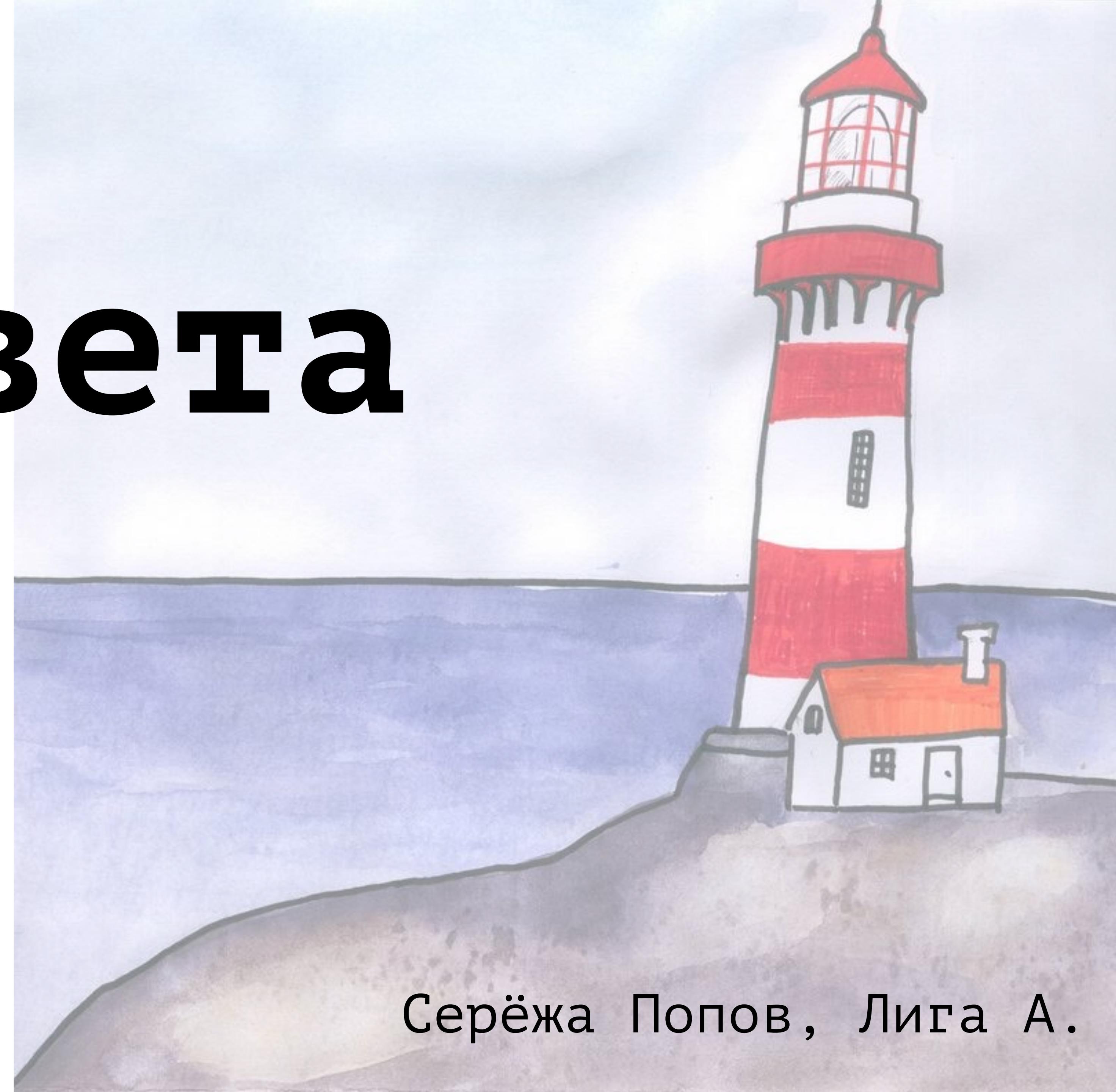


# дом Света

История в двух томах

Серёжа Попов, Лига А.



# Два тома

## ○ Проблема



# Два тома

- Проблема
- Инструмент решения проблемы



# Том 1. Проблема



# Наши проблемы

- ➊ Забыли про HTML

# SPA

# Наши проблемы

- Забыли про HTML
- **Общий уровень качества**



89



54



48



89

доступность



54

производительность



48

SEO

89

54

48



89

SEO



54



48



89

SEO



54

доступность



48



89

SEO



54

доступность



48

производительность

# Наши проблемы

- Забыли про HTML
- Общий уровень качества
- **Непонимание важности качества для SEO и доступности**

**Бейонсе обвинили в использовании  
темной магии. Ох...**



# Beyoncé's Parkwood Entertainment sued over website accessibility

**A lawsuit claims beyonce.com violates the Americans With Disabilities Act by failing to accommodate visually impaired users**



▲ Beyoncé. Photograph: Evan Agostini/AP

Качественные характеристики  
учитываются поисковыми  
алгоритмами

**В чём причина?**



# Причины

- Незнание фундаментальных основ

# Причины

- Незнание фундаментальных основ
- **Невозможность убедиться в правильности своей работы**

# Причины

- Незнание фундаментальных основ
- Невозможность убедиться в правильности своей работы
- **Пофигизм и последствия**

# Причины

- Незнание фундаментальных основ
- Невозможность убедиться в правильности своей работы
- Пофигизм и последствия
- **Искажение реальности**

# Тестирование вёрстки

- Кроссбраузерность
- Кросплатформенность
- PixelPerfect
- Валидность
- Linting
- SEO

# Тестирование вёрстки

- Кроссбраузерность
- Кросплатформенность
- ~~PixelPerfect~~
- Валидность
- Linting
- SEO

# Тестирование вёрстки

- Кроссбраузерность
- Кросплатформенность
- ~~PixelPerfect~~
- Валидность
- ~~Linting~~
- SEO

# Тестирование вёрстки

- Кросбраузерность
- Кросплатформенность
- PixelPerfect
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# Тестирование вёрстки

- Кросбраузерность
- Кросплатформенность
- PixelPerfect
- Валидность
- Linting
- SEO

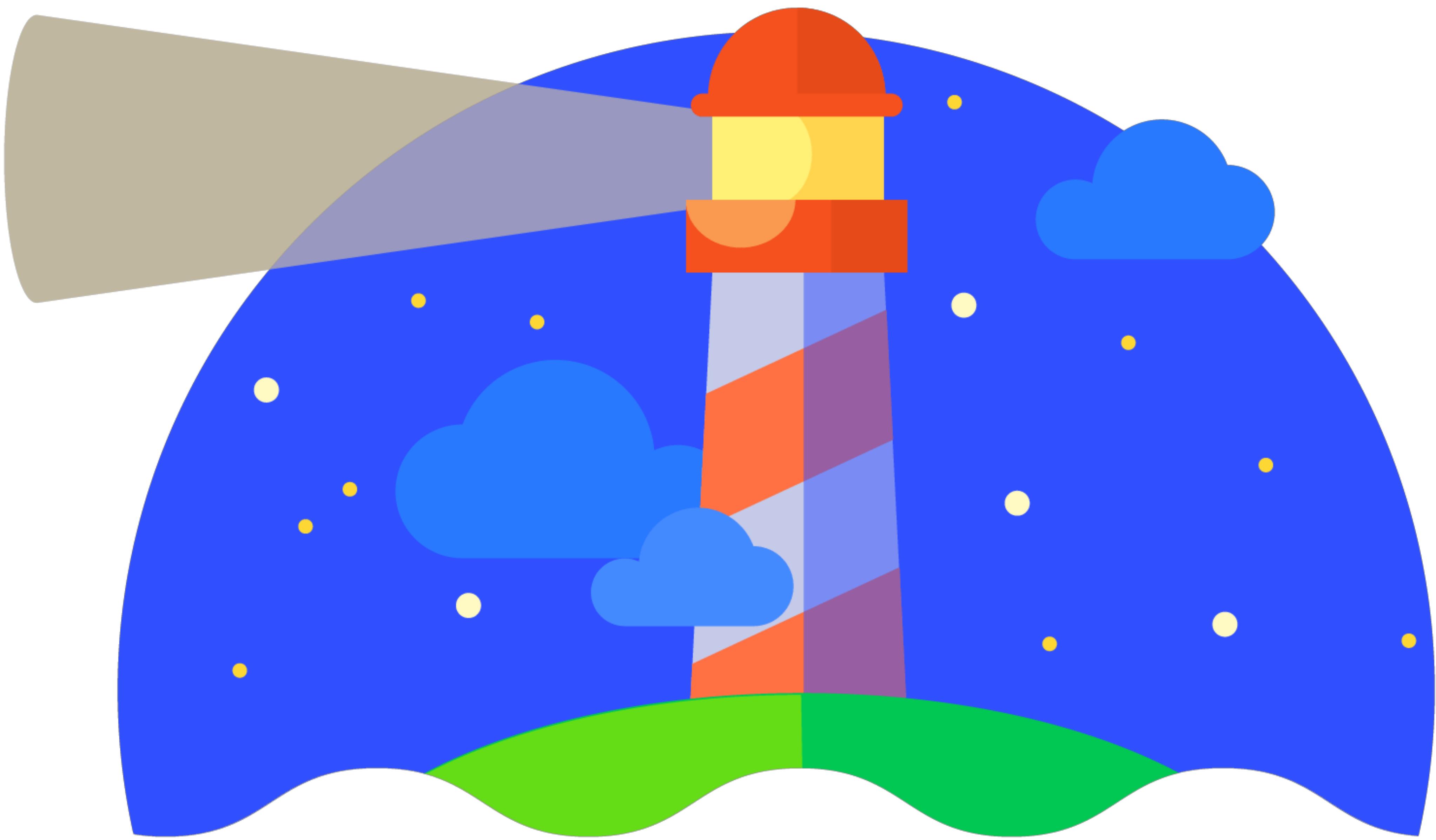
# Тестирование вёрстки

- Валидность
- SEO

# **Качественные характеристики**

# Тестирование вёрстки

- Валидность
- SEO
- Иерархия заголовков
- Семантика
- Доступность

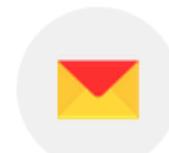


# **Tom 2. Lighthouse**

# Способ 1



Введите поисковый запрос или URL



Елена Попова

Елена Попова

Входящие — ...

Официальный...

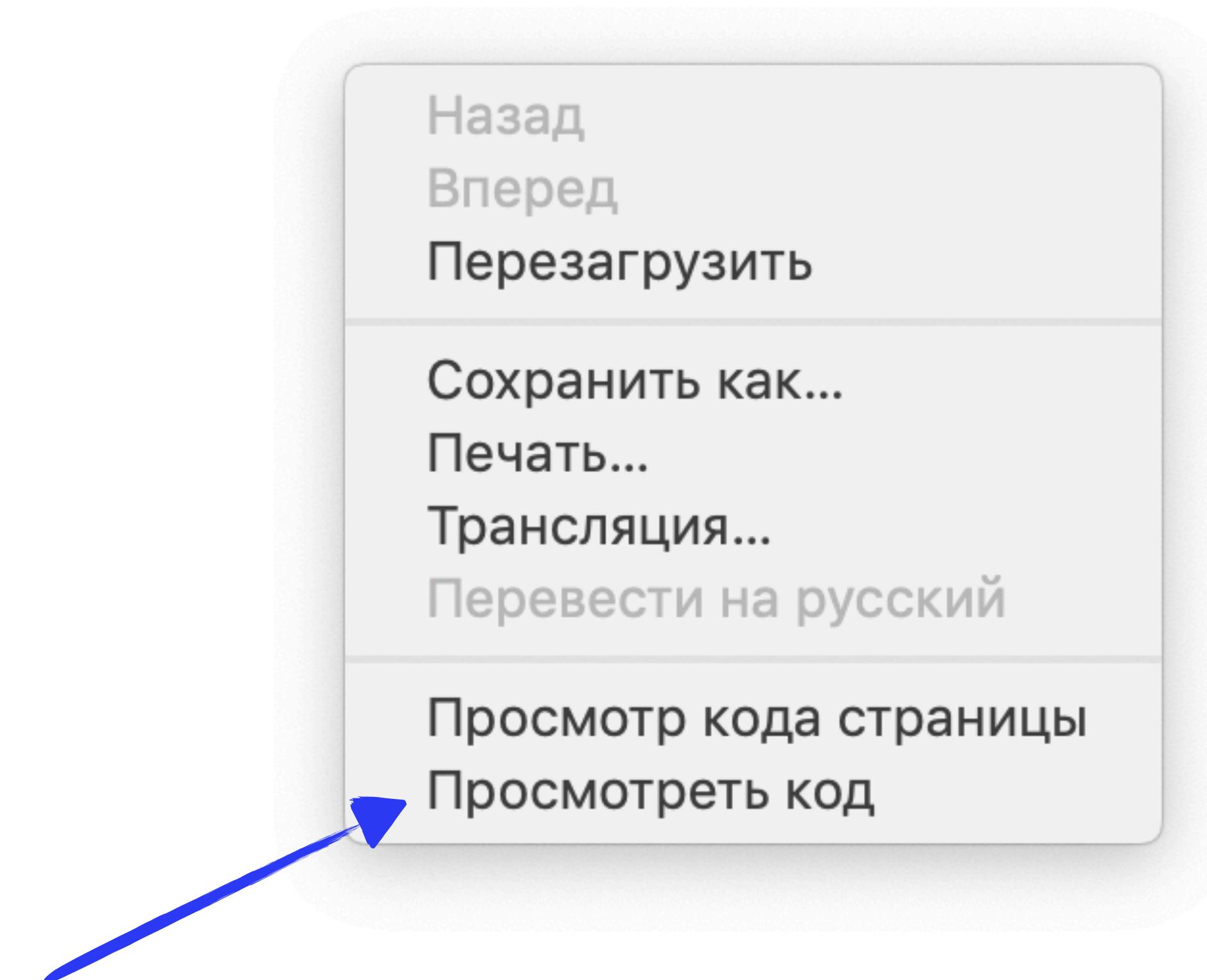


Орфограф

Гидрометцент...

Добавить ярлык







Elements    Console    Sources    Network    Performance    Memory    Application    Security    **Audits**

```
<!doctype html>
<html lang="ru">
  <head>...</head>
  <body>
    <div></div>
    <div class="bx-crm-widget-form-config-wrapper">...</div>
    <div>...</div>
    <noscript>...</noscript>
    <header class="header link-color-top">...</header>
    <button class="nav-toggler js-nav-toggler link-color-top" type="button">...</button>
    <nav class="main-nav js-nav">...</nav>
    <main class="page-content">
      <section class="section intro js-section" data-name="top" id="about-us">...</section> == $0
      <section class="section js-section projects" data-name="projects" id="projects">...</section>
      <section class="section js-section work" data-name="work" id="work">...</section>
      <section class="section js-section advantages" data-name="advantages" id="advantages">...</section>
      <section class="section js-section our-team" data-name="team" id="team">...</section>
      <section class="section js-section reviews" data-name="reviews" id="reviews">...</section>
    </main>
    <footer class="page-footer js-section" data-name="contacts" id="contacts">...</footer>
    <div class="partners-club">...</div>
    <script src="scripts/libs/scroll-lock.min.js"></script>
    <script src="scripts/libs/smoothscroll.js"></script>
    <script src="scripts/libs/autosize.min.js"></script>
    <script src="scripts/libs/svg4everybody.min.js"></script>
    <script src="scripts/libs/swiper.min.js"></script>
    <script src="scripts/libs/simplebar.js"></script>
    <script src="scripts/script.v26.js"></script>
    <script>...</script>
    <script type="text/javascript" id="...</script>
    <noscript>...</noscript>
```

Styles    Computed    Event Listeners

Filter

```
element.style { } .section { position: relative; overflow: hidden; } .intro { display: -webkit-box; display: -ms-flexbox; display: flex; -webkit-box-pack: center; -ms-flex-pack: center; justify-content: center; padding-top: 110px; padding-bottom: 135px; -webkit-box-sizing: border-box; box-sizing: border-box; min-height: 100vh; } article, aside, footer, header, hgroup, section { display: block; } Inherited from body
```

```
body { margin: 0; font-family: "plex", "Arial", sans-serif; }
```



## Audits

Identify and fix common problems that affect your site's performance, accessibility, and user experience. [Learn more](#)

Device

Mobile

Desktop

Audits

Performance

Progressive Web App

Best practices

Accessibility

SEO

Throttling

Simulated Fast 3G, 4x CPU Slowdown

Applied Fast 3G, 4x CPU Slowdown

No throttling

Clear storage

**Run audits**



Performance



Accessibility



Best Practices



SEO

Score scale: 0-49 50-89 90-100

## Performance

### Metrics

First Contentful Paint

0.9 s

First Meaningful Paint

1.2 s

Speed Index

6.5 s

First CPU Idle

6.8 s

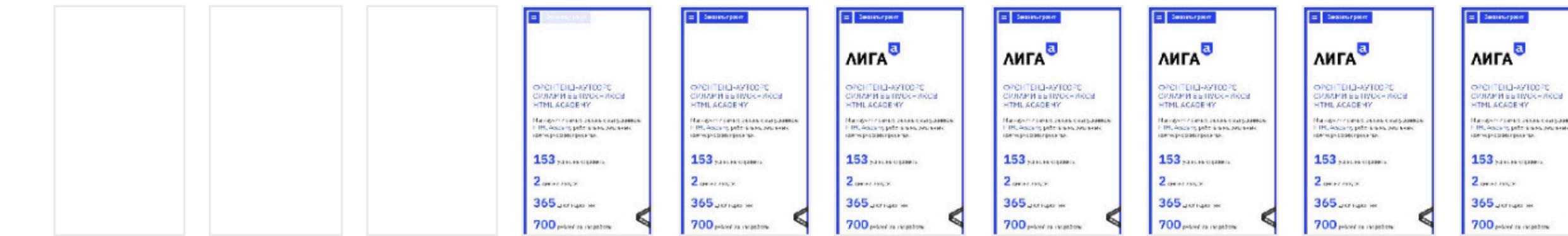
Time to Interactive

8.8 s

Estimated Input Latency

300 ms

[View Trace](#)



Values are estimated and may vary.

### Opportunities

These optimizations can speed up your page load.

Opportunity	Estimated Savings
1 Defer offscreen images	2.55 s
2 Properly size images	1.65 s
3 Preconnect to required origins	0.3 s
4 Defer unused CSS	0.15 s

### Diagnostics

More information about the performance of your application.

1 Serve static assets with an efficient cache policy

40

45 resources found

# Способ 2

Last login: Wed Feb 6 17:38:34 on ttys000

Sergeys-MacBook-Pro:~ sergeypopov\$ npm install -g lighthouse

N



Last login: Wed Feb 6 17:38:34 on ttys000

Sergeys-MacBook-Pro:~ sergeypopov\$ lighthouse https://liga-a.ru

**status** Evaluating: Uses HTTP/2 for its own resources +0ms  
**status** Evaluating: Uses passive listeners to improve scrolling performance +1ms

S

**status** Evaluating: Document has a meta description +0ms  
**status** Evaluating: Page has successful HTTP status code +0ms  
**status** Evaluating: Document uses legible font sizes +1ms  
**status** Evaluating: Links have descriptive text +1ms  
**status** Evaluating: Page isn't blocked from indexing +2ms  
**status** Evaluating: robots.txt is valid +2ms  
**status** Evaluating: Document has a valid `hreflang` +1ms  
**status** Evaluating: Document avoids plugins +0ms  
**status** Evaluating: Document has a valid `rel=canonical` +0ms  
**status** Evaluating: Page is mobile friendly +1ms  
**status** Evaluating: Structured data is valid +0ms  
**status** Generating results... +0ms

**ChromeLauncher** Killing Chrome instance 15665 +45ms

**Printer** html output written to /Users/sergeypopov/liga-a.ru\_2019-02-06\_17-48-55.report.html +185ms

**CLI** Protip: Run lighthouse with `--view` to immediately open the HTML report in your browser

**status** Evaluating: Uses HTTP/2 for its own resources +0ms

**status** Evaluating: Uses passive listeners to improve scrolling performance +1ms

s

**status** Evaluating: Document has a meta description +0ms

**status** Evaluating: Page has successful HTTP status code +0ms

**status** Evaluating: Document uses legible font sizes +1ms

**status** Evaluating: Links have descriptive text +1ms

**status** Evaluating: Page isn't blocked from indexing +2ms

**status** Evaluating: robots.txt is valid +2ms

**status** Evaluating: Document has a valid `hreflang` +1ms

**status** Evaluating: Document avoids plugins +0ms

**status** Evaluating: Document has a valid `rel=canonical` +0ms

**status** Evaluating: Page is mobile friendly +1ms

**status** Evaluating: Structured data is valid +0ms

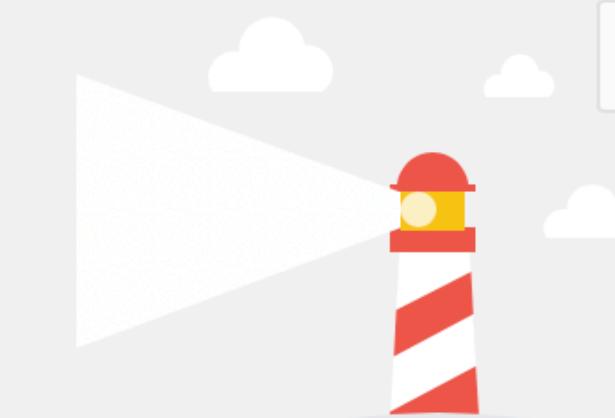
**status** Generating results... +0ms

**ChromeLauncher** Killing Chrome instance 15665 +45ms

**Printer** html output written to /Users/sergeypopov/liga-a.ru\_2019-02-06\_17-48-55.report.html +185ms

**CLI** Protip: Run lighthouse with `--view` to immediately open the HTML report in your browser

Sergeys-MacBook-Pro:~ sergeypopov\$ lighthouse https://liga-a.ru --view



Performance



Accessibility



Best Practices



SEO



Progressive Web App

Score scale: 90-100 50-89 0-49

## Performance

### Metrics

First Contentful Paint	1.1 s	First Meaningful Paint	1.4 s
Speed Index	4.0 s	First CPU Idle	6.3 s
Time to Interactive	6.8 s	Estimated Input Latency	120 ms



Values are estimated and may vary.



### Opportunities

These optimizations can speed up your page load.

Opportunity	Estimated Savings
1 Properly size images	1.86 s

**В чём разница?**

# Версии

- **Google Chrome 71 – Lighthouse 3.2.0**

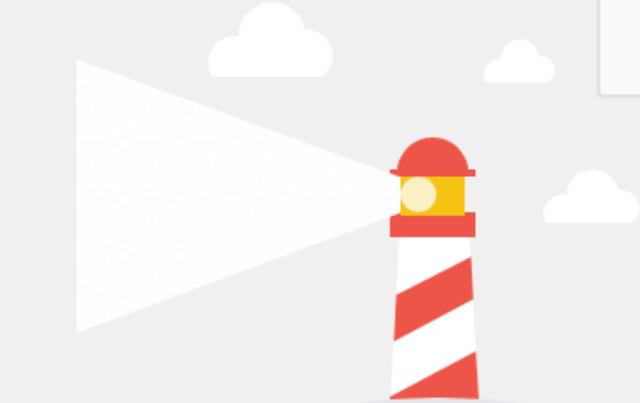
# Версии

- Google Chrome 71 – Lighthouse 3.2.0
- **Yandex.Браузер – 3.0.3**

# Версии

- Google Chrome 71 – Lighthouse 3.2.0
- Yandex.Браузер – 3.0.3
- **NPM пакет – Lighthouse 4.1.0**

**Как это решит проблемы?**



Performance



Accessibility



Best Practices



SEO



Progressive Web App

Score scale: 90-100 50-89 0-49

## Performance

### Metrics

First Contentful Paint

1.1 s

Speed Index

4.0 s

Time to Interactive

6.8 s

First Meaningful Paint

1.4 s

First CPU Idle

6.3 s

Estimated Input Latency

120 ms

Values are estimated and may vary.



### Opportunities

These optimizations can speed up your page load.

Opportunity

Estimated Savings

1 Properly size images

1.86 s

<https://liga-a.ru/>

Feb 6, 2019, 5:58 PM GMT+3

Emulated Nexus 5X, Simulated Slow 4G network



Performance



Accessibility



Best Practices



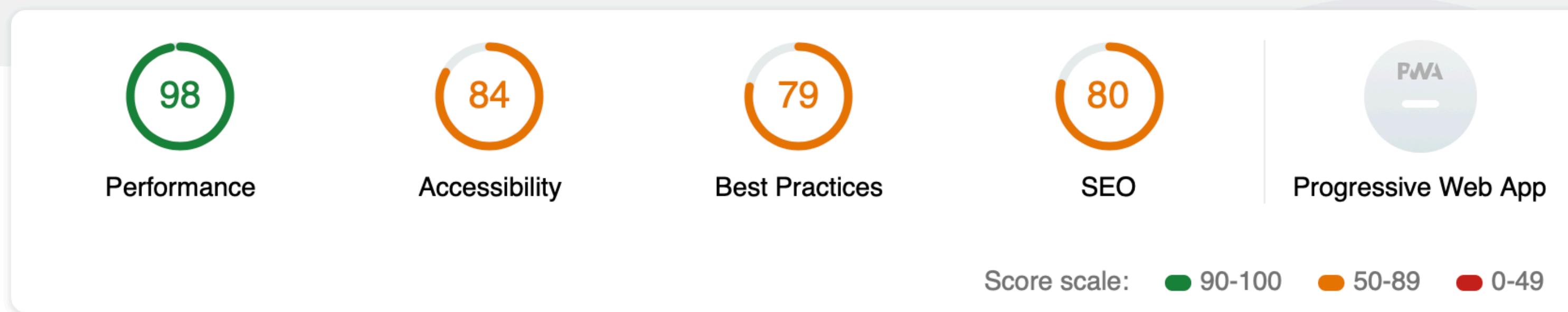
SEO



Progressive Web App

Score scale: 90-100 50-89 0-49

- **Зелёное** — отлично
- **Оранжевое** — нормально
- **Красное** — плохо
- **Серое** — невозможно применить или ошибка



## Performance

### Metrics

First Contentful Paint	1.5 s <span>✓</span>	First Meaningful Paint	1.7 s <span>✓</span>
Speed Index	1.8 s <span>✓</span>	First CPU Idle	2.7 s <span>✓</span>
Time to Interactive	2.8 s <span>✓</span>	Estimated Input Latency	180 ms <span>▲</span>



Values are estimated and may vary.



### Diagnostics

More information about the performance of your application.

1	Avoid an excessive DOM size	4,650 nodes <span>▲</span> <span>▼</span>
2	Serve static assets with an efficient cache policy	14 resources found <span>▲</span> <span>▼</span>
3	Minimize main-thread work	3.4 s <span>●</span> <span>▼</span>

Метрики Lighthouse –  
это не rocket science!

# **Производительность**

# Performance

74

## Metrics

First Contentful Paint

1.1 s ✓

Speed Index

4.0 s  ⓘ

Time to Interactive

6.8 s  ⓘ

First Meaningful Paint

1.4 s ✓

First CPU Idle

6.3 s  ⓘ

Estimated Input Latency

120 ms ▲



Values are estimated and may vary.

# Performance

## Metrics

First Contentful Paint marks the time at which the first text or image is painted.  
[Learn more.](#)

74

First Contentful Paint

1.1 s

Speed Index

4.0 s

Time to Interactive

6.8 s



First Meaningful Paint

1.4 s

First CPU Idle

6.3 s

Estimated Input Latency

120 ms

Values are estimated and may vary.

# Performance

## Metrics

First Contentful Paint marks the time at which the first text or image is painted.  
[Learn more.](#)

First Contentful Paint

1.1 s 

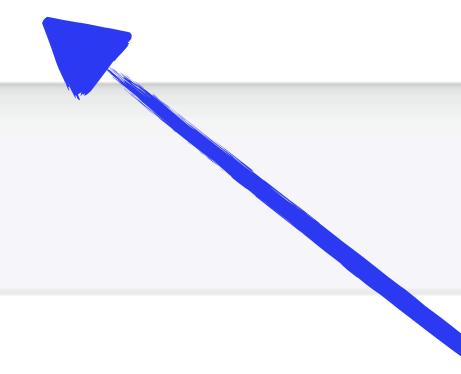
Speed Index

4.0 s 

Time to Interactive

6.8 s 

74



First Meaningful Paint

1.4 s 

First CPU Idle

6.3 s 

Estimated Input Latency

120 ms 

Values are estimated and may vary.

<https://developers.google.com/web/tools/lighthouse/audits/first-contentful-paint>

Missed the action at the 2018 Chrome Dev Summit? Catch up with our playlist on the Google Chrome Developers channel on YouTube. [Watch now.](#)

Overview  
▶ Scoring Guides  
Lighthouse v3 Migration Guide

Audit References  
▼ Performance  
Critical Request Chains  
Defer unused CSS  
Enable Text Compression  
Estimated Input Latency

[First Contentful Paint](#)  
First CPU Idle  
First Meaningful Paint  
Has Enormous Network Payloads  
Has multiple page redirects

JavaScript Bootup Time Is Too High

Keep Server Response Times Low

Minify CSS  
Offscreen Images  
Optimize Images

# First Contentful Paint



## Overview

Load is not a single moment in time – it's an experience that no one metric can fully capture. There are multiple moments during the load experience that can affect whether a user perceives it as "fast" or "slow".

--- [Paint Timing spec](#) ↗

First Contentful Paint (FCP) measures the time from navigation to the time when the browser renders the first bit of content from the DOM. This is an important milestone for users because it provides feedback that the page is actually loading.

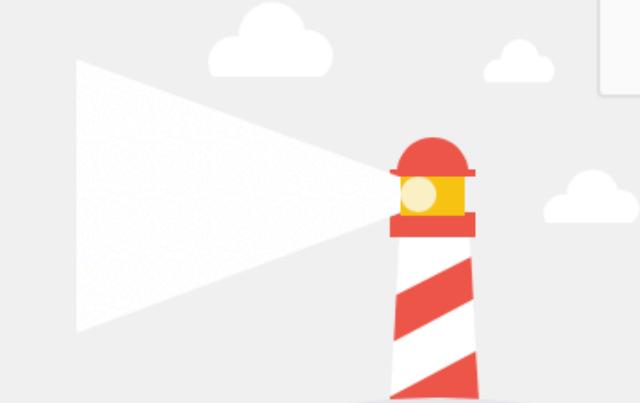
## Recommendations

To speed up First Contentful Paint, speed up the download time of resources or do less work that blocks the browser from rendering DOM content.

- Minimize the number of render-blocking external stylesheets and scripts upon which the page depends. See [Render-Blocking CSS](#) and [Loading Third-Party JavaScript](#).
- Use [HTTP Caching](#) to speed up repeat visits.

## Содержание

[Overview](#)  
[Recommendations](#)  
[Tracking FCP in the real world](#)  
[More information](#)  
[Feedback](#)



Performance



Accessibility



Best Practices



SEO



Progressive Web App

Score scale: 90-100 50-89 0-49

## Performance

### Metrics

First Contentful Paint

1.1 s

Speed Index

4.0 s

Time to Interactive

6.8 s

First Meaningful Paint

1.4 s

First CPU Idle

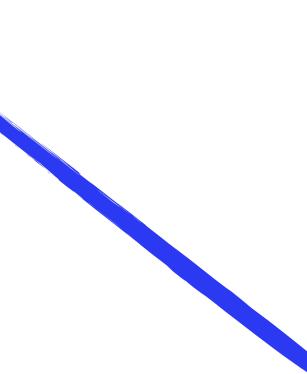
6.3 s

Estimated Input Latency

120 ms



Values are estimated and may vary.



### Opportunities

These optimizations can speed up your page load.

Opportunity

Estimated Savings

1 Properly size images

1.86 s

## ⊕ Opportunities

These optimizations can speed up your page load.

Opportunity	Estimated Savings
1 Properly size images	1.86 s ▾
2 Preconnect to required origins	0.31 s ▾
3 Defer unused CSS	0.19 s ▾
4 Serve images in next-gen formats	0.19 s ▾

## 📋 Diagnostics

More information about the performance of your application.

1 Serve static assets with an efficient cache policy	41 resources found ▲
2 Minimize main-thread work	5.2 s ▲
3 Reduce JavaScript execution time	1.7 s ⓘ
4 Avoid an excessive DOM size	906 nodes ⓘ
5 Minimize Critical Requests Depth	8 chains found

## ✓ Passed audits

13 audits ▾

## ⊕ Opportunities

These optimizations can speed up your page load.

Opportunity	Estimated Savings
1 Properly size images	1.86 s ▾
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## ✓ Passed audits

13 audits ▾

## Opportunity

## Estimated Savings

## 1 Properly size images

1.86 s ^

Serve images that are appropriately-sized to save cellular data and improve load time. [Learn more.](#)

URL	Size (KB)	Potential Savings (KB)
...team-page/lera@2x.webp (liga-a.ru)	114 KB	84 KB
...team-page/dima@2x.webp (liga-a.ru)	99 KB	73 KB
...team-page/bro@2x.webp (liga-a.ru)	92 KB	68 KB
...team-page/ira@2x.webp (liga-a.ru)	77 KB	57 KB
...team-page/sergey@2x.webp (liga-a.ru)	23 KB	17 KB
...team-page/tema@2x.webp (liga-a.ru)	9 KB	6 KB
/img/agima-club@2x.webp (liga-a.ru)	8 KB	5 KB
/img/logo-html.webp (liga-a.ru)	5 KB	3 KB
/img/logo-css.webp (liga-a.ru)	4 KB	2 KB

## Opportunity

## Estimated Savings

## 1 Properly size images

1.86 s ^

Serve images that are appropriately-sized to save cellular data and improve load time. [Learn more.](#)

URL	Size (KB)	Potential Savings (KB)
 ...team-page/lera@2x.webp (liga-a.ru)	114 KB	84 KB
 ...team-page/dima@2x.webp (liga-a.ru)	99 KB	73 KB
 ...team-page/bro@2x.webp (liga-a.ru)	92 KB	68 KB
 ...team-page/ira@2x.webp (liga-a.ru)	77 KB	57 KB
 ...team-page/sergey@2x.webp (liga-a.ru)	23 KB	17 KB
 ...team-page/tema@2x.webp (liga-a.ru)	9 KB	6 KB
 /img/agima-club@2x.webp (liga-a.ru)	8 KB	5 KB
 /img/logo-html.webp (liga-a.ru)	5 KB	3 KB
 /img/logo-css.webp (liga-a.ru)	4 KB	2 KB

### 3 Defer unused CSS

0.19 s ^

Remove unused rules from stylesheets to reduce unnecessary bytes consumed by network activity. [Learn more](#).

URL	Size (KB)	Potential Savings (KB)
html.bx-ios.bx-ios-fix-frame-focus,.bx-ios.bx-ios-fix-frame-focus body{-webkit-overflow-scrolling:to... } ...	12 KB	11 KB
/styles/style.v50.css (liga-a.ru)	17 KB	10 KB
:root{--ui-icon-size-xs:26px;--ui-icon-size-sm:31px;--ui-icon-size-md:39px;--ui-icon-size-lg:47px} ...	7 KB	7 KB
.bx-crm-widget-form-config-sidebar{position:fixed;left:-3850px;height:100%;width:369px; ... } ...	2 KB	2 KB

## ⊕ Opportunities

These optimizations can speed up your page load.

Opportunity	Estimated Savings
1 Properly size images	1.86 s ▾
2 Preconnect to required origins	0.31 s ▾
3 Defer unused CSS	0.19 s ▾
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## ✓ Passed audits

13 audits ▾

## ⊕ Opportunities

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Opportunity	Estimated Savings
1 Properly size images	1.86 s ▾
2 Preconnect to required origins	0.31 s ▾
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5 Minimize Critical Requests Depth	8 chains found
✓ Passed audits	13 audits ▾

✓ Passed audits

13 audits ^

- |    |   |                           |   |   |
|----|---|---------------------------|---|---|
| 1  | Eliminate render-blocking resources           | Potential savings of 0 ms | ✓ | ▼ |
| 2  | Defer offscreen images                        |                           | ✓ | ▼ |
| 3  | Minify CSS                                    |                           | ✓ | ▼ |
| 4  | Minify JavaScript                             |                           | ✓ | ▼ |
| 5  | Efficiently encode images                     |                           | ✓ | ▼ |
| 6  | Enable text compression                       |                           | ✓ | ▼ |
| 7  | Server response times are low (TTFB)          | Root document took 110 ms | ✓ | ▼ |
| 8  | Avoid multiple page redirects                 |                           | ✓ | ▼ |
| 9  | Preload key requests                          |                           | ✓ | ▼ |
| 10 | Use video formats for animated content        |                           | ✓ | ▼ |
| 11 | Avoids enormous network payloads              | Total size was 1,105 KB   | ✓ | ▼ |
| 12 | User Timing marks and measures                |                           | ✓ | ▼ |
| 13 | All text remains visible during webfont loads |                           | ✓ | ▼ |

# Доступность

# Accessibility

These checks highlight opportunities to [improve the accessibility of your web app](#). Only a subset of accessibility issues can be automatically detected so manual testing is also encouraged.

95

## Elements Describe Contents Well

These are opportunities to make your content easier to understand for a user of assistive technology, like a screen reader.

1 <frame> or <iframe> elements do not have a title

⚠️ ▾

🔍 Additional items to manually check

12 audits ▾

✓ Passed audits

20 audits ▾

⊖ Not applicable

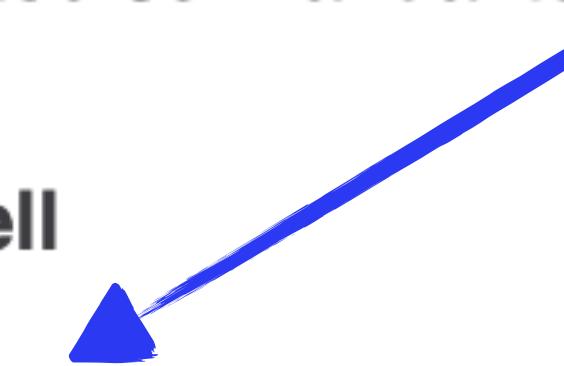
13 audits ▾

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 Passed audits		20 audits ▾
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## Additional items to manually check

12 audits

These items address areas which an automated testing tool cannot cover. Learn more in our guide on [conducting an accessibility review](#).

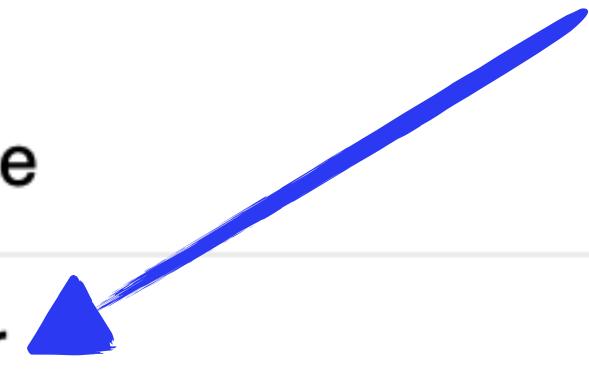
- 1 [accesskey] values are unique
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- 3 Interactive controls are keyboard focusable
- 4 Interactive elements indicate their purpose and state
- 5 The user's focus is directed to new content added to the page
- 6 User focus is not accidentally trapped in a region
- 7 Custom controls have associated labels
- 8 Custom controls have ARIA roles
- 9 Visual order on the page follows DOM order
- 10 Offscreen content is hidden from assistive technology
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- 12 HTML5 landmark elements are used to improve navigation



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<http://yoksel.github.io/html-tree/>

## Введите код:

```
3cg73.js');  
</script>  
  
<iframe name="_ym_native" frameborder="0" style="opacity: 0; width: 0px;  
height: 0px; position: absolute; left: 100%; bottom: 100%; border: 0px  
!important;"></iframe><ym-measure class="ym-viewport" style="display:  
block; top: 0px; right: 0px; bottom: 0px; left: 0px; position: fixed; transform:  
translate(0px, -100%); transform-origin: 0px 0px;"></ym-measure><ym-  
measure class="ym-zoom" style="bottom: 100%; position: fixed; width:  
100vw;"></ym-measure></body>
```

Уровни: **14**

Похоже, в классах используется БЭМ-нотация, но что-то пошло не так.

## Структура заголовков:

# Фронтенд-аутсорс силами выпускников HTML Academy

## Главное о нас

### А ещё, вы получаете

Команду по цене услуги

Гибкость при выборе стека

Кстати, стек, который мы любим

## Наши проекты

## Наш рабочий процесс

Как это выглядит для вас?

## Структура разметки:

BODY  
|---DIV  
|---DIV.bx-crm-widget-form-config-wrapper

|---DIV.bx-crm-widget-form-config-sidebar

|---DIV.bx-crm-widget-form-config-sidebar-inner

|---DIV.bx-crm-widget-form-config-sidebar-header

|---SPAN.bx-crm-widget-form-config-sidebar-hamburger

|---SPAN.bx-crm-widget-form-config-sidebar-hamburger-item

|---SPAN.bx-crm-widget-form-config-sidebar-message

|---SPAN.bx-crm-widget-form-config-sidebar-message-item

|---DIV.bx-crm-widget-form-config-sidebar-rollup

|---SPAN.bx-crm-widget-form-config-sidebar-rollup-item

|---SPAN.bx-crm-widget-form-config-sidebar-close

|---SPAN.bx-crm-widget-form-config-sidebar-close-item

|---DIV.bx-crm-widget-form-config-sidebar-info

|---DIV

|---DIV.bx-crm-widget-form-config-sidebar-chat-container

|---DIV.bx-crm-widget-form-config-sidebar-chat-border

|---DIV.bx-crm-widget-form-config-sidebar-logo

|---A

|---SPAN.bx-crm-widget-form-config-sidebar-logo-text

|---SPAN.bx-crm-widget-form-config-sidebar-logo-bx

|---SPAN.bx-crm-widget-form-config-sidebar-logo-24

|---DIV

|---DIV.b24-widget-button-shadow

|---DIV

|---A.b24-widget-button-social-item

|---I

|---SPAN.b24-widget-button-social-tooltip

|---DIV.b24-widget-button-wrapper

b24-widget-button-position-bottom-right b24-widget-visible

|---DIV.b24-widget-button-item

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</script>
```

```
<iframe name="_ym_native" frameborder="0" style="opacity: 0; width: 0px;  
height: 0px; position: absolute; left: 100%; bottom: 100%; border: 0px  
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## Структура заголовков:

**H1** Фронтенд-аутсорс силами выпускников  
HTML Academy

**H2** Главное о нас

**H3** А ещё, вы получаете

**H3** Команду по цене услуги

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b24-widget-button-position-bottom-right b24-widget-visible

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<https://validator.w3.org/nu/>

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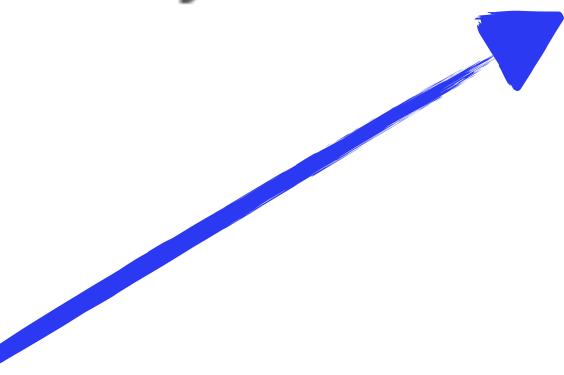
12 audits A small grey arrow pointing down, indicating a dropdown menu.

**Passed audits**

20 audits A small grey arrow pointing down, indicating a dropdown menu.

**Not applicable**

13 audits A small grey arrow pointing down, indicating a dropdown menu.



# **Лучшие практики**

## Best Practices



1 Browser errors were logged to the console



2 Displays images with incorrect aspect ratio



### ✓ Passed audits

13 audits 

1 Avoids Application Cache



2 Uses HTTPS



3 Uses HTTP/2 for its own resources



4 Uses passive listeners to improve scrolling performance



5 Avoids `document.write()`



6 Links to cross-origin destinations are safe



7 Avoids requesting the geolocation permission on page load



8 Page has the HTML doctype



9 Avoids front-end JavaScript libraries with known security vulnerabilities



10 Detected JavaScript libraries



11 Avoids requesting the notification permission on page load



12 Avoids deprecated APIs



# SEO

# SEO

These checks ensure that your page is optimized for search engine results ranking. There are additional factors Lighthouse does not check that may affect your search ranking. [Learn more](#).

100

## Additional items to manually check

2 audits 

Run these additional validators on your site to check additional SEO best practices.

1 Page is mobile friendly 

2 Structured data is valid 

## Passed audits

10 audits 

1 Has a `<meta name="viewport">` tag with `width` or `initial-scale`  

2 Document has a `<title>` element  

3 Document has a meta description  

4 Page has successful HTTP status code  

5 Links have descriptive text  

6 Page isn't blocked from indexing  

7 robots.txt is valid  

8 Document has a valid hreflang  

9 Document uses legible font sizes  

# Решение проблем

## ○ Самопроверки

# Решение проблем

- Самопроверки
- **Незнание базовых основ**

Lighthouse не научит  
вас верстать

# Чек-лист

- Lighthouse
- CSS Tree
- Validator

# Lighthouse bot

нет, это не чат-бот



## All checks have passed

2 successful checks

[Hide all checks](#)



**Lighthouse** — Passed. New Lighthouse score would be 100/100.

[Details](#)



**continuous-integration/travis-ci/pr** — The Travis CI build passed

[Details](#)



## This branch has no conflicts with the base branch

Merging can be performed automatically.

[Merge pull request](#)



You can also open this in [GitHub Desktop](#) or view [command line instructions](#).

<https://github.com/ebidel/lighthousebot>

[https://web.dev/fast/using-lighthouse-bot-to-set-a-  
performance-budget](https://web.dev/fast/using-lighthouse-bot-to-set-a-performance-budget)

# Итого

- **Lighthouse прост как для новичка, так и для специалиста**

# Итого

- Lighthouse прост как для новичка, так и для специалиста
- **Lighthouse не только проверка, но и знания**

# Итого

- Lighthouse прост как для новичка, так и для специалиста
- Lighthouse не только проверка, но и знания
- **Включите это в свой чек-лист!**

Давайте делать  
**качественно!**

# Спасибо !

Серёжа Попов

[fb.com/sergeytovarov](https://fb.com/sergeytovarov)

[twitter.com/sergeytovarov](https://twitter.com/sergeytovarov)

