

THIS IS



Miloš Rujević
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Spartacus is not official product from SAP (Project “Spartacus”)



**Angular-based
modern storefront**

OPEN SOURCE

SAP Commerce Cloud

Tech Stack



Angular

Angular is our framework of choice, as we can build a storefront framework with it.



TypeScript

With TS you can use the latest EcmaScript version during, while still *transpiling* to the JS version of choice.



RxJS

A reactive programming framework that is used everywhere, so that we can build fast loading UIs in an async way.



NgRx

Reactive State management library for Angular, so that state can be managed cross the Application.



SASS

For pre-processing CSS, we use SASS.



Bootstrap

The current UI is (still) using Bootstrap. We do want to become agnostic to UI frameworks soon.



Jasmine

There is ~90% unit tests coverage, tests are written in Jasmine.



Cypress

The new kid on the block for end-to-end testing is Cypress, no more Selenium.

3.x

Angular CLI: Version 10.1 or later, < 11.

Node.js: The most recent 12.x version is recommended, < 13.

Yarn: Version 1.15 or later.


```
ng new mystore --style=scss
```

without routing

```
ng add @spartacus/schematics
```

```
--pwa
```

```
--ssr
```

```
--baseUrl https://spartacus-training.eastus.cloudapp.azure.com:8443
```

```
--baseSite electronics-spa
```

```
--occPrefix /occ/v2/
```

```
yarn install
```

```
yarn start
```

sap.github.io/spartacus-docs/schematics

DEMO

powertools

spartacus-demo.eastus.cloudapp.azure.com:444/powertools-spa/en/USD/

Performance

OOTB Features

PWA

Server Side Rendering

SEO Features

Open Source

Accessibility

Configurable

Localization

Extendable

Context-Driven Services Support

OOTB Features

Home

Search

Cart

Categories

Storefinder

Address/Payment Management

Registration

Account

Product details

Wishlist

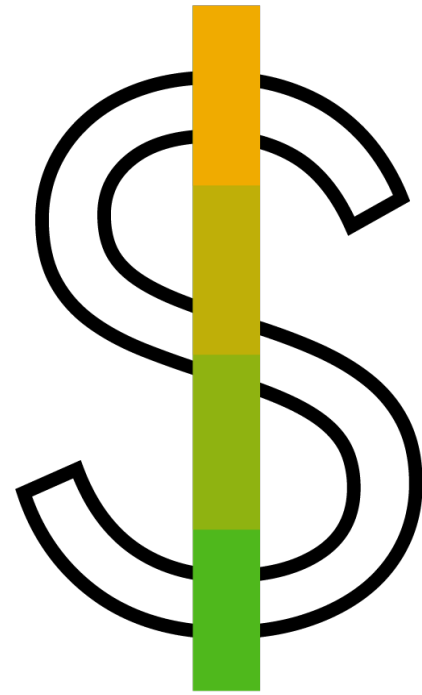
Responsive design

Performance

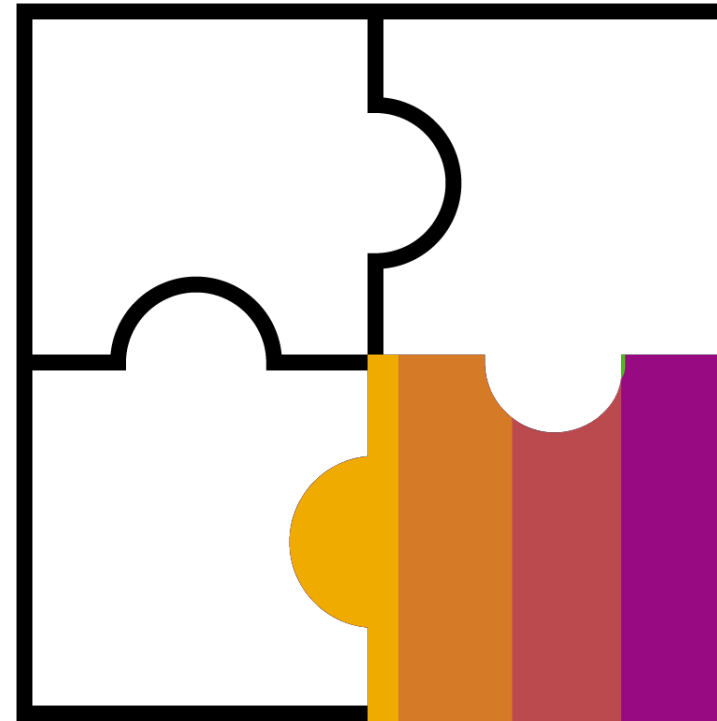


Lazy Loading

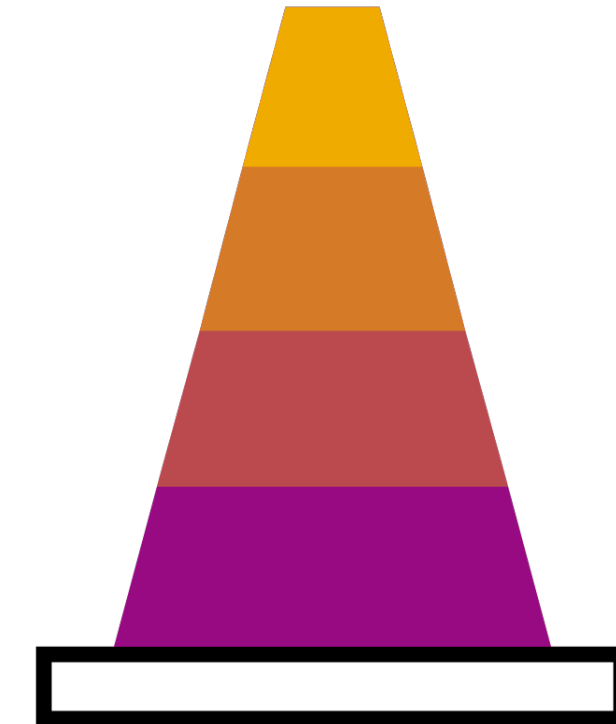
Performance



PRODUCT
LOADING
SCOPES

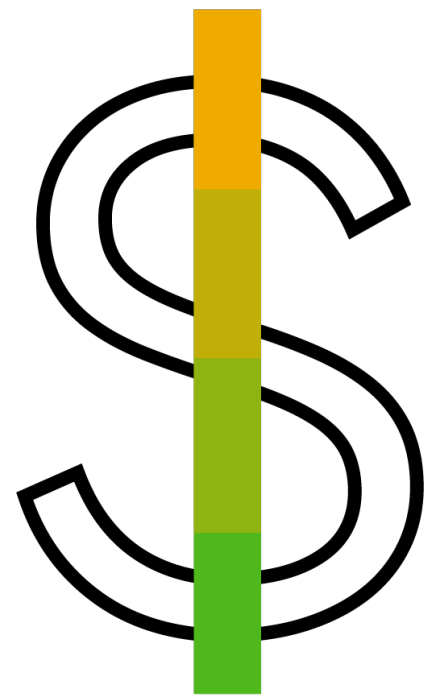


DEFERRED
LOADING



ABOVE-THE-FOLD
LOADING

Performance

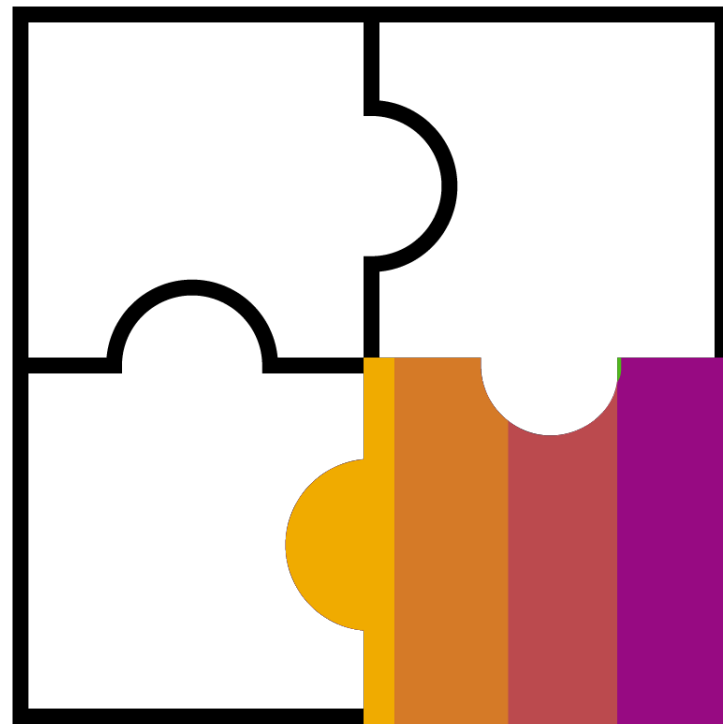


**PRODUCT
LOADING
SCOPES**

```
{  
  backend: {  
    loadingScopes: {  
      product: {  
        list: {  
          maxAge: 60  
        }  
      },  
    },  
  },  
}
```

Reload only happens when in scope and older than 60 seconds

Performance

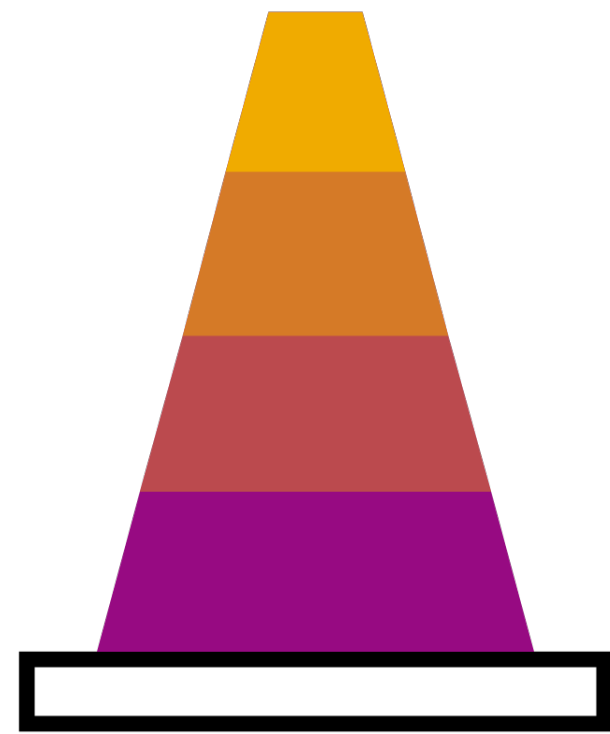


**DEFERRED
LOADING**

```
b2cLayoutConfig: LayoutConfig = {  
  deferredLoading: {  
    strategy: DeferLoadingStrategy.DEFER,  
    intersectionMargin: '50px',  
  },  
  layoutSlots: {  
    [...]  
  }  
}
```

Deferred loading is not applied to server-side rendering, so that crawlers can receive the full DOM.

Performance



ABOVE-THE-FOLD
LOADING

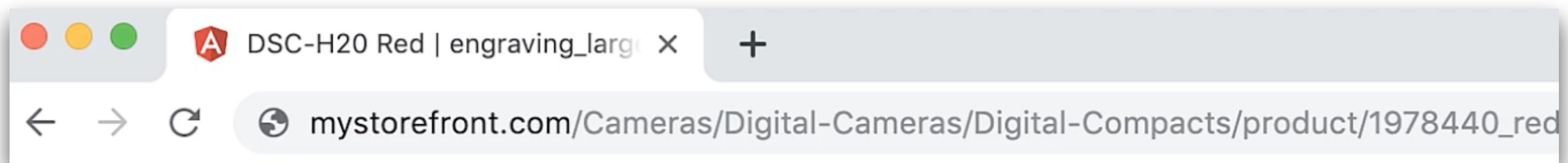
```
LandingPage2Template: {  
  pageFold: 'Section2B',  
  slots: [  
    'Section1',  
    'Section2A',  
    'Section2B',  
    [...]  
  ]  
}
```

```
cx-page-slot.cx-pending.page-fold ~ cx-page-slot.cx-pending {  
  margin-top: 100vh;  
}
```

SEO

Easy to configure

Routing

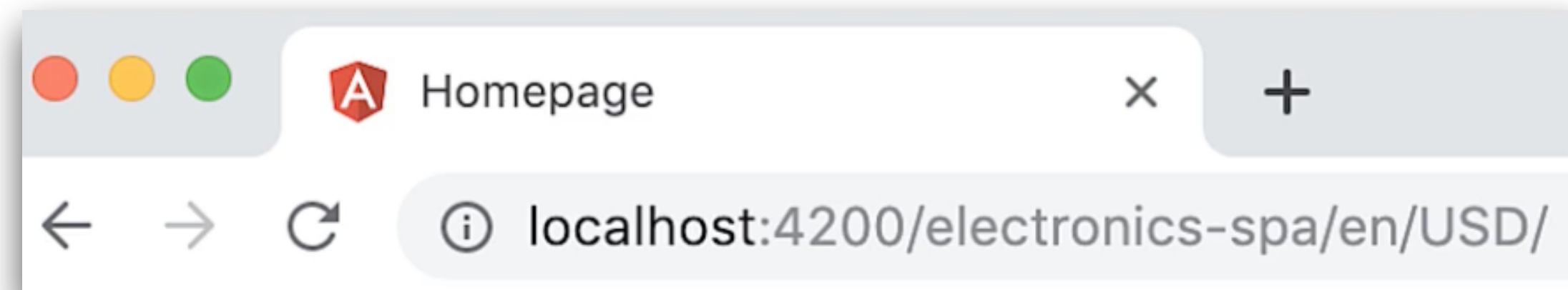


SEO Features

SEO

Easy to configure

Site Context



SEO

Easy to configure

- Indexable Pages
- Structured Data (schema.org)
- HTML Tags
 - Page Meta Resolvers
 - Title Resolver
 - Description Resolver
 - Image Resolver
 - Robots Tag

SEO Easy to configure

Server Side Rendering

[Spartacus: SSR Deep Dive](#)



PWA reliable, fast, engaging

- Cross-browser**
- Each page URL**
- Social Metadata**
- Use of responsive design**
- Add to Home**
- First load fast**
- PWA caching / service workers**
- Snappy UX**

Event System

user added a product X to his cart

CONTEXT-DRIVEN SERVICES



Global Style Variables

Localization

```
import { translations, translationChunksConfig } from '@spartacus/assets';

// ...

imports: [
  B2cStorefrontModule.withConfig({
    i18n: {
      resources: {
        en: translations, // or YOUR_ENGLISH_TRANSLATIONS,
        de: YOUR_GERMAN_TRANSLATIONS,
        ...
      },
    },
    chunks: translationChunksConfig
  })
];
```

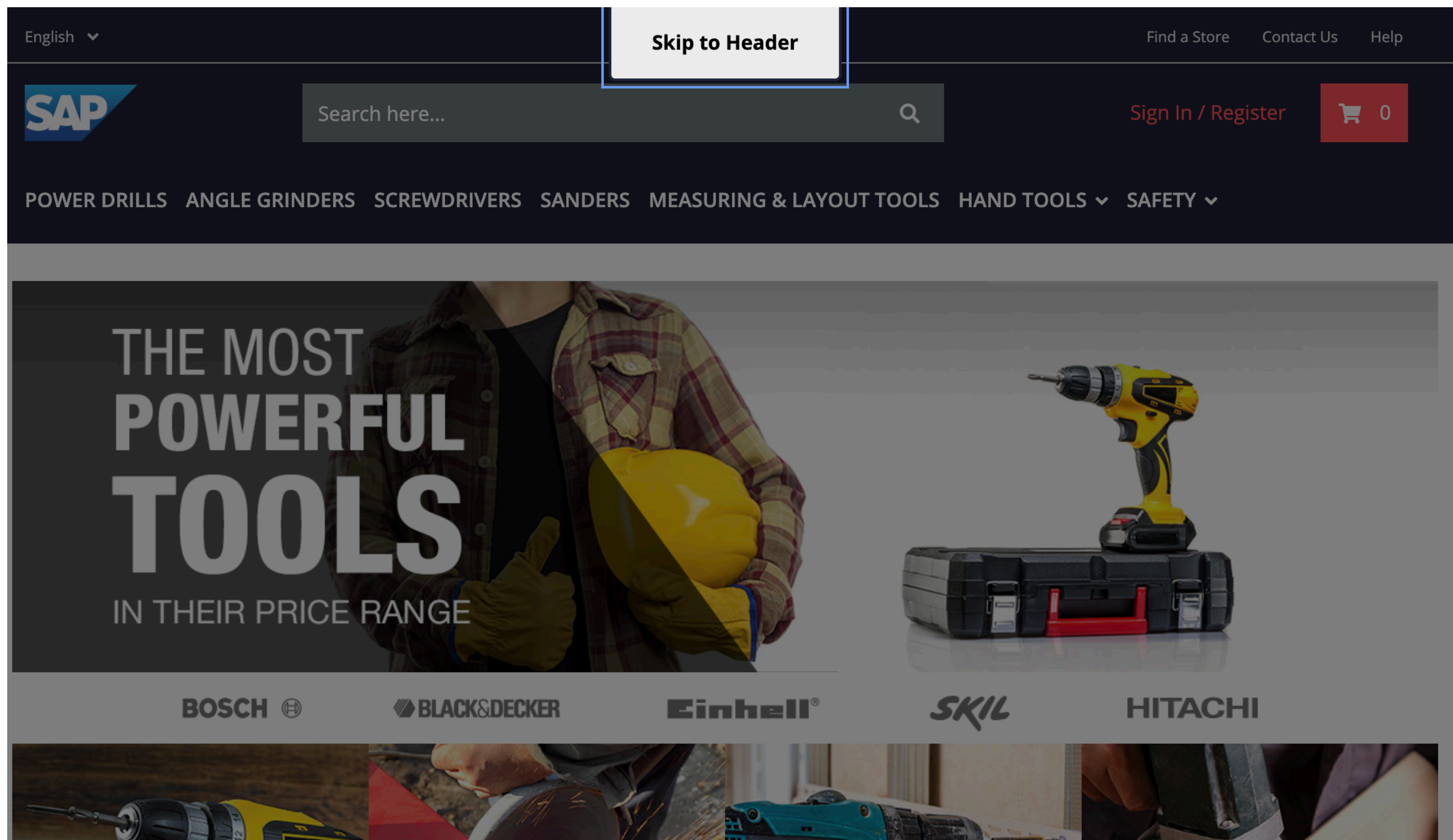
Directionality

left-to-right (LTR)

right-to-left (RTL)

```
const defaultDirectionConfig: DirectionConfig = {  
  direction: {  
    detect: true,  
    default: DirectionMode.LTR,  
    rtlLanguages: ["he", "ar"],  
  },  
};
```

SKIP LINK



```
const exampleSkipLinkConfig: SkipLinkConfig = {
  skipLinks: [
    {
      key: 'SiteContext',
      i18nKey: 'skipLink.labels.header',
    },
    {
      key: 'BottomHeaderSlot',
      position: SkipLinkScrollPosition.AFTER,
      i18nKey: 'skipLink.labels.main',
    },
    {
      key: 'Footer',
      i18nKey: 'skipLink.labels.footer'
    },
  ]
};
```

Web Content Accessibility Guidelines (WCAG) 2.1:

- 2.1.1, Level A, Keyboard
- 2.1.2, Level A, No Keyboard Trap
- 2.4.1, Level A, Bypass Blocks
- 2.4.3, Level A, Focus Order
- 2.4.7, Level AA, Focus Visible
- 3.2.3, Level AA, Consistent Navigation

github.com/SAP/spartacus★



npmjs.com/package/@spartacus/storefront

ROADMAP

sap.github.io/spartacus-docs/spartacus-roadmap



Learning

Free



open**SAP**

[OPEN.SAP.COM/COURSES?Q=SPARTACUS](https://open.sap.com/courses?q=spartacus)



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CATEGORY/SPARTACUS/178316081](https://microlearning.opensap.com/category/spartacus/178316081)



Paid



[TRAINING.SAP.COM/COURSE/C4H370-SPARTACUS-ILT-DEVELOPER-
TRAINING-CLASSROOM-004-US-EN/?](https://TRAINING.SAP.COM/COURSE/C4H370-SPARTACUS-ILT-DEVELOPER-TRAINING-CLASSROOM-004-US-EN/?)



Community



[STACKOVERFLOW.COM/QUESTIONS/
TAGGED/SPARTACUS-STOREFRONT](https://stackoverflow.com/questions/tagged/spartacus-storefront)



[SPARTACUS-STOREFRONT.SLACK.COM](https://spartacus-storefront.slack.com)



Thank you.

[linkedin.com/in/itmilos](https://www.linkedin.com/in/itmilos)

