



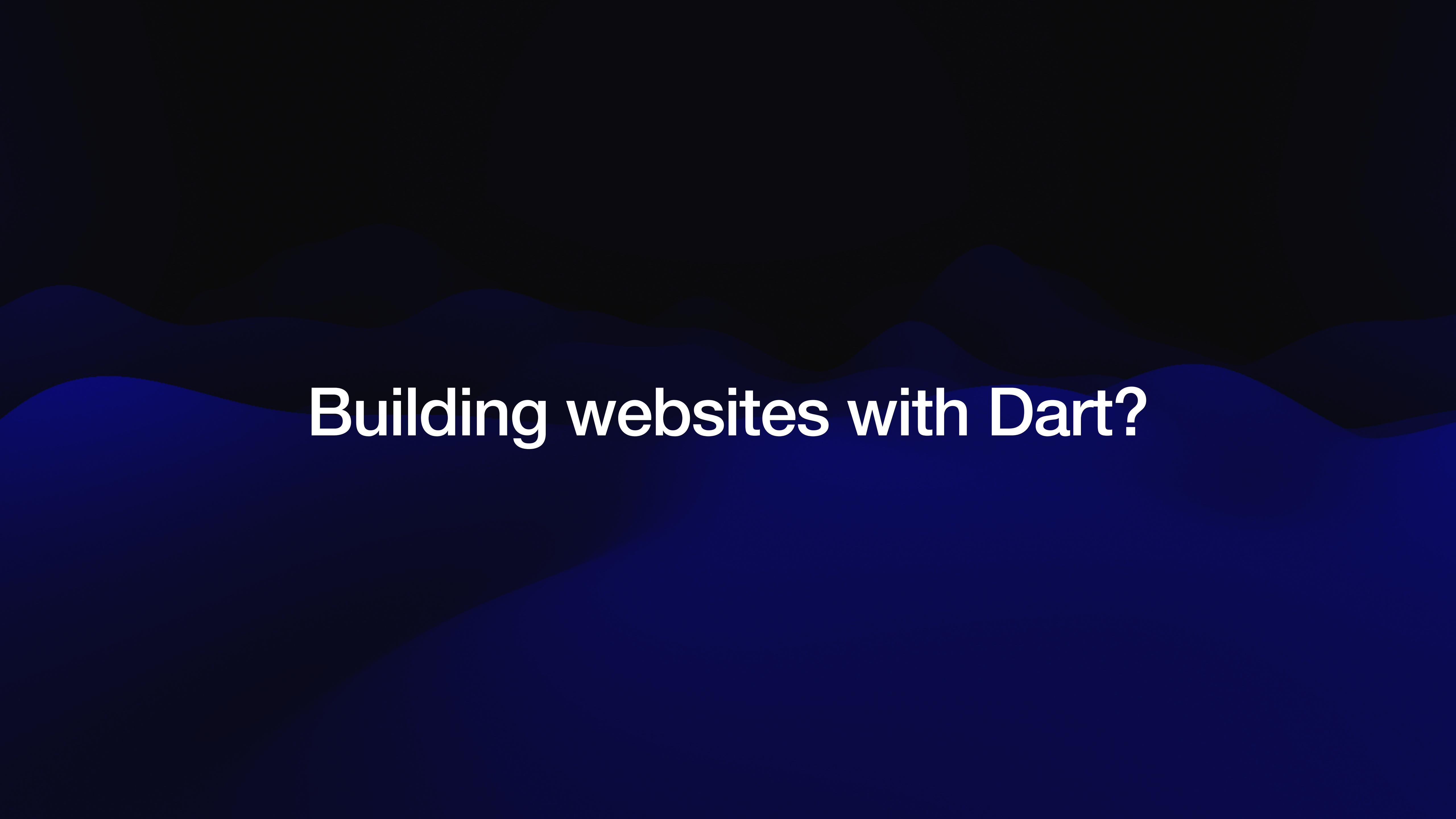
# Introducing Jaspr

## Darts first full stack web framework

Kilian Schulte  
@schultek







# Building websites with Dart?

# Flutter Web?

## Web FAQ

Platform integration > Web > Web FAQ



„Flutter Web is only  
for web apps!“

### What scenarios are ideal for Flutter on the web?

Not every web page makes sense in Flutter, but we think Flutter is particularly suited for app-centric experiences:

- Progressive Web Apps
- Single Page Apps
- Existing Flutter mobile apps

At this time, Flutter is not suitable for static websites with text-rich flow-based content. For example, blog articles benefit from the document centric model that the web is built around, rather than the app centric services that a UI framework like Flutter can deliver. However, you *can* use Flutter to embed interactive experiences into these websites.

For more information on how you can use Flutter on the web, see [Web support for Flutter](#).

### Search Engine Optimization (SEO)

In general, Flutter is geared towards dynamic application experiences. Flutter's web support is no exception. Flutter web prioritizes performance, fidelity, and consistency. This means application output does not align with what search engines need to properly index. For web content that is static or document-like, we recommend using HTML—just like we do on [flutter.dev](#), [dart.dev](#), and [pub.dev](#). You should also consider separating your primary application experience—created in Flutter—from your landing page, marketing content, and help content—created using search-engine optimized HTML.

# Flutter Web?

- Improve the indexability (SEO) of Flutter apps on the web c: new feature

c: proposal customer: crowd framework P2 platform-web team-web triaged-web

192 542

#46789 opened on Dec 11, 2019 by deepak-kumar-swain

- Server-side rendering for Flutter web c: new feature c: proposal customer: crowd

P3 platform-web team-web triaged-web

59 384

#47600 opened on Dec 22, 2019 by wliumelb

# Dart Web!

```
$ dart create --template web
```



**index.html**

**styles.css**

**main.dart**

```
import 'package:web/helpers.dart';

void main() {
    final now = DateTime.now();
    final element = document.querySelector('#output') as HTMLDivElement;
    element.text = 'The time is ${now.hour}:${now.minute} '
    ' and your Dart web app is running!';
}
```



```
class FooComponent extends StatelessWidget {  
  const FooComponent({super.key});  
  
  @override  
  Iterable<Component> build(BuildContext context) sync* {  
    yield DomComponent(  
      tag: 'div',  
      children: [  
        DomComponent(  
          tag: 'p',  
          children: [  
            Text('Hello World'),  
          ],  
        ),  
      ],  
    );  
    yield DomComponent(  
      tag: 'img',  
      attributes: {  
        'src': '/images/logo.png',  
      },  
    );  
  }  
}
```

```
class FooComponent extends StatelessWidget {  
  const FooComponent({super.key});  
  
  @override  
  Iterable<Component> build(BuildContext context) {  
    return [  
      yield DomComponent(  
        tag: 'div',  
        children: [  
          DomComponent(  
            tag: 'p',  
            children: [  
              Text('Hello World'),  
            ],  
          ),  
        ],  
      ),  
      yield DomComponent(  
        tag: 'img',  
        attributes: {  
          'src': '/images/logo.png',  
        },  
      ),  
    ];  
  }  
}
```



```
Node a = document.createElement('p');  
a.text = 'Hello World';  
Node b = document.createElement('div');  
b.append(a);  
Node c = document.createElement('img');  
c.setAttribute('src', '/images/logo.png');  

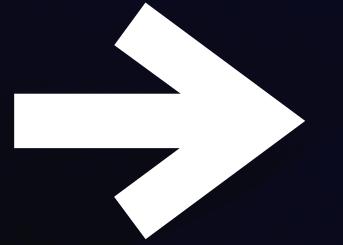

Hello World


```

# Flutters Rendering System

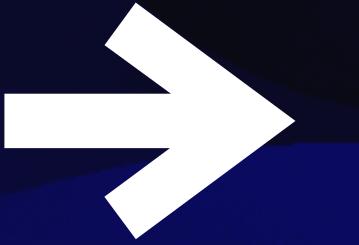
## Widget

**FooWidget**



## Element

**FooElement**



## RenderObject

**RenderFoo**

Holds config for a piece  
of UI

Has a public API

Frequently rebuilds

Represents an actual  
piece of the UI

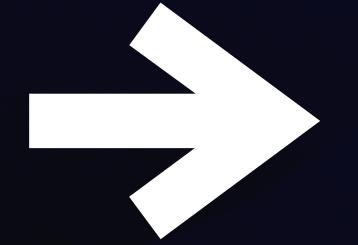
Rarely rebuilds

Renders to the screen  
Rarely rebuilds

# Jasprs Rendering System

## Component

**FooComponent**



Holds config for a piece  
of UI

Has a public API

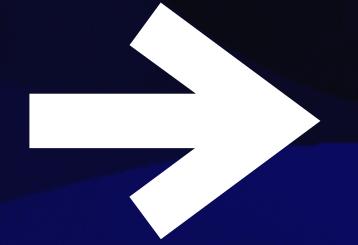
Frequently rebuilds

## Element

**FooElement**

Represents an actual  
piece of the UI

Rarely rebuilds



## RDOM Node

**RenderFoo**

Just plain DOM nodes

Rarely rebuilds





Client Side  
Hydration

Island  
Architecture

CLI

Server Side  
Rendering

Routing

Theming

# Building a framework?!

Deployment

Using custom  
Backends

Javascript  
Integrations

Development  
Server

Testing

CSS Library  
Integrations

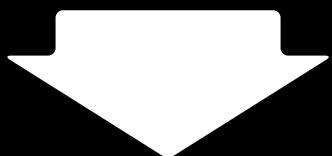


```
runApp (FooComponent);
```

Jaspr

## Pre-rendering

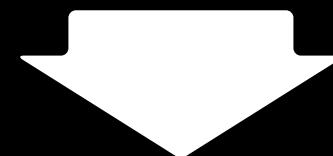
on the  
**server**



**HTML**  
(as a String)

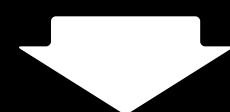
## (Continued) rendering

on the  
**client**



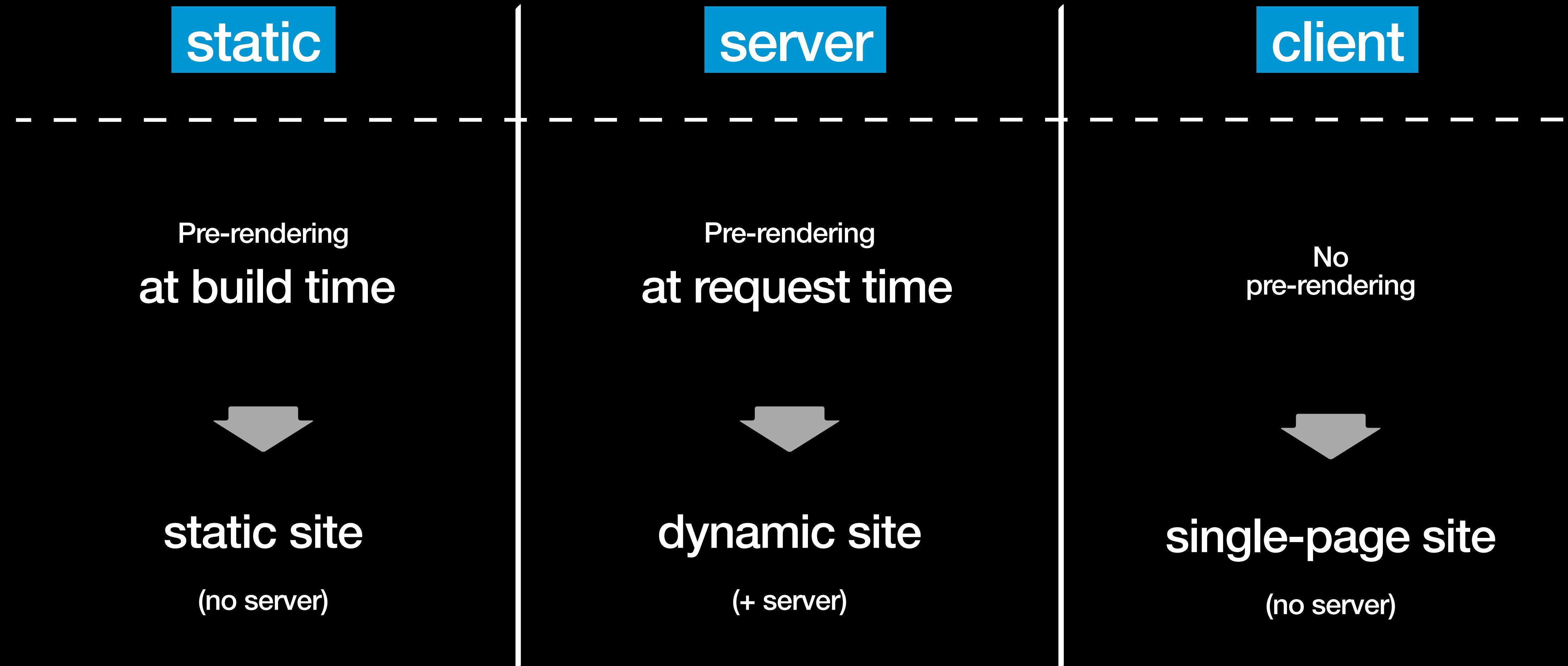
**DOM instructions**

Browser



**HTML Elements**

# Jasprs Rendering Modes





## r/dartlang

Top ▾ All Time ▾ ⏷ ▾

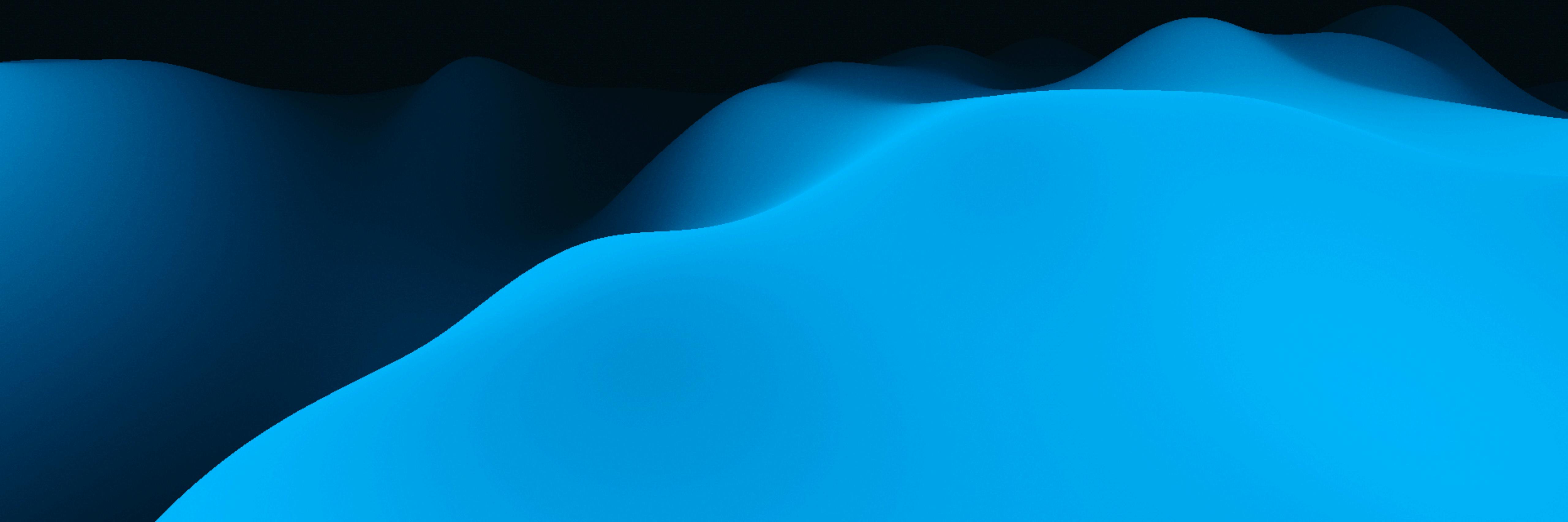


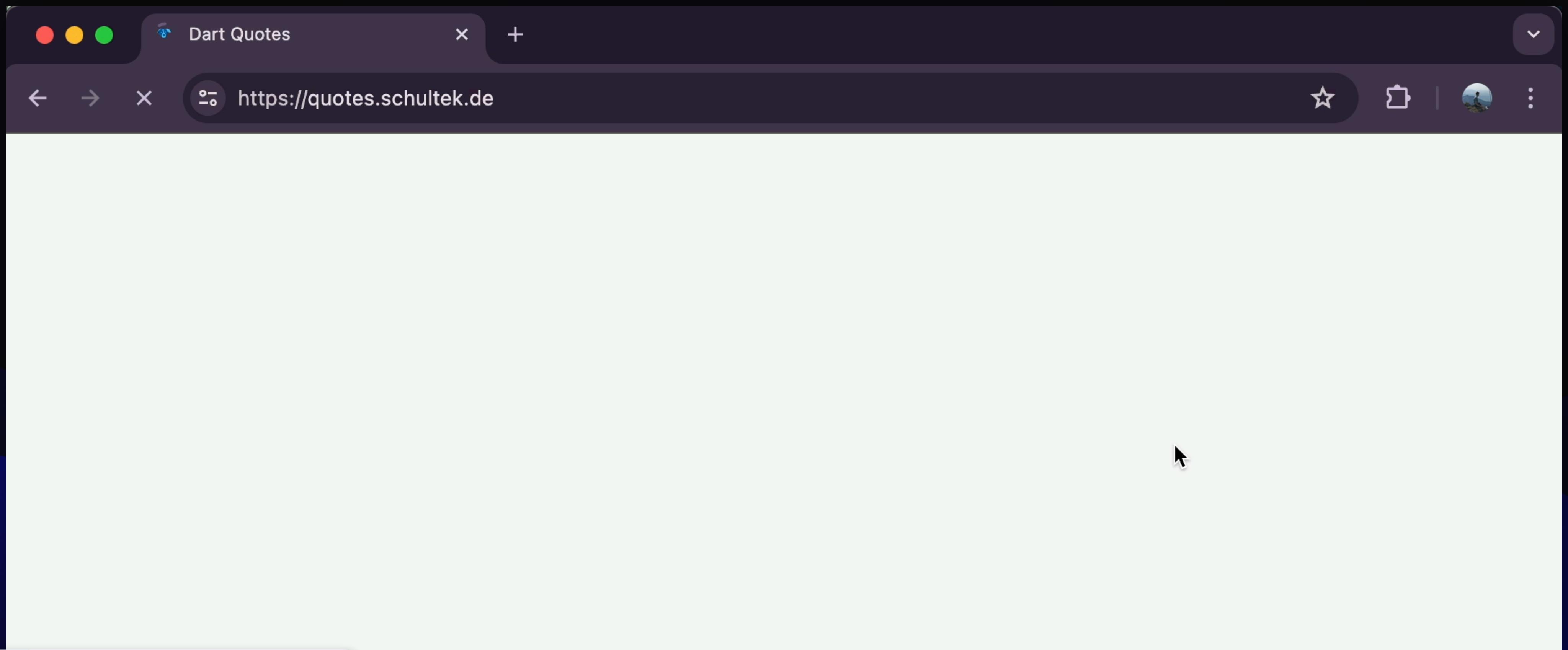
u/schultek · 2 yr. ago

### Introducing Jaspr - A complete web-framework written in Dart

Hi fellow developers, I'm really excited to finally share with you what I've been working on over the last few months: Jaspr is a complete web-framework that is written in Dart. It takes inspiration from frameworks like React or Remix, but most importantly Flutter. While it renders normal HTML & CSS, it looks and feels very much like Flutter. So while you get all the benefits of an actual web app (fast page load, seo, server-side rendering, etc.) you get the familiar structure of stateless, stateful and inherited widgets. There is so much to talk about, but here are some highlights: 1. Familiar component model similar to Flutter widgets but adapted for the web It...

# Jaspr in Action





Firebase

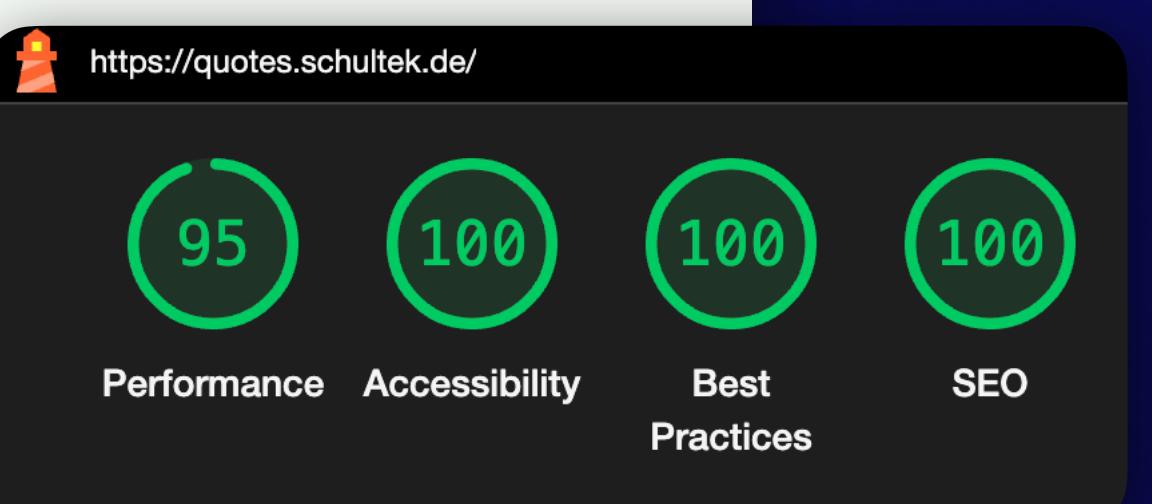
Cloud Firestore

Daten Regeln Indexe Nutzung Extensions

Zusätzliche Funktionen in Google Cloud

(default) quotes 7LNoLHkvJUc7...:

- + Sammlung starten
- + Dokument hinzufügen
- + Sammlung starten
- + Feld hinzufügen
- author: "@elliothesp"
- likes:
  - 0 "i8PGs8K02hS7dcCGcQBEcNps2Q22"
  - 1 "LQxZZHcp2aaBKpNuChFTLBAJTPv2"
- quote: "Really good to see more pushing the backend Dart space forwards."



```
$ jaspr create
```

Specify a target directory: myapp

Select a rendering mode:

- ›  static: Build a statically pre-rendered site.
- ›  server: Build a server-rendered site.
- client: Build a purely client-rendered site.

(Recommended) Enable automatic hydration on the client? (Y/n) Yes

Setup routing for different pages of your site? (Y/n) Yes

(Recommended) Use multi-page (server-side) routing?

Choosing [no] sets up a single-page application with client-side routing instead. (Y/n) Yes

Setup Flutter web embedding? (y/N) No

Enable support for using Flutter web plugins in your project? (Y/n) Yes

✓ Generated 25 file(s)

Created project myapp! In order to get started, run the following commands:

```
cd s
```

```
jaspr serve
```

### main.dart

```
import 'package:jaspr/server.dart';

import 'app.dart';
import 'jaspr_options.dart';

void main() {
  Jaspr.initializeApp(
    options: defaultJasprOptions,
  );

  runApp(Document(
    title: 'Dart Quotes',
    body: App(),
  ));
}
```

## main.dart

```
import 'package:jaspr/server.dart';

import 'app.dart';
import 'jaspr_options.dart';

void main() {
  Jaspr.initializeApp(
    options: defaultJasprOptions,
  );

  runApp(Document(
    title: 'Dart Quotes',
    lang: 'en',
    meta: {
      "description": "A collection of cool Dart quotes. Built for FullStackFlutter Conference.",
    },
    body: App(),
  ));
}
```

```
import 'package:jaspr/server.dart';

import 'app.dart';
import 'jaspr_options.dart';

void main() {
  Jaspr.initializeApp(
    options: defaultJasprOptions,
  );

  runApp(Document(
    title: 'Dart Quotes',
    lang: 'en',
    meta: {
      "description": "A collection of cool Dart quotes. Built for FullStackFlutter Conference.",
    },
    styles: [
      // Root styles
      css('html, body')
        .text(fontFamily: const FontFamily.list([FontFamily('Roboto'), FontFamilies.sansSerif]))
        .box(width: 100.percent, minHeight: 100.vh)
        .box(margin: EdgeInsets.zero, padding: EdgeInsets.zero)
        .background(color: Color.hex('#F7F7F7')),
      css('h1').text(fontSize: 4.rem).box(margin: EdgeInsets.unset),
    ],
    body: App(),
  ) );
}
```

```
runApp(Document(
  title: 'Dart Quotes',
  lang: 'en',
  meta: {
    "description": "A collection of cool Dart quotes. Built for FullStackFlutter Conference.",
  },
  styles: [
    // Root styles
    css('html, body')
      .text(fontFamily: const FontFamily.list([FontFamily('Roboto'), FontFamilies.sansSerif]))
      .box(width: 100.percent, minHeight: 100.vh)
      .box(margin: EdgeInsets.zero, padding: EdgeInsets.zero)
      .background(color: Color.hex('#F7F7F7')),
    css('h1').text(fontSize: 4.rem).box(margin: EdgeInsets.unset),
  ],
  // Include text font
  StyleRule.fontFace(fontFamily: "Roboto", url: "/fonts/Roboto-Regular.ttf"),
  StyleRule.fontFace(fontFamily: "Roboto", fontStyle: FontStyle.italic, url: "/fonts/Roboto-Italic.ti
  // Include icon font
  StyleRule.fontFace(fontFamily: "icomoon", url: "/fonts/icomoon.ttf"),
  css(' [class^="icon-"], [class*=" icon-"] ').text(fontFamily: FontFamily('icomoon')),
  css('.icon-heart-o:before').raw({'content': r'\e900'}),
  css('.icon-heart:before').raw({'content': r'\e901'}),
],
body: App(),
));
}
```

```
<style>

html, body {
    font-family: 'Roboto', sans-serif;
    width: 100%;
    min-height: 100vh;
    padding: 0;
    margin: 0;
    background-color: #F7F7F7;
}

h1 {
    font-size: 4rem;
    margin: unset;
}

@font-face {
    font-family: "Roboto";
    src: url(/fonts/Roboto-Regular.ttf);
}
@font-face {
    font-family: "Roboto";
    font-style: italic;
    src: url(/fonts/Roboto-Italic.ttf);
}

@font-face {
    font-family: "icomoon";
    src: url(/fonts/icomoon.ttf);
}
[class^="icon-"], [class*=" icon-"] {
    font-family: 'icomoon';
}
.icon-heart-o:before {
    content: "\e900";
}
.icon-heart:before {
    content: "\e901";
}

</style>
```



### app.dart

```
import 'package:jaspr/jaspr.dart';
import 'package:jaspr_router/jaspr_router.dart';

import 'pages/home_page.dart';
import 'pages/quote_page.dart';

class App extends StatelessWidget {

  @override
  Iterable<Component> build(BuildContext context) sync* {
    yield div(classes: 'main', [
      Router(
        routes: [
          Route(path: '/', builder: (context, state) {
            return HomePage();
          }),
          Route(path: '/quote/:quoteId', builder: (context, state) {
            return QuotePage(id: state.params['quoteId']!);
          }),
        ],
      ),
    ]);
  }
}
```

## home\_page.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/server.dart';

class HomePage extends StatelessWidget {
  const HomePage({super.key});

  @override
  Iterable<Component> build(BuildContext context) sync* {
    yield header([
      img(src: 'images/quote.jpg', alt: "Quote symbol", width: 100),
      h1([text('Dart Quotes')]),
    ]);

    yield ul([
      ...
    ]);
  }
}
```

## **firebase.dart**

```
import 'dart:io';

import 'package:dart_quotes/data/quote.dart';
import 'package:jaspr/jaspr.dart';

import 'package:firebase_admin/firebase_admin.dart';
import 'package:firebase_admin/firestore.dart';

class FirebaseService {
    static FirebaseService instance = FirebaseService();

    late final FirebaseAdminApp adminApp = FirebaseAdminApp.initializeApp(
        'dart-quotes',
        Credential.fromServiceAccount(File('service-account.json')) ,
    );

    late final Firestore adminFirestore = Firestore(adminApp);

    Future<List<Quote>> loadQuotes() async {
        var query = await adminFirestore.collection('quotes').get();
        return query.docs.map((doc) {
            return Quote.fromData(doc.id, doc.data());
        }).toList();
    }
}
```

## home\_page.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/server.dart';

class HomePage extends StatelessWidget {
  const HomePage({super.key});

  @override
  Iterable<Component> build(BuildContext context) sync* {
    yield header([
      img(src: 'images/quote.jpg', alt: "Quote symbol", width: 100),
      h1([text('Dart Quotes')]),
    ]);

    yield ul([
      ...
    ]);
  }
}
```



Name	Status	Type	Initiator	Size	Time	Waterfall
quotes.schultek.de	200	docum...	Other	5.3 kB	117 ms	
quote.jpg	200	jpeg	(index):1	10.2 kB	47 ms	
github-badge.svg	200	svg+xml	(index):1	524 B	44 ms	
Roboto-Regular.ttf	200	font	(index):2	92.2 kB	76 ms	
Roboto-Italic.ttf	200	font	(index):2	97.6 kB	86 ms	
favicon.ico	200	x-icon	Other	2.6 kB	41 ms	

## quote\_page.dart

```
import 'package:jaspr/server.dart';

class QuotePage extends AsyncStatelessComponent {
  const QuotePage({required this.id, super.key});

  final String id;

  @override
  Stream<Component> build(BuildContext context) async* {
    var quote = await FirebaseService.instance.getQuoteById(id);

    yield nav([
      a(href: "/", [text('Home')]),
    ]);

    yield div(classes: "center", [
      div(classes: "quote-container", [
        img(classes: "quotes-start", src: 'images/quote.jpg', alt: "Starting quote symbol", width: 100),
        h1([text(quote.quote)]),
        p([text(quote.author)]),
        QuoteLikeButton(id: id, initialCount: quote.likes.length),
        img(classes: "quotes-end", src: 'images/quote.jpg', alt: "Ending quote symbol", width: 100),
      ])
    ]);
  }
}
```

### **firebase.dart**

```
class FirebaseService {  
  ...  
  
  Stream<Quote?> getQuoteById(String id) async* {  
    var doc = await adminFirestore.doc('quotes/$id').get();  
    if (doc.exists) {  
      yield Quote.fromData(doc.id, doc.data()!);  
    } else {  
      yield null;  
    }  
  }  
}
```

## quote\_page.dart

```
import 'package:jaspr/server.dart';

class QuotePage extends AsyncStatelessComponent {
  const QuotePage({required this.id, super.key});

  final String id;

  @override
  Stream<Component> build(BuildContext context) async* {
    var quote = await FirebaseService.instance.getQuoteById(id).single;

    yield nav([
      a(href: "/", [text('Home')]),
    ]);

    yield div(classes: "center", [
      div(classes: "quote-container", [
        img(classes: "quotes-start", src: 'images/quote.jpg', alt: "Starting quote symbol", width: 100),
        h1([text(quote.quote)]),
        p([text(quote.author)]),
        QuoteLikeButton(id: id, initialCount: quote.likes.length),
        img(classes: "quotes-end", src: 'images/quote.jpg', alt: "Ending quote symbol", width: 100),
      ])
    ]);
  }
}
```

## quote\_like\_button.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/jaspr.dart';

class QuoteLikeButton extends StatelessWidget {
  const QuoteLikeButton({required this.id, required this.initialCount});

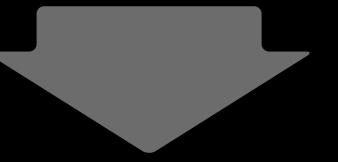
  final String id;
  final int initialCount;

  @override
  Iterable<Component> build(BuildContext context) sync* {
    yield StreamBuilder(
      stream: FirebaseService.instance.getQuoteById(id),
      builder: (context, snapshot) sync* {
        int count = snapshot.data?.likes.length ?? initialCount;
        bool? hasLiked = snapshot.data?.likes.contains(FirebaseService.instance.getUserId());
        yield button(
          classes: "quote-like-btn${hasLiked == true ? ' active' : ''}",
          [
            span(classes: "icon-heart${hasLiked ?? false ? '' : '-o'}", []),
            text('$count'),
          ],
        );
      });
  }
}
```

### quote\_like\_button.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/jaspr.dart';

@client
class QuoteLikeButton extends StatelessWidget {
  const QuoteLikeButton({required this.id, required this.initialCount});
```



### quote\_like\_button.client.dart.js

```
@override
Iterable<Component> build(BuildContext context) sync* {
  yield StreamBuilder(
    stream: FirebaseService.instance.getQuoteById(id),
```

## **firebase.dart**

```
import 'package:dart_firebase_admin/dart_firebase_admin.dart';

import 'package:dart_firebase_admin/firestore.dart';

class FirebaseService {
  ...

  Stream<Quote?> getQuoteById(String id) async* {
    var doc = await adminFirestore.doc('quotes/$id').get();
    if (doc.exists) {
      yield Quote.fromData(doc.id, doc.data()!);
    } else {
      yield null;
    }
  }
}
```

## **firebase.dart**

```
@Import.onServer('package:dart_firebase_admin/dart_firebase_admin.dart',
  show: [#FirebaseAdminApp, #Credential])
@Import.onServer('package:dart_firebase_admin/firestore.dart',
  show: [#Firestore])
import 'firebase.imports.dart';

class FirebaseService {
  ...

  Stream<Quote?> getQuoteById(String id) async* {
    var doc = await adminFirestore.doc('quotes/$id').get();
    if (doc.exists) {
      yield Quote.fromData(doc.id, doc.data()!);
    } else {
      yield null;
    }
  }
}
```

## **firebase.dart**

```
@Import.onServer('package:dart_firebase_admin/dart_firebase_admin.dart',
  show: [#FirebaseAdminApp, #Credential])
@Import.onServer('package:dart_firebase_admin/firestore.dart',
  show: [#Firestore])
import 'firebase.imports.dart';

class FirebaseService {
  ...

  Stream<Quote?> getQuoteById(String id) async* {
    if (!kIsWeb) {
      var doc = await adminFirestore.doc('quotes/$id').get();
      if (doc.exists) {
        yield Quote.fromData(doc.id, doc.data()!);
      } else {
        yield null;
      }
    } else {
    }
  }
}
```

```
@Import.onWeb('package:firebase_core/firebase_core.dart',
  show: [#Firebase, #FirebaseApp])
@Import.onWeb('package:cloud_firestore/cloud_firestore.dart',
  show: [#Firestore])
@Import.onServer('package:dart_firebase_admin/dart_firebase_admin.dart',
  show: [#FirebaseAdminApp, #Credential])
@Import.onServer('package:dart_firebase_admin/firestore.dart',
  show: [#Firestore])
import 'firebase.imports.dart';

class FirebaseService {
  ...

  Stream<Quote?> getQuoteById(String id) async* {
    if (!kIsWeb) {
      var doc = await adminFirestore.doc('quotes/$id').get();
      if (doc.exists) {
        yield Quote.fromData(doc.id, doc.data()!);
      } else {
        yield null;
      }
    } else {
      ...
    }
  }
}
```

## firebase.dart

```
@Import.onWeb('package:firebase_core/firebase_core.dart',
  show: [#Firebase, #FirebaseApp])
@Import.onWeb('package:cloud_firestore/cloud_firestore.dart',
  show: [#Firestore])
@Import.onServer('package:dart_firebase_admin/dart_firebase_admin.dart',
  show: [#FirebaseAdminApp, #Credential])
@Import.onServer('package:dart_firebase_admin/firestore.dart',
  show: [#Firestore])
import 'firebase.imports.dart';

class FirebaseService {
  ...

  Stream<Quote?> getQuoteById(String id) async* {
    if (!kIsWeb) {
      var doc = await adminFirestore.doc('quotes/$id').get();
      if (doc.exists) {
        yield Quote.fromData(doc.id, doc.data()!);
      } else {
        yield null;
      }
    } else {
      var snapshots = FirebaseFirestore.instance.collection('quotes').doc(id).snapshots();
      await for (var doc in snapshots) {
        yield Quote.fromData(doc.id, doc.data()!);
      }
    }
  }
}
```

## quote\_like\_button.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/jaspr.dart';

class QuoteLikeButton extends StatelessWidget {
  const QuoteLikeButton({required this.id, required this.initialCount});

  ...

  @override
  Iterable<Component> build(BuildContext context) sync* {
    ...

    yield button(
      classes: "quote-like-btn${hasLiked == true ? ' active' : '-o'}",
      [
        span(classes: "icon-heart${hasLiked ?? false ? '' : '-o'}", []),
        text('$count'),
      ],
    );
  }
}
```

## quote\_like\_button.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/jaspr.dart';

class QuoteLikeButton extends StatelessWidget {
  const QuoteLikeButton({required this.id, required this.initialCount});

  ...

  @override
  Iterable<Component> build(BuildContext context) sync* {
    ...

    yield button(
      classes: "quote-like-btn${hasLiked == true ? ' active' : ''}",
      onClick: () {
        FirebaseService.instance.toggleLikeOnQuote(id, !hasLiked);
      },
    ) ,
    [
      span(classes: "icon-heart${hasLiked ?? false ? '' : '-o'}"),
      text(' $count'),
    ],
  );
}

}
```

## quote\_like\_button.dart

```
import 'package:dart_quotes/data/firebase.dart';
import 'package:jaspr/jaspr.dart';

class QuoteLikeButton extends StatelessWidget {
  const QuoteLikeButton({required this.id, required this.initialCount});

  ...

  @override
  Iterable<Component> build(BuildContext context) sync* {
    ...

    yield button(
      classes: "quote-like-btn${hasLiked == true ? ' active' : ''}",
      onClick: () {
        FirebaseService.instance.toggleLikeOnQuote(id, !hasLiked);
        if (!hasLiked) {
          ConfettiService.instance.show(emojis: ['❤️', '🎉']);
        }
      },
      [
        span(classes: "icon-heart${hasLiked ?? false ? '' : '-o'}", []),
        text(' $count'),
      ],
    );
  }
}
```

## js-confetti ts

0.12.0 • Public • Published 5 months ago

[Readme](#)

[Code](#) Beta

[0 Dependencies](#)

[...](#)

[npm package](#) 0.12.0 [downloads](#) 27k/week [jsDelivr](#) 4M hits/month [minzipped size](#) 2.41 kB

# JavaScript Confetti library

- 💥 Supports emojis as confetti
- ⚡ Zero dependencies used
- 🦄 Works without any config, yet configurable
- ✖ Has TypeScript typings
- ✳️ Confetti speed adapts to user screen width

Links: [GitHub](#) | [NPM](#) | [Demo](#)

## Install

You can install library from NPM using yarn or npm

```
yarn add js-confetti
```

Alternatively you can download script from CDN

```
<script src="https://cdn.jsdelivr.net/npm/js-confetti@latest/dist/js-confetti.js">
```

and then access `JSConfetti` global variable

## Usage

## js-confetti ts

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## Usage

### quote\_page.dart

```
yield Head(  
  children: [  
    script(src: "https://cdn.jsdelivr.net/npm/js-confetti@latest/dist/js-confetti.js",  
          defer: true, []),  
  ],  
) ;
```

and then access `JSConfetti` global variable

## Usage

Initialize instance of `JSConfetti` class and call `addConfetti` method

```
import JSConfetti from 'js-confetti'

const jsConfetti = new JSConfetti()

jsConfetti.addConfetti()
```

*NOTE* `new JSConfetti()` creates HTML Canvas element and adds it to page, so call it only once!

## Customise confetti

Use emojis as confetti:

```
jsConfetti.addConfetti({
  emojis: ['🌈', '⚡', '💥', '✨', '💫', '🌸'],
})
```

### confetti\_interop.dart

```
import 'dart:js_interop';

extension type JSConfetti._(JSObject _) {
  external JSConfetti();
  external void addConfetti([ConfettiOptions? options]);
  static JSConfetti instance = JSConfetti();
  void show({List<String>? emojis}) {
    addConfetti(ConfettiOptions(emojis: emojis.jsify()));
  }
}

extension type ConfettiOptions._(JSObject o) implements JSObject {
  external ConfettiOptions({JSAny? emojis});
}
```

and then access `JSConfetti` global variable

## Usage

Initialize instance of `JSConfetti` class and call `addConfetti` method

```
import JSConfetti from 'js-confetti'

const jsConfetti = new JSConfetti()

jsConfetti.addConfetti()
```

*NOTE* `new JSConfetti()` creates HTML Canvas element and adds it to page, so call it only once!

## Customise confetti

Use emojis as confetti:

```
jsConfetti.addConfetti({
  emojis: ['🌈', '⚡', '💥', '✨', '💫', '🌸'],
})
```

### confetti\_interop.dart

```
import 'dart:js_interop';

extension type JSConfetti._(JSObject _) {
  external JSConfetti();
  external void addConfetti([ConfettiOptions? options]);
  static JSConfetti instance = JSConfetti();
  void show({List<String>? emojis}) {
    addConfetti(ConfettiOptions(emojis: emojis.jsify()));
  }
}
```

### confetti.dart

```
extension-type ConfettiOptions._(JSObject o) implements JSObject {
  external package:flutter_jsinterop_dart.show(List<String>? emojis);
}
@Import.onWeb('confetti_interop.dart', show: [#JSConfetti])
import 'confetti.imports.dart';

class ConfettiService {
  static ConfettiService instance = ConfettiService();

  void show({List<String>? emojis}) {
    JSConfetti.instance.show(emojis: emojis);
  }
}
```

# What we have seen.

- Create a new project
- Building components and ui using HTML in Dart
- Styling using CSS in Dart
- Using meta tags for SEO
- @client components
- Platform specific @Imports
- Integrating firebase plugins  
(both server & client)
- Integrating external js libraries

The background of the image features a dark blue color with subtle, flowing, wavy patterns that create a sense of depth and movement.

<https://quotes.schultek.de>



# Introducing Jaspr

## Darts first full stack web framework

Kilian Schulte  
@schultek



https://quotes.schultek.de

# Dart Quotes

Really good to see more pushing the backend Dart space forwards.  
@elliothesp

2024 will be the year of Dart everywhere 🚀  
@dillontheDev

There's never been a better time for you to contribute to OSS, and for your company to fund OSS.  
@SuprDeclarative

Watch out, JS!  
@luke\_pighetti

Network tab showing resource loading details:

Name	Status	Type	Initiator	Size	Time	Waterfall
quotes.schultek.de	200	docu...	Other	5.2 kB	236 ms	
quote.jpg	200	jpeg	(index):1	10.2 kB	51 ms	
github-badge.svg	200	svg+...	(index):1	458 B	51 ms	
Roboto-Regular.ttf	200	font	(index):2	92.1 kB	80 ms	
Roboto-Italic.ttf	200	font	(index):2	97.6 kB	75 ms	
favicon.ico	200	x-icon	Other	2.6 kB	47 ms	

6 requests | 208 kB transferred | 357 kB resources | Finish: 397 ms | DOMContentLoaded: 261 ms