: "promotion view",  
  data: { name: "Setting up ..." },  
}
```



DevOps &
Developer



Data
Analyst

Only HTML Attributes

How to tag elbish

`data-elbcontext="test:engagement"`

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim
id veniam aliqua proident excepteur commodo do ea.

Get started

Learn more →

```
{  
  event: "promotion view",  
  data: { name: "Setting up ..." },  
  context: {  
    test: ["engagement", 0],  
  
  },  
  
}
```



DevOps &
Developer



Data
Analyst



Product
Owner

Only HTML Attributes

How to tag elbish

`data-elbglobals="language:en"`

Setting up tracking easily

Incididunt sint fugiat pariatur cupidatat consectetur sit cillum anim
id veniam aliqua proident excepteur commodo do ea.

Get started

Learn more →

```
{  
  event: "promotion view",  
  data: { name: "Setting up ..." },  
  context: {  
    test: ["engagement", 0],  
  
  },  
  globals: {  
    language: "en"  
  },  
}
```



DevOps &
Developer



Data
Analyst



Product
Owner

Only HTML Attributes

How to tag elbish

`data-elbcontext="font:beautiful"`

Setting up tracking easily

*Incididunt sint fugiat pariatur cupidatat consectetur sit cillum
anim id veniam aliqua proident excepteur commodo do ea.*

Get started

Learn more →

```
{  
  event: "promotion view",  
  data: { name: "Setting up ..." },  
  context: {  
    test: ["engagement", 0],  
    font: ["beautiful", 1],  
  },  
  globals: {  
    language: "en"  
  },  
}
```



DevOps &
Developer



Data
Analyst



Product
Owner



Growth
Manager

Only HTML Attributes

How to tag elbish

`data-elbaction="click:start"`

Setting up tracking easily

*Incididunt sint fugiat pariatur cupidatat consectetur sit cillum
anim id veniam aliqua proident excepteur commodo do ea.*

Get started

Learn more →

```
{  
  event: "promotion start",  
  data: { name: "Setting up ..." },  
  context: {  
    test: ["engagement", 0],  
    font: ["beautiful", 1],  
  },  
  globals: {  
    language: "en"  
  },  
}
```



DevOps &
Developer



Data
Analyst



Product
Owner



Growth
Manager

The event model

Law and order

```
walker event
{
  event: 'promotion view', // Combination of entity and action
  data: {
    // Arbitrary set properties with the data-elb-promotion attribute
    name: 'Setting up tracking easily',
    category: 'analytics',
  },
  context: {
    // Related properties defined with the data-elbcontext attribute
    test: ['engagement', 0] // Value and order
  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionid',
  },
  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
  trigger: 'visible', // Name of the trigger that fired
  entity: 'promotion', // Entity name
  action: 'view', // Entity action
  timestamp: 1647261462000, // Time when the event fired
  timing: 3.14, // How long it took from the page load to trigger the event
  group: '01b5e2', // Random group id for all events on a page
  count: 2, // Incremental counter of the events on a page
  version: {
    // Helpful when working with raw data
    client: '1.0.0', // Semantic version of the used client
    tagging: 42, // A version number of the then used tagging status
  },
  source: {
    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  event: "promotion start",
  data: { name: "Setting up ..." },
  context: {
    test: ["engagement", 0],
    font: ["beautiful", 1],
  },
  globals: {
    language: "en"
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DevOps &
Developer



Data
Analyst



Product
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Manager

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    test: ['engagement', 0] // Value and order
  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionId',
  },
  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
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  walker: true, // Flag to filter events
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```
{
  timestamp: 1647261462000,
  timing: 3.14,
  group: "01b5e2",
  count: 2,
  version: {
    client: "1.0.0",
    tagging: 42,
  },
}
```



DevOps &
Developer



Data
Analyst



Product
Owner



Growth
Manager



Data
Scientist

The event model

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  context: {
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  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionid',
  },
  nested: [], // All nested entities within the promotion
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  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
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    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  user: {
    id: "userid",
    device: "cookieid",
    session: "sessionid",
  },
}
```



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Data
Analyst



Product
Owner



Growth
Manager



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Scientist

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walker event
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    // Related properties defined with the data-elbcontext attribute
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  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionId',
  },
  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
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  timing: 3.14, // How long it took from the page load to trigger the event
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    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  consent: {
    functional: true,
  },
}
```



DevOps &
Developer



Data
Analyst



Product
Owner



Growth
Manager



Data
Scientist



Data
Governance

The event model

Law and order

```
walker event
{
  event: 'promotion view', // Combination of entity and action
  data: {
    // Arbitrary set properties with the data-elb-promotion attribute
    name: 'Setting up tracking easily',
    category: 'analytics',
  },
  context: {
    // Related properties defined with the data-elbcontext attribute
    test: ['engagement', 0] // Value and order
  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionid',
  },
  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
  trigger: 'visible', // Name of the trigger that fired
  entity: 'promotion', // Entity name
  action: 'view', // Entity action
  timestamp: 1647261462000, // Time when the event fired
  timing: 3.14, // How long it took from the page load to trigger the event
  group: '01b5e2', // Random group id for all events on a page
  count: 2, // Incremental counter of the events on a page
  version: {
    // Helpful when working with raw data
    client: '1.0.0', // Semantic version of the used client
    tagging: 42, // A version number of the then used tagging status
  },
  source: {
    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  event: "page view",
  data: {
    domain: "127.0.0.1",
    id: "/demo",
    title: "Tagging playground",
  },
  source: {
    type: "web",
  },
}
```



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    session: 'sessionid',
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  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
  trigger: 'visible', // Name of the trigger that fired
  entity: 'promotion', // Entity name
  action: 'view', // Entity action
  timestamp: 1647261462000, // Time when the event fired
  timing: 3.14, // How long it took from the page load to trigger the event
  group: '01b5e2', // Random group id for all events on a page
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  },
  source: {
    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  event: "session start",
  data: {
    id: "s3ss10n",
    marketing: true,
    campaign "MAS",
  },
  source: {
    type: "web",
  },
}
```



DevOps &
Developer



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Online
Marketer

The event model

Law and order

```
walker event
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    // Related properties defined with the data-elbcontext attribute
    test: ['engagement', 0] // Value and order
  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
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    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  event: "session end",
  data: {
    id: "s3ss10n",
    duration: 2520,
    stage: "checkout",
  },
  source: {
    type: "server",
  },
}
```



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Scientist



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The event model

Law and order

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    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

```
{
  event: "screen view",
  data: {
    id: "abc",
    type: "full",
    name: "welcome",
  },
  source: {
    type: "app",
  },
}
```



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The event model

Law and order

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    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
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  },
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```

- ✓ First party
- ✓ Source of truth
- ✓ Structured flexibility
- ✓ Different sources
- ✓ Vendor agnostic
- ✓ Industry independent



DevOps &
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The event model

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    name: 'Setting up tracking easily',
    category: 'analytics',
  },
  context: {
    // Related properties defined with the data-elbcontext attribute
    test: ['engagement', 0] // Value and order
  },
  custom: {}, // Additional custom data for individual setups
  globals: {
    // General Properties defined with the data-elbglobals attribute
    language: 'en'
  },
  user: {
    // Stored user ids (manually added once)
    id: 'userid',
    device: 'cookieid',
    session: 'sessionId',
  },
  nested: [], // All nested entities within the promotion
  consent: { functional: true }, // Status of the consent state(s)
  id: '1647261462000-01b5e2-5', // Timestamp, group & count of the event
  trigger: 'visible', // Name of the trigger that fired
  entity: 'promotion', // Entity name
  action: 'view', // Entity action
  timestamp: 1647261462000, // Time when the event fired
  timing: 3.14, // How long it took from the page load to trigger the event
  group: '01b5e2', // Random group id for all events on a page
  count: 2, // Incremental counter of the events on a page
  version: {
    // Helpful when working with raw data
    client: '1.0.0', // Semantic version of the used client
    tagging: 42, // A version number of the then used tagging status
  },
  source: {
    // Origins of the event
    type: 'web', // Source type of the event
    id: 'https://github.com/elbwalker/walkerOS', // Source id of the event's origin (url)
    previous_id: 'https://www.elbwalker.com/' // Previous source id (referrer)
  },
  walker: true, // Flag to filter events
}
```

- ✓ First party
- ✓ Source of truth
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- ✓ Different sources
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Data infrastructure

How to get from A to Z

**Nothing has been
tracked yet!**

Data infrastructure

How to get from A to Z

Clients

Web

Data infrastructure

How to get from A to Z

Clients

Destinations

Web

 Google Ads

 Google
Analytics 4

Data infrastructure

How to get from A to Z

Clients

Web

Destinations

Marketing



Google Ads

Analytics



Google
Analytics4

Data infrastructure

How to get from A to Z

Clients

Stacks

Destinations

Web



Google Tag Manager

Marketing



Google Ads

Analytics



Google Analytics4

Data infrastructure

How to get from A to Z

Clients

Stacks

Destinations

Web



Google Tag Manager

Marketing



Google Ads



Meta

Analytics



Google Analytics



SNOWPLOW

PIWIK

PRO

Data infrastructure

How to get from A to Z

Clients

Web

App

Server

Stacks



Google Tag Manager

Destinations

Marketing



Google Ads



Meta

Analytics



Google Analytics 4



SNOWPLOW

PIWIK

PRO

Data infrastructure

How to get from A to Z

Clients

Web

App

Server

Stacks



Google Tag Manager

Destinations

Marketing



Google Ads



Meta

Analytics



Google Analytics 4



SNOWPLOW

PIWIK

PRO

Database



Google
BigQuery



snowflake

Data infrastructure

How to get from A to Z

Clients

Stacks

Destinations



Data infrastructure

How to get from A to Z

Clients

Web

App

Server

Stacks



Google Tag Manager

Destinations

Marketing



Google Ads



Meta

Analytics



Google Analytics 4



SNOWPLOW

PIWIK

PRO

Database



Google
BigQuery



snowflake

Data infrastructure

How to get from A to Z

Clients

Web

App

Server

Stacks



Server-side
Google Tag Manager

Destinations

Marketing



Google Ads



Meta

Analytics



Google Analytics 4



SNOWPLOW

PIWIK

PRO

Database



Google
BigQuery



snowflake

Data infrastructure

How to get from A to Z

Clients

Web

App

Server



Server-side
Google Tag Manager

Stacks

Destinations

Marketing



Analytics



Database



Data collection with **walkerOS**

A few pipeline examples



tagging.html

```
<body data-elbglobals="language:en">
  <div data-elbcontext="test:engagement">
    <div data-elb="promotion" data-elbaction="visible:view">
      <h1 data-elb-promotion="name:Setting up tracking easily">
        Setting up tracking easily
      </h1>
      <p data-elb-promotion="category:analytics">Analytics</p>
    </div>
  </div>
</body>
```

**Tagged
Website**

Data collection with **walkerOS**

A few pipeline examples

```
tagging.html

<body data-elbglobals="language:en">
  <div data-elbcontext="test:engagement">
    <div data-elb="promotion" data-elbaction="visible:view">
      <h1 data-elb-promotion="name:Setting up tracking easily">
        Setting up tracking easily
      </h1>
      <p data-elb-promotion="category:analytics">Analytics</p>
    </div>
  </div>
</body>
```

Tagged
Website

Data collection with **walkerOS**

A few pipeline examples



install

```
import Elbwalker from '@elbwalker/walker.js';  
window.elbwalker = Elbwalker({ default: true });
```

Tagged
Website



walker.js
web client

Data collection with **walkerOS**

A few pipeline examples

× walker.js 📁 Save ⋮

Tag Configuration

Tag Type

<> **Custom HTML**
Custom HTML Tag

HTML ?

```
1 <script>
2   var elb = function(){ window.elbLayer.push(arguments)};
3   var elbwalker = {{walker.js}}({ default: true });
4 </script>
```

Tagged
Website



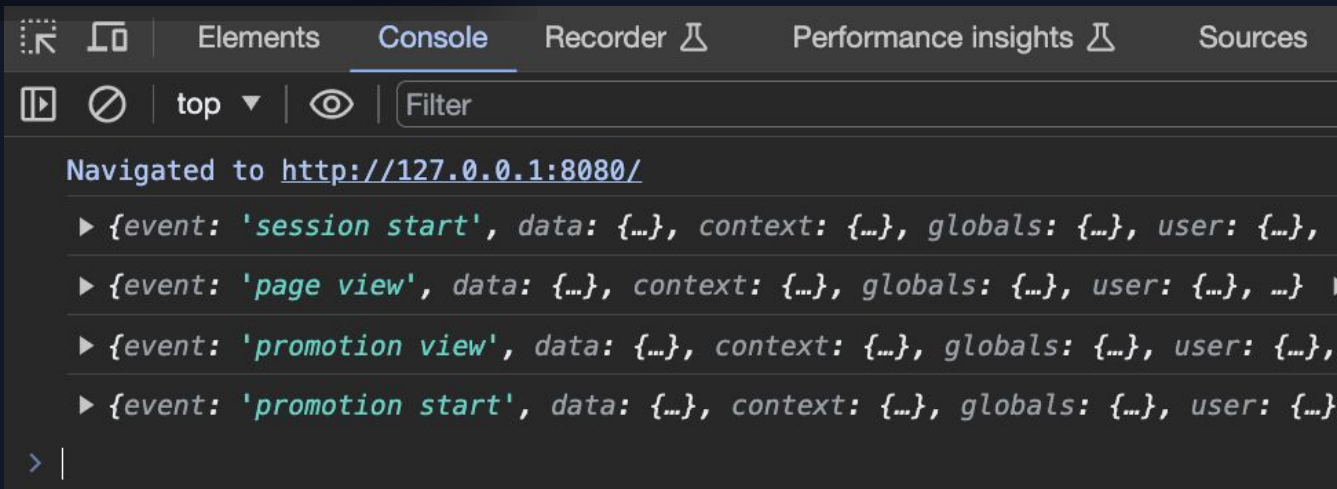
walker.js
web client

Data collection with **walkerOS**

A few pipeline examples

console destination

```
elb('walker destination', { push: console.log });
```



Tagged
Website

walker.js
web client

Console
Destination

Data collection with **walkerOS**

A few pipeline examples

GTM destination

```
elb('walker destination', {  
  init: () => { window.dataLayer = window.dataLayer || []; },  
  push: dataLayer.push  
});
```

Connected
127.0.0.1

1 Google tag found GTM-WCFR4W5

Summary

walkerOS tagging demo

- 9 promotion start
- 8 promotion view
- 7 Window Loaded
- 6 DOM Ready
- 5 page view
- 4 session start
- 3 Container Loaded
- 2 Initialization
- 1 Consent Initialization

Event: promotion view

API Call

```
dataLayer.push({  
  event: "promotion view",  
  data: {category: "analytics", name: "Setting up tracking easily"},  
  context: {test: ["engagement", 0], category: ["analytics", 0]},  
  globals: {language: "en", cart_value: 249},  
  user: {},  
  nested: {},  
  consent: {},  
  id: "1699616357157-sgyp0z-3",  
  trigger: "visible",  
  entity: "promotion",  
  action: "view",  
  timestamp: 1699616357157,  
  timing: 1.69,  
  group: "sgyp0z",  
  count: 3,  
  version: {config: 1, walker: 1.6},  
  source: {  
    type: 1,  
    id: "http://127.0.0.1:8080/?gtm_debug=1699616355459",  
    previous_id: "https://tagassistant.google.com/"  
  },  
  walker: true,  
  gtm.uniqueEventId: 14  
});
```

Tagged
Website

walker.js
web client

GTM
Destination

Data collection with **walkerOS**

A few pipeline examples

walker.js destination Piwik PRO

Save

Tag Configuration

Tag Type

<>

Custom HTML

Custom HTML Tag

HTML ⓘ

```
1 <script>
2 elb("walker destination", {{walker.js destination Piwik PRO}}, {
3   consent: { functional: true }, // Necessary consent states
4   custom: {
5     appId: 'xxxxxxxx-xxxx-xxxx-xxxxxxxxxxxx', // Id of the site
6     url: 'https://elbwalker.piwik.pro/', // Same address as the login
7   },
8   loadScript: true, // Load additional required scripts on init
9   mapping: {
10    'order': {
11      'complete': {
12        custom: {
13          goalId: 'xxxx-xxxx-xxxx-xxxx-xxxx', // Count the event as a goal
14          goalValue: 'data.total', // Property to be used as goal value
15        },
16      },
17    },
18  },
19 }
```

Tagged
Website

walker.js
web client

Piwik PRO
Destination

Data collection with **walkerOS**

A few pipeline examples



Firebase stack

```
import { firebaseStack } from '@elbwalker/stack-firebase';  
  
const { elb, push } = firebaseStack({});  
  
export const ingest = push({ cors: true, region: 'europe-west1' });
```

Tagged
Website



walker.js
web client

Firebase
Stack

Data collection with **walkerOS**

A few pipeline examples

```
● ● ●  
Firebase stack  
  
import { firebaseStack } from '@elbwalker/stack-firebase';  
import { destinationBigQuery }  
  from '@elbwalker/destination-node-bigquery';  
  
const { elb, push } = firebaseStack({});  
  
elb('walker destination', destinationBigQuery, {  
  custom: { projectId: 'my-own' },  
});  
  
export const ingest = push({ cors: true, region: 'europe-west1' });
```

Tagged
Website



walker.js
web client

Firebase
Stack



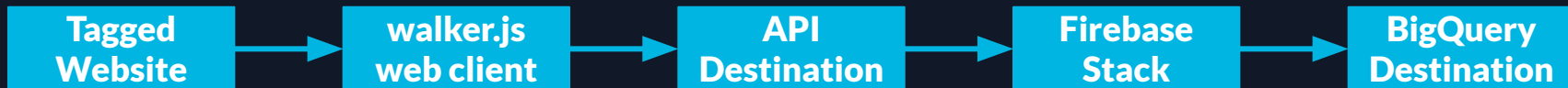
BigQuery
Destination

Data collection with **walkerOS**

A few pipeline examples

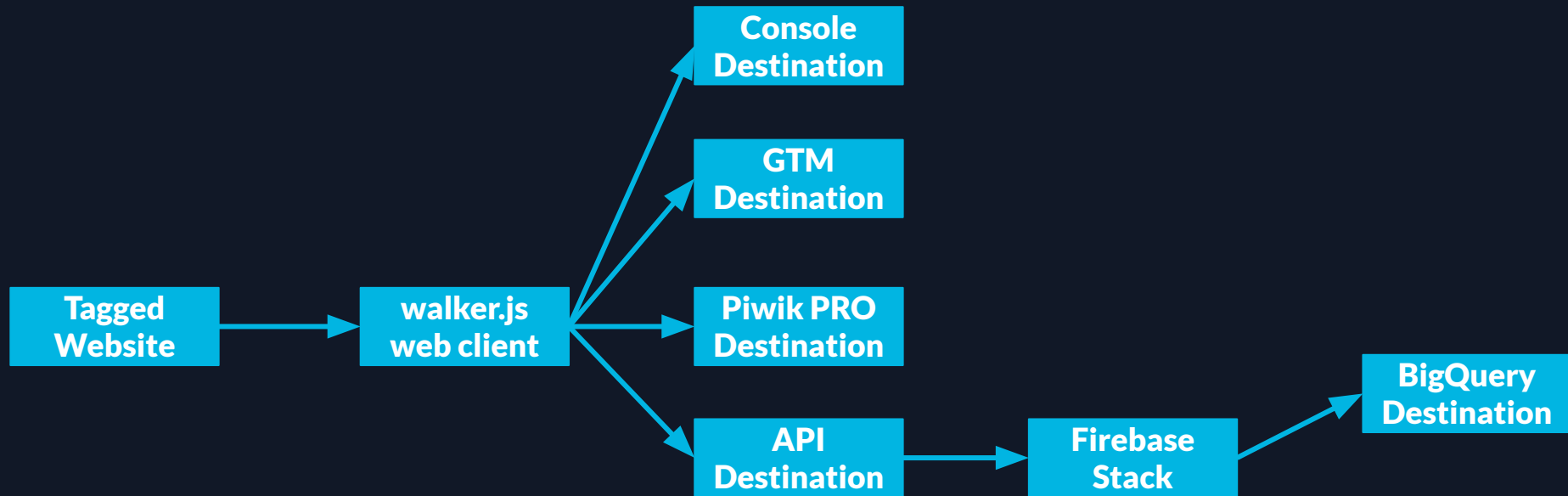
API destination

```
elb('walker destination', api, {  
  consent: { functional: true },  
  custom: {  
    url: 'http://127.0.0.1:5001/firebase/europe-west1/ingest',  
  },  
});
```



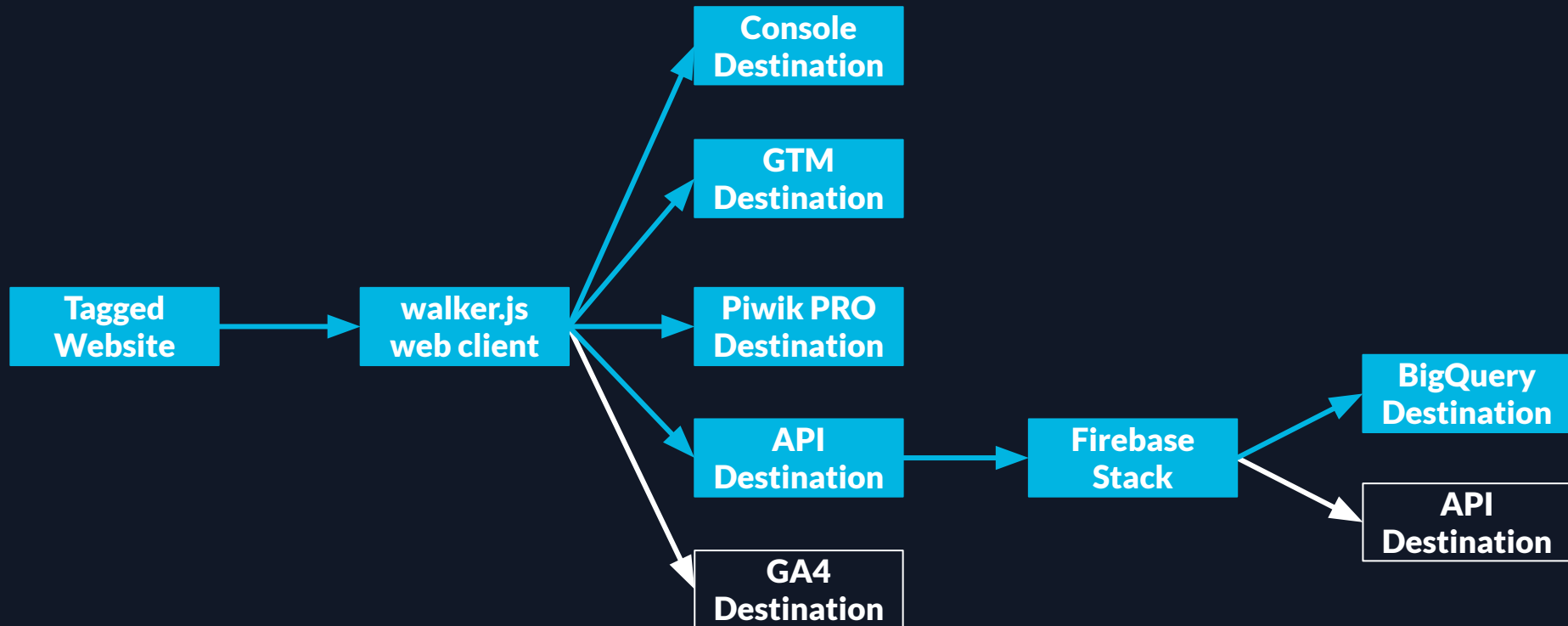
Data collection with **walkerOS**

A complete pipeline example



Data collection with **walkerOS**

A complete pipeline example



Data collection with **walkerOS**

Mapping helps to translate

```
{  
  event: "promotion view",  
  data: {  
    name: "Setting up ...",  
    category: "analytics"  
  },  
  globals: { language: "en" },  
  context: {  
    test: ["engagement", 0]  
  },  
}
```

Data collection with **walkerOS**

Mapping helps to translate

```
{  
  event: "promotion view",  
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  },  
  globals: { language: "en" },  
  context: {  
    test: ["engagement", 0]  
  },  
}
```

promotion_view



trackContentImpression



view_promotion



trackPromotionView



Data collection with **walkerOS**

Contracts ensure quality

```
{
  event: "promotion view",
  data: {
    name: "Setting up ...",
    category: "analytics"
  },
  globals: { language: "en" },
  context: {
    test: ["engagement", 0]
  },
}
```



contract-analyst.ts

```
const analyst: Schema.Contract = {
  promotion: { 'view': {
    data: { schema: { name: { required: true } } }
  } }
};
```



contract-scientist.ts

```
const scientist: Schema.Contract = {
  '*': { '*': {
    globals: { schema: { cart_value: { type: 'number' } } }
  } }
};
```

(Un)popular opinions

Things I love to discuss

**Use tools only for
what they were
made for**

(Un)popular **opinions**

Things I love to discuss

**Forget the
client_id**

(Un)popular opinions

Things I love to discuss

**Data is
never done**

How to get **started**

Next steps

**What stops you
from using it?**



Thank you!

 [alexander.kirtzel](#)

 [elbwalker/walkerOS](#)

No **big** deal

It's the little things in life

~11Kb

Runs fast

Resource-saving