

INTRO

Please find below top-level checklist that I'm using for investigating sort of issues on <https://payever.org/>.

In this document you will find also references, notes, comments about discovered issues.

All issues reports are high-level bug reports with short description and attached video/photo materials.

I did basic check for almost all sections of website and skipped authentication testing as far as this section related to the different URL.

Also, I made quick API check and security issues investigation for the web application. All information you will in the relevant sections.

Kindly ask you to read all information carefully and make assumption that each reported issue can be investigated more deeper from different sides like a business or technical or logical point of views.

For this assessment I was using some automation tools and scripts that helped me speed up process of testing web resource and discover unexpected behavior of website on different platforms and devices.

1. Functional Testing

1. Functional Testing	
1.1. User Interface Testing	
	Verify that all links are clickable and lead to the correct pages.
	Ensure buttons are functional and perform their intended actions.
	Check that images on slides are loading correctly and displayed at the right quality.
	Validate text content for spelling, grammar, and clarity.
1.2. Form Testing	
	Ensure all form fields accept appropriate input types (e.g., text, email, numbers).
	Test form validation messages for correct error reporting.
	Validate that form submissions behave as expected (e.g., correct data submission, appropriate confirmation messages).
	Check if required fields are marked and enforced.
1.3. Navigation Testing	
	Ensure the main navigation menu works and links to the correct sections.
	Test for breadcrumb functionality and accuracy.
	Validate that any dropdown menus work correctly on both desktop and mobile.
1.4. Authentication Testing	
	Verify user registration functionality. (Not checked but required)
	Check login and logout functionalities. (Not checked but required)
	Ensure password recovery works as intended. (Not checked but required)
	Validate session management (e.g., timeout, session expiration). (Not checked but required)
1.5. Content Testing	
	Check dynamic content updates (sliders, animations) for accuracy.
	Ensure multilingual content works
	Validate the presence and functionality of multimedia elements (videos, audio), player's controls.

2. Non-Functional Testing

2. Non-Functional Testing	
2.1. Performance Testing	
	Test page loading speed (using tools like Lighthouse, GTmetrix or WebPageTest).
	Validate resource usage (browser performance).
2.2. Responsiveness Testing	
	Ensure the website is responsive across different screen sizes (desktop, tablet, mobile).
	Check layout and formatting on various devices (iOS, Android, different browsers).
	Validate touch functionalities like swipe and pinch-to-zoom on mobile.
2.3. Cross-Browser Testing	
	Test website functionality in various browsers (Chrome, Firefox, Safari, Edge).
	Check for consistent user experiences across all supported browsers.
<u>2.4. Security Testing</u>	
	Do some manual security checks.
	Do security checks by automation tools (e.g. OWASP)
	Test user roles and permissions for restricted areas. (Not checked but required)
2.5. Usability Testing	
	Ensure the website is easy to navigate and intuitive.
	Collect user feedback on the overall experience.
	Validate accessibility features (screen reader compatibility, alt texts for images).

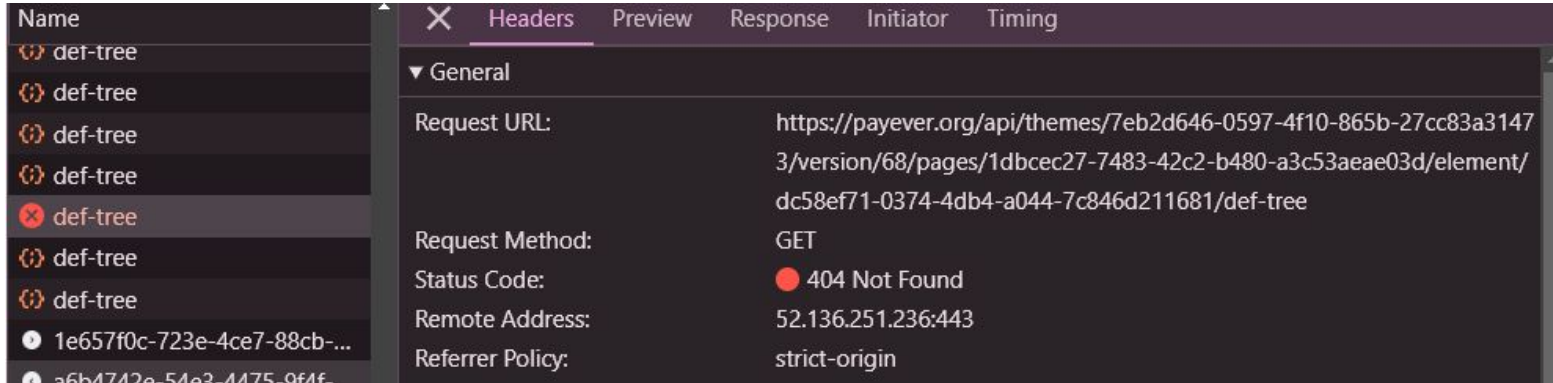
1.1. User Interface Testing

User interface tested was completed by manual investigation of the web site.

I did not find critical issues for :

desktop browsers **except**:

1. Issues with loading themes from the server (Windows 10 , Chrome Version 130.0.6723.70 + Firefox 131.0.3 (64-bit))



1.1. User Interface Testing (continue_2)

2. Navigation for some footer elements is broken. When user trying to open footer links after redirecting to the page section that was opened via footer link native navigation is not working. Please check reported [issue: "footer link is not opening after redirecting to page sections via footer link"](#)
3. Design and order of navigation elements is mixed. User can be confused when after clicking e.g. 'Products' link in the footer links section. Slider design should be reviewed and improved for better conversions.
4. UI animation is very heavy and it makes navigation is very complex and focus oriented not on exact goal but on awaiting for discovering exact place of required UI elements. On mobile device web site works very laggy and for some links UI/UX should be improved for preventing decreasing conversions.
5. For mobile devices some pages not presented and web app shows ugly messages like "Check reported issue "Checkout page is not available for mobile devices" . Reported another [issue: "checkout page is not available for mobile devices"](#)
6. For mobile and desktop browsers exist issue with language selector (footer section). Please check reported [issue "Language selector did not appear on second try."](#)

1.1. User Interface Testing (bug reports_1)

Title: “Checkout page is not available for mobile devices”

Steps to reproduce:

1. Open <https://payever.org/> on mobile device.
2. Scroll down to footer section.
3. Open ‘Checkout Solutions’ menu.
4. Tap on ‘Checkout’ link.
5. Check result.

Expected result

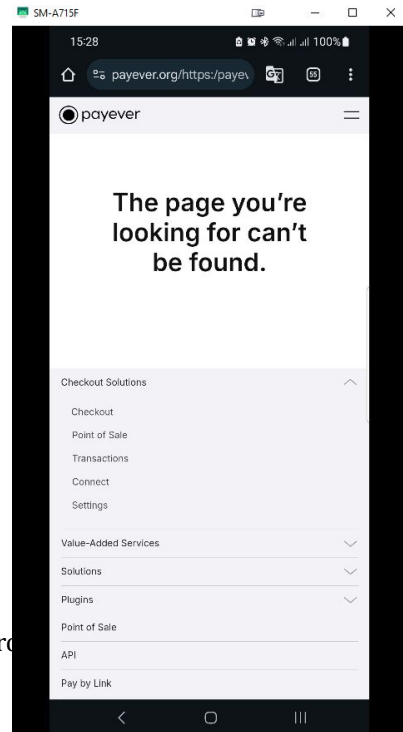
1. ‘Checkout’ link is opening ‘Checkout’ page. (According to notification on the mobile phone screen it's a page)
2. If design is the same as for desktop web app version , ‘Checkout’ link should open same slider screen as for desktop browser.

Actual result

1. ‘Checkout’ link is not opening ‘Checkout’ page. (according to notification on the screen)
2. Mobile device shows for the Chrome browser : “The page you're looking for can't be found.”
3. Route for footer link was built in wrong way. Please fire the UI/UX designer and all your QA team.
More deeper investigation of link shows that it has unexpectable references to some fake env. Final links was built from 2 different references: <https://payever.org/https://payever-site-2.payever.site/checkout#mobile-section-products>

Additional information:

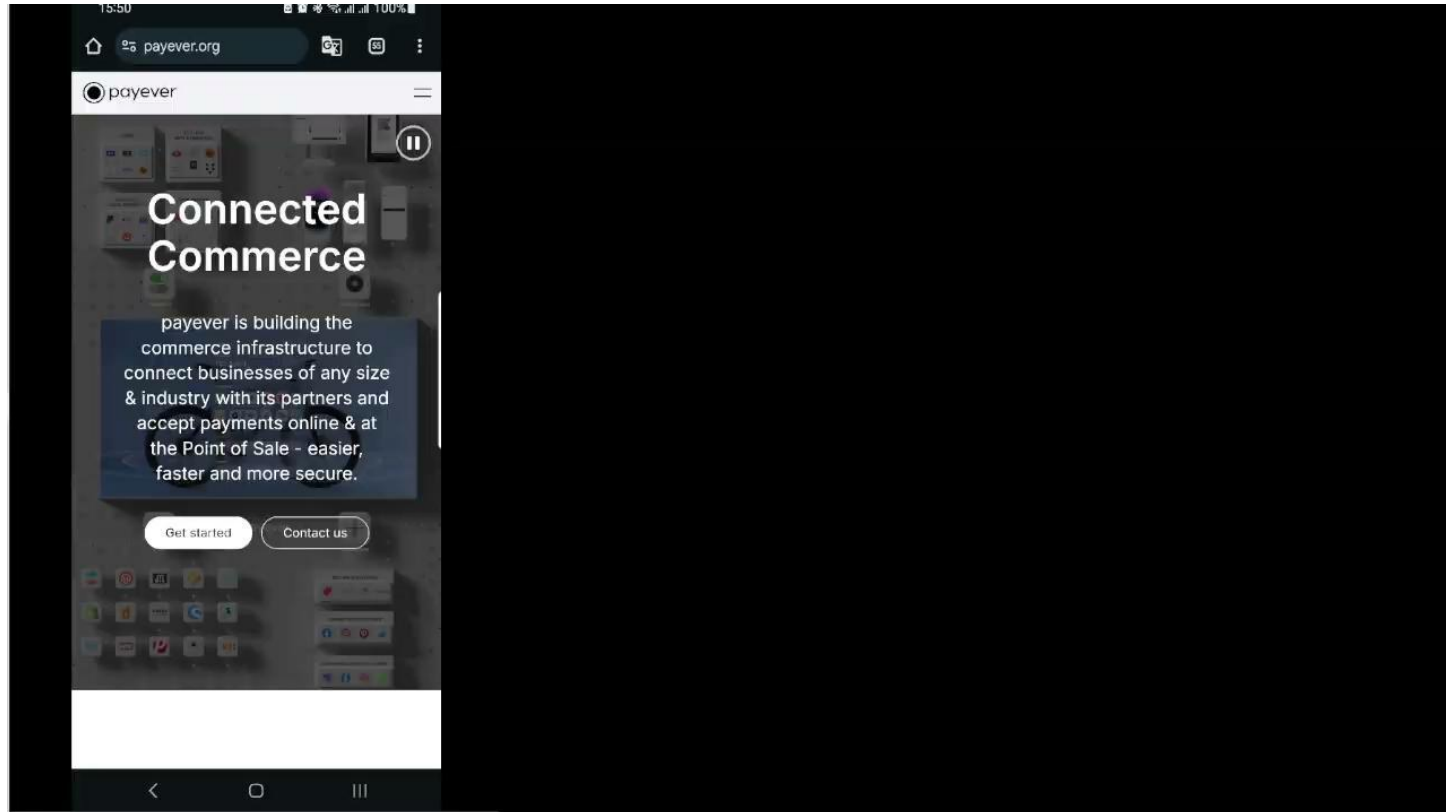
- **Mobile browser:** Chrome128.0.6613.128
- **Operating system:** Android13; SM-A715F Build/TP1A.220624.014
- **Link from mobile device:** <https://payever.org/https://payever-site-2.payever.site/checkout#mobile-section-products>
- **Frequency:** Consistently reproducible



Please find attachment and the next slide

checkout_page_is_not_available_for_mobile_devices.mp4

[Link: checkout page is not available for mobile devices.mp4](#)



1.1. User Interface Testing (bug reports_2)

Title: “Footer link is not opening after redirecting to page sections via footer link”

Steps to reproduce:

1. Open <https://payever.org/> with desktop browser.
2. Scroll down to footer section.
3. Click on ‘Products’ link .
4. After redirecting to the ‘Products’ section go down and click on ‘Products’ link again.
5. Check result.

Expected result

1. ‘Products’ link is redirecting user to ‘Products’ slider.

Actual result

1. ‘Products’ link is not working when user used some footer links before
2. Mobile device shows for the Chrome browser : “The page you're looking for can't be found.”
3. Route for footer link was builded in wrong way.

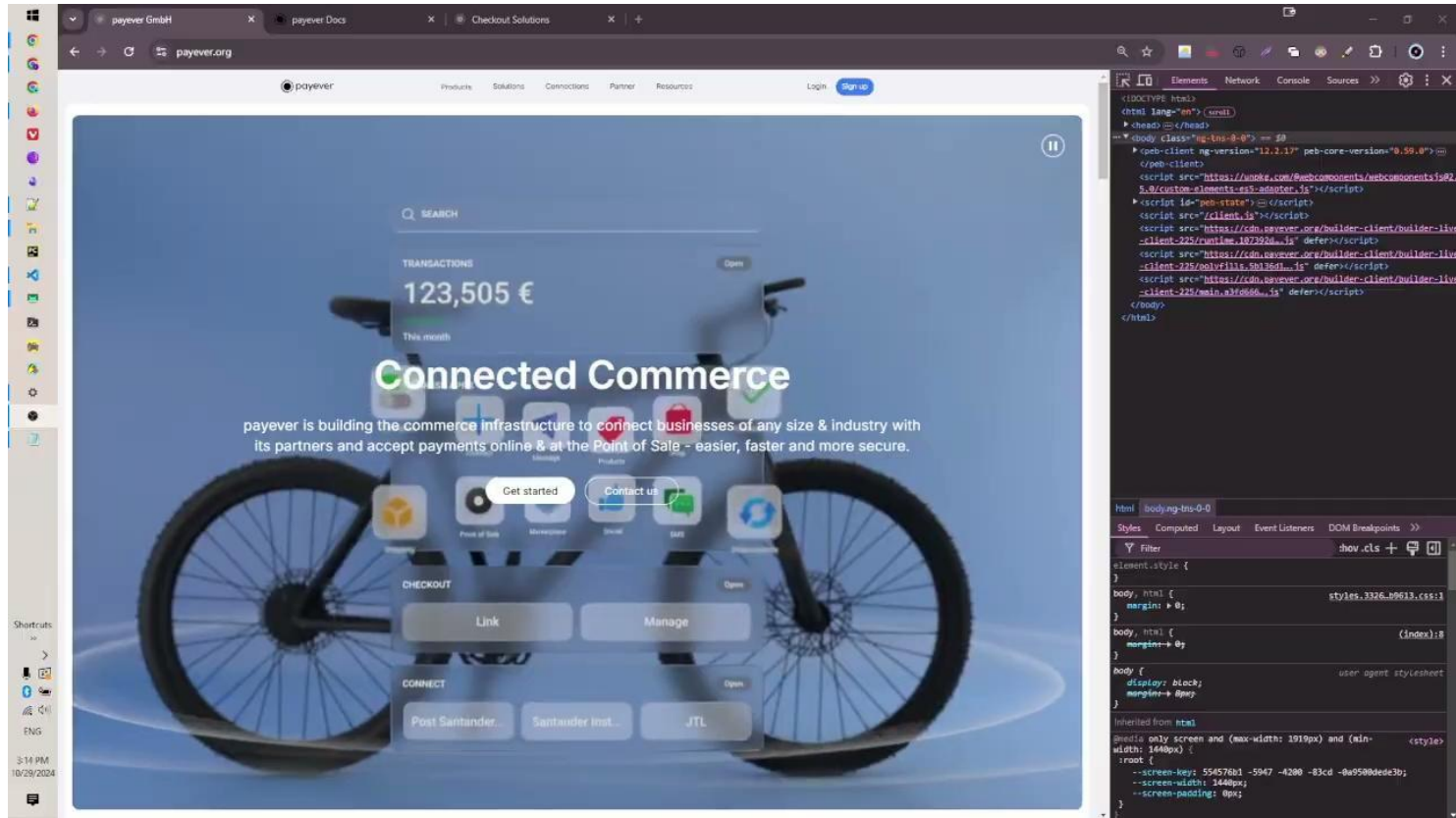
Additional information:

- This issue related to routes issue and all footer links should be redesigned.
- More deeper investigation of the DOM shows that desktop browser has some specific technical issue with transferring back-end code on front-end side.
- **Browser:** Chrome Version 130.0.6723.70
- **Operating system:** Windows 10 , x64
- **Frequency:** Consistently reproducible

Please find attachment and the next slide.

footer_link_is_not_opening_after_redirecting_to_page_sections_via_footer_link.mp4

[Link: footer link is not opening after redirecting to page sections via footer link.mp4](#)



1.1. User Interface Testing (bug reports_3)

Title: “Language selector did not appear on second try.”

Steps to reproduce:

1. Open <https://payever.org/> with desktop browser.
2. Scroll down to footer section.
3. Click on language selector link.
4. Open it and select different language that you have now.
5. When website language changed go to the language selector and open language menu again.
6. Check that language selector appears.

Expected result

1. Language selector shows the set of available languages.

Actual result

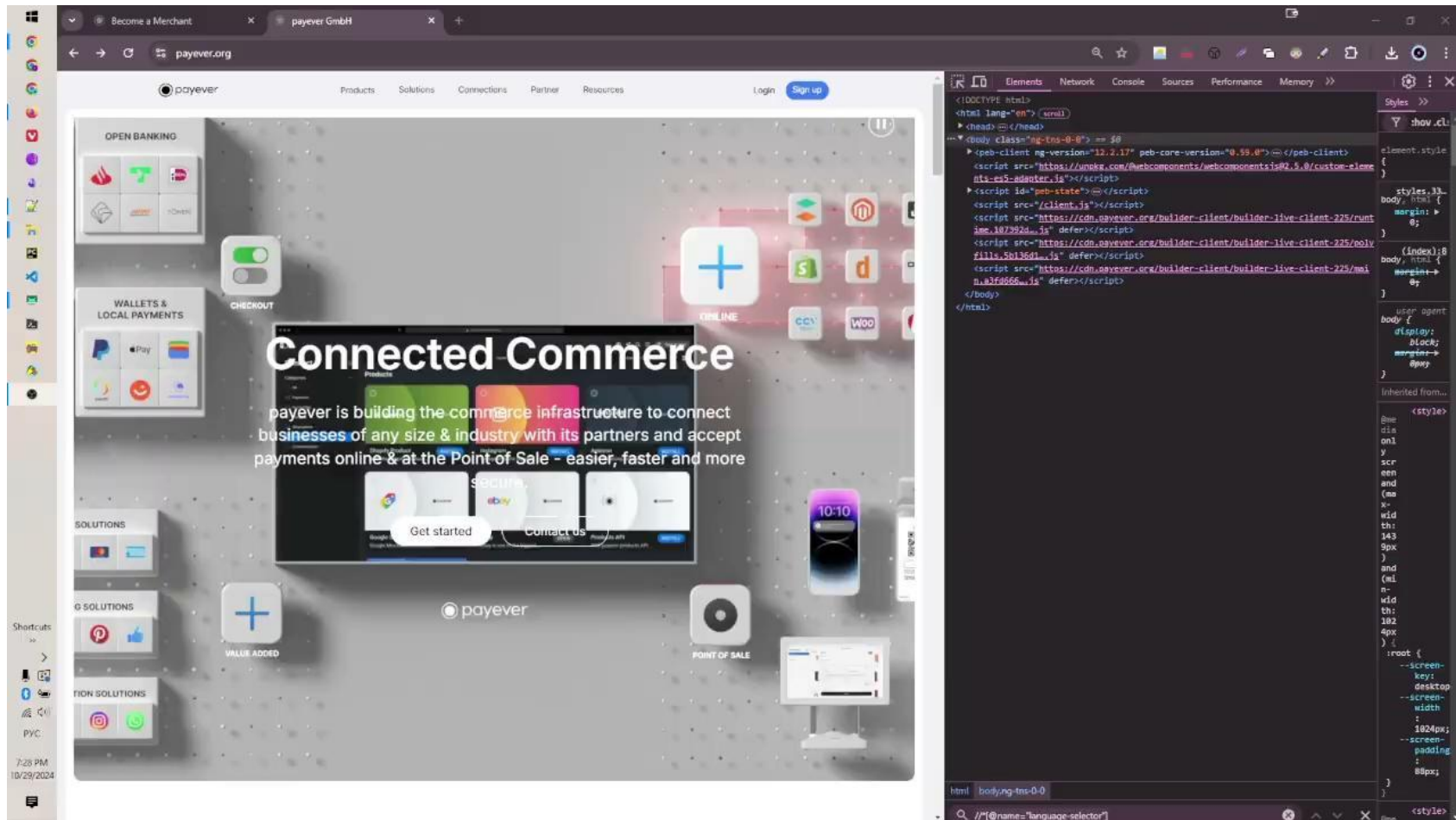
1. Language selector did not appear on second try.

Additional information:

- This issue potentially related to misconfiguration design. Language selector identifies via locator `//*[@name="language-selector"]` first time and after second try language selector is not possible to identify using same selector.
- **Platforms:** Desktop / Mobile
- **Browsers:** Chrome (desktop/mobile) , Firefox (desktop)
- **Operating system:** Windows 10 , x64
- **Frequency:** Consistently reproducible

Please find attachment and the next slide.

Link: Language selector did not appear on second try.



1.1. User Interface Testing (bug reports_4)

Title: “Language selector not responding after first selection”

Steps to reproduce:

1. Open <https://payever.org/> on with desktop/mobile browser.
2. Scroll down to footer section.
3. Click on language selector link.
4. Open it and select different language that you have now.
5. When website language changed go to the language selector and open language menu again.
6. Click on same language that was selected first time.
7. Check the website behavior.

Expected result

1. Language selector shows the set of available languages.

Actual result

1. Language selector did not appear on second try.

Additional information:

- This issue potentially related to misconfiguration design. Language selector identifies via locator `//*[@name="language-selector"]` first time and after second try the language selector is not possible to identify using same selector.
- **Platforms:** Desktop / Mobile
- **Browsers:** Chrome (desktop/mobile) , Firefox (desktop)
- **Operating system:** Windows 10 , x64 / Android OS v.13
- **Frequency:** Consistently reproducible

Please find attachment and the next slide.

Language selector not responding after first selection

[Link: Language selector not responding after first selection](https://payever.org/)

The screenshot displays the payever.org website in a browser window. The website has a dark header with the payever logo and navigation links: Produkte, Lösungen, Integrationen, Partner, Ressourcen, Einloggen, and a blue button labeled 'Jetzt starten'. The main content area features a large blue banner with the text 'Händler, Finanzinstitut oder Partner.' and two buttons: 'Jetzt starten' and 'Kontaktieren'. Below the banner, there is a grid of five columns: Produkte, Lösungen, Integrationen, Partner, and Follow Us. Each column contains a list of links to various services and resources. At the bottom, there is a footer with copyright information, legal links (Impressum, Nutzungsbedingungen, Datenschutzerklärung), a language selector (Deutsch), and a 'created with payever' badge.

The code editor on the right shows the HTML structure of the page. The <body> tag has a class attribute with a value of 'ng-tms-0-0'. The <script> tags include references to the payever client and various scripts for the website's functionality. The <style> tag defines the layout and styling of the page, including the language selector.

```
<DOCTYPE html>
<html lang="en">
<head>
</head>
<body class="ng-tms-0-0" style="margin-right: 0px; overflow: visible;">
<script src="https://unpkg.com/@webcomponents/webcomponentsjs@2.5.0/custom-elements-es5-adapter.js"></script>
<script id="pwb-state"></script>
<script src="client.js"></script>
<script src="https://cdn.payever.org/builder-client/builder-live-client-225/run-time-187382d...js" defer></script>
<script src="https://cdn.payever.org/builder-client/builder-live-client-225/polyfills-5b136d...js" defer></script>
<script src="https://cdn.payever.org/builder-client/builder-live-client-225/main-3f4666...js" defer></script>
</body>
</html>
```

1.1. User Interface Testing (bug reports_5)

Title: “Become a Merchant link leads to invalid form”

Steps to reproduce:

1. Open <https://payever.org/> with desktop browser.
2. Open ‘Resource’ menu in the header section
3. Select ‘Become a Merchant’ option
4. Check the website behavior.

Expected result

1. Become a Merchant link leads to Become ‘a Merchant ’ page

Actual result

1. Become a Merchant link leads to invalid form

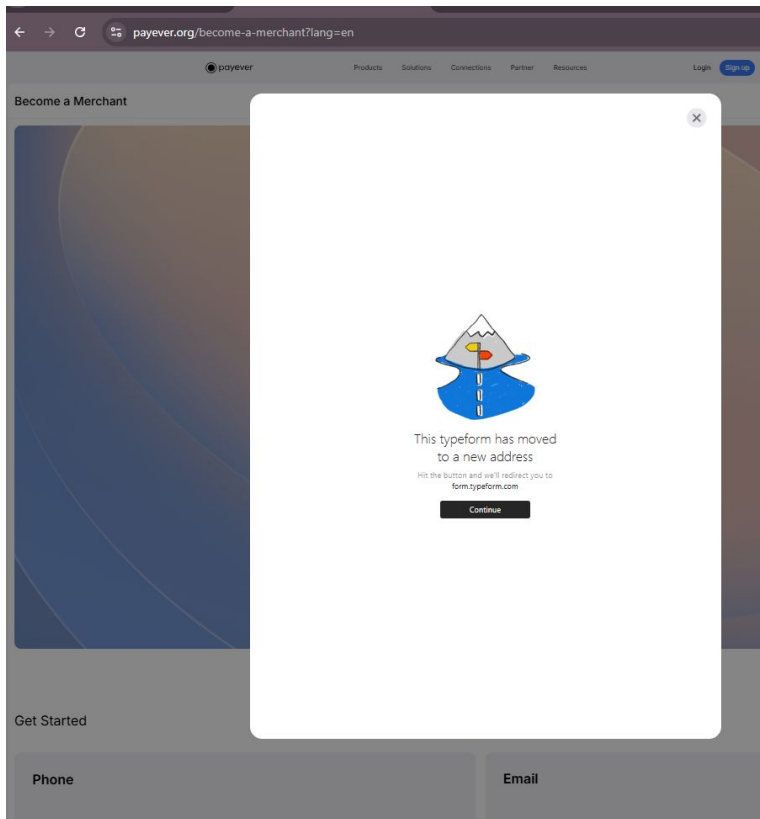
Additional information:

- This issue reproducible only on desktop browser.
- **Platforms:** Desktop / Mobile
- **Browsers:** Chrome (desktop/mobile) , Firefox (desktop)
- **Operating system:** ONLY on Windows 10 , x64
- **Frequency:** Consistently reproducible

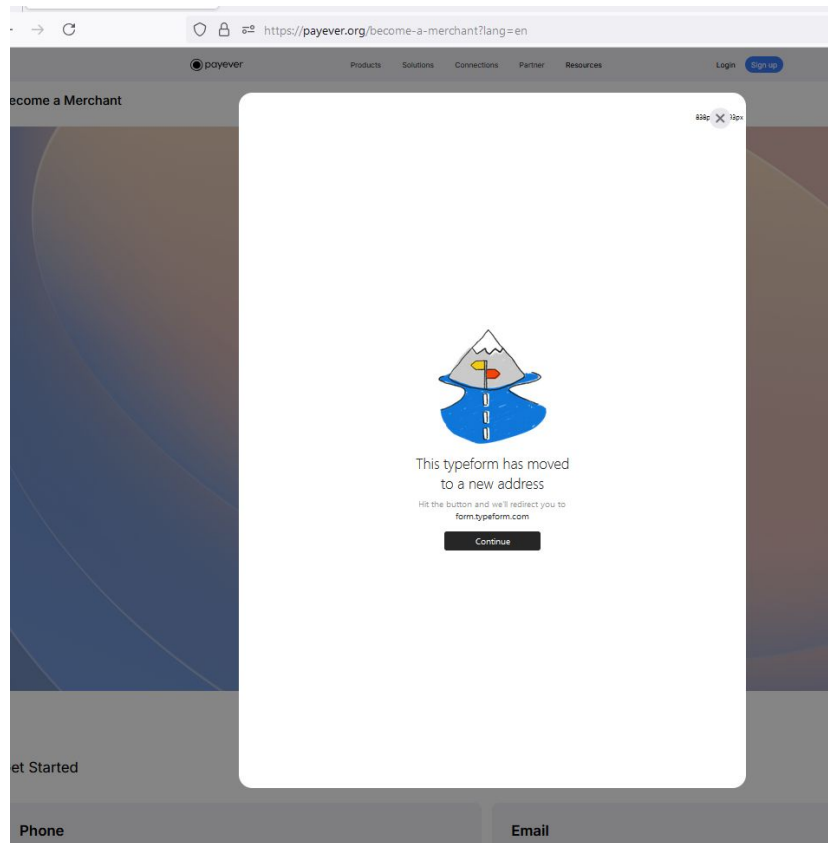
Please find attachment and the next slide.

Language selector not responding after first selection

Chrome



Firefox



1.1. User Interface Testing (bug reports_6)

Title: “Video player. Manual scroll is not working on some clips”

Steps to reproduce:

1. Open <https://payever.org/> with desktop/mobile browser.
2. Scroll to ‘Solutions’ section or choose it on the menu bar.
3. Click/tap on the ‘Marketing clip.’
4. When clip starts to play rewind the video using time scrubber bar.
5. Check player behavior. Focus on the time scrubber bar.
6. Open other clip, e.g. ‘Selling’ and check player controls.

Expected result

1. There is possible to scroll video using time scrubber bar.

Actual result

1. There is not possible to scroll video using time scrubber bar.
2. Video plays with no options to scroll it using scrubber bar.

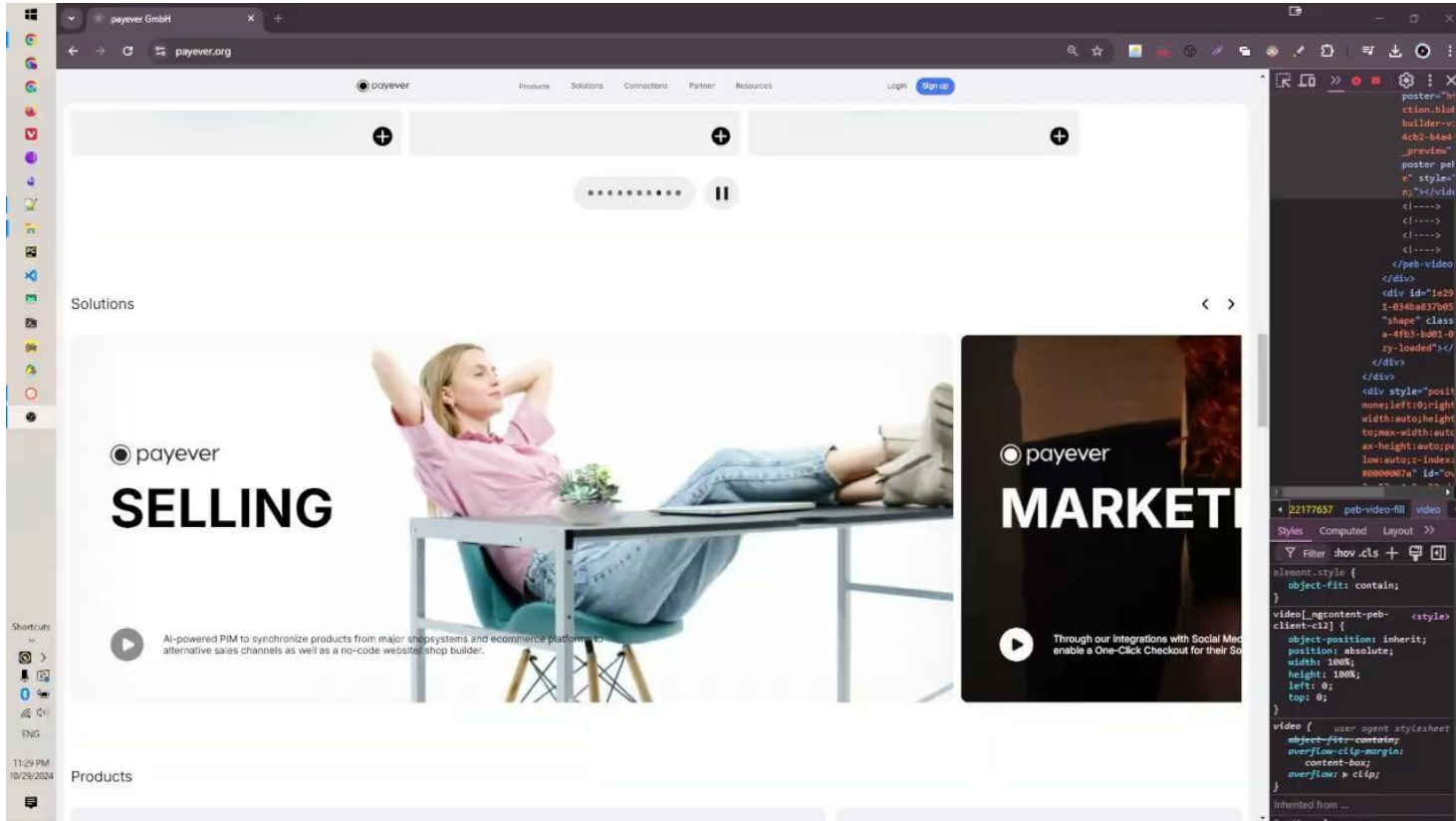
Additional information:

- **Platforms:** Desktop / Mobile
- **Browsers:** Chrome (desktop/mobile) , Firefox (desktop)
- **Operating system:** Windows 10 , x64 / Android OS v.13
- **Frequency:** Consistently reproducible

Please find attachment and the next slide.

Video player. Manual scroll is not working on some clips

[Link: Video player. Manual scroll is not working on some clips](#)



Functional Testing / API Testing

In advance I did API testing using available API calls. I found some GET/POST requests from devTools.

Investigation of POST <https://payever-es-live-log.apm.westeurope.azure.elastic-cloud.com/intake/v2/rum/events> shows that you have not a classic server behavior. After sending POST request I found that server response returns 400 Bad Request and response body as `{"accepted": 0, "errors": [{"message": "invalid content type: ""}]}`

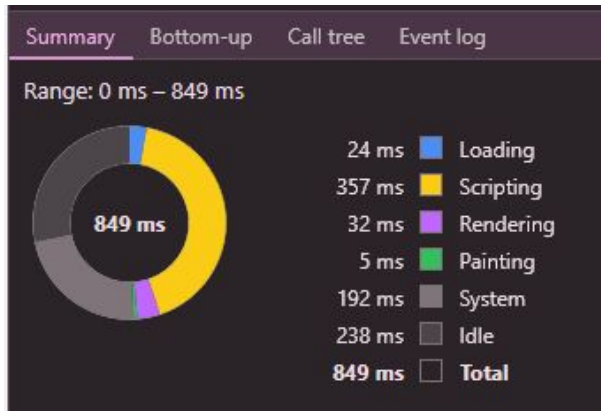
Definitely that it's not a bug but can be improved for more convenient investigations of different issues .

```
"errors": [
  {
    "field": "Content-Type",
    "issue": "missing or invalid",
    "message": "Invalid content type: expected 'application/json'"
  }
]
```

Also regarding to exposing the URL in client-side applications and sensitive information will be better if you will follow best practices and implement approaches for :

- avoiding hardcoding platform and region details;
- use abstract platform name from URL path. Using a generic identifier (e.g., api.companyname.com/logs/events) instead of payever-es-live-log;
- obfuscating or abstracting version numbers (not /intake/v2/rum/events but /intake/latest/rum/events)

2. Non-Functional Testing / 2.1. Performance Testing



After careful investigation of payloads and API requests I can make an assumption that <https://payever.org/> website is very heavy.

1. Payloads are too big and even CDN is using for delivery content score can be better.
2. Lighthouse report (See [Fig.-1](#)) also confirmed my assumptions and shows that developers need to optimize website performance for video content (See [Fig.-2](#)) ,

> heap: 51 610 000 Documents: 17 Nodes: 14 / 53 Listeners: 6 278

Summary Bottom-up Call tree Event log

Aa (.) ab Filter No grouping ▼

Self time	Total time	Activity
5.9 ms 1.0 %	419.5 ms 74.2 %	▶ Evaluate script
31.6 ms 5.6 %	219.4 ms 38.8 %	▶ (anonymous)
0.0 ms 0.0 %	209.1 ms 37.0 %	▶ runTask

This table shows a detailed breakdown of the 'Evaluate script' activity. The 'Evaluate script' step itself takes 5.9 ms (1.0% of total), but the time spent on its sub-tasks, '(anonymous)' and 'runTask', is much higher, totaling 419.5 ms (74.2% of the total time shown in this section).

Lighthouse report

Fig -1

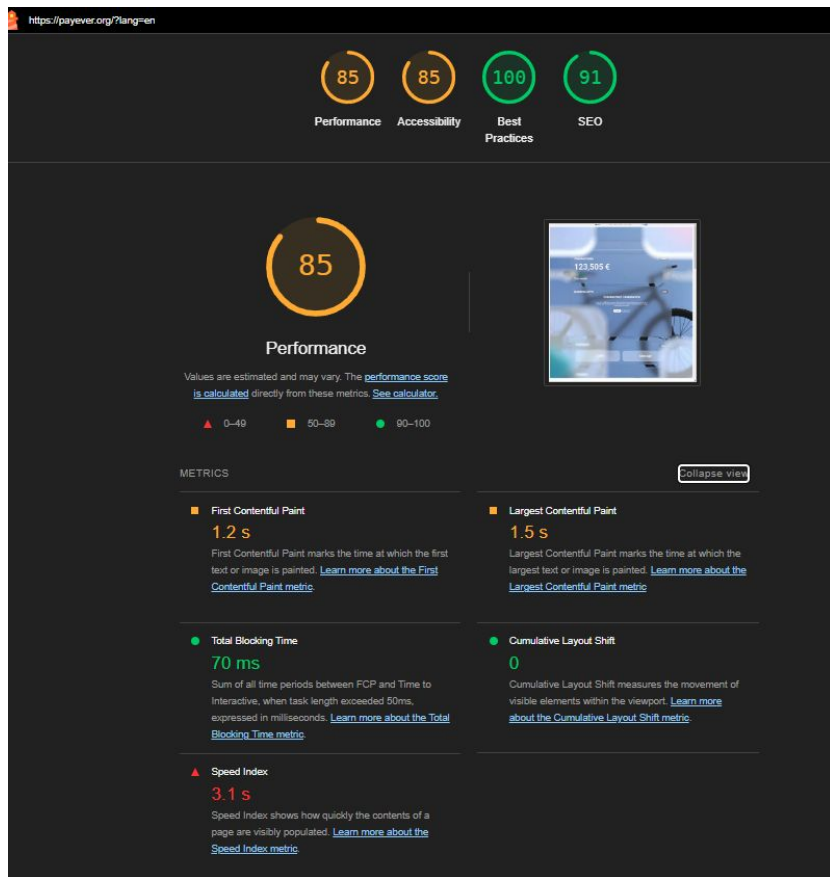
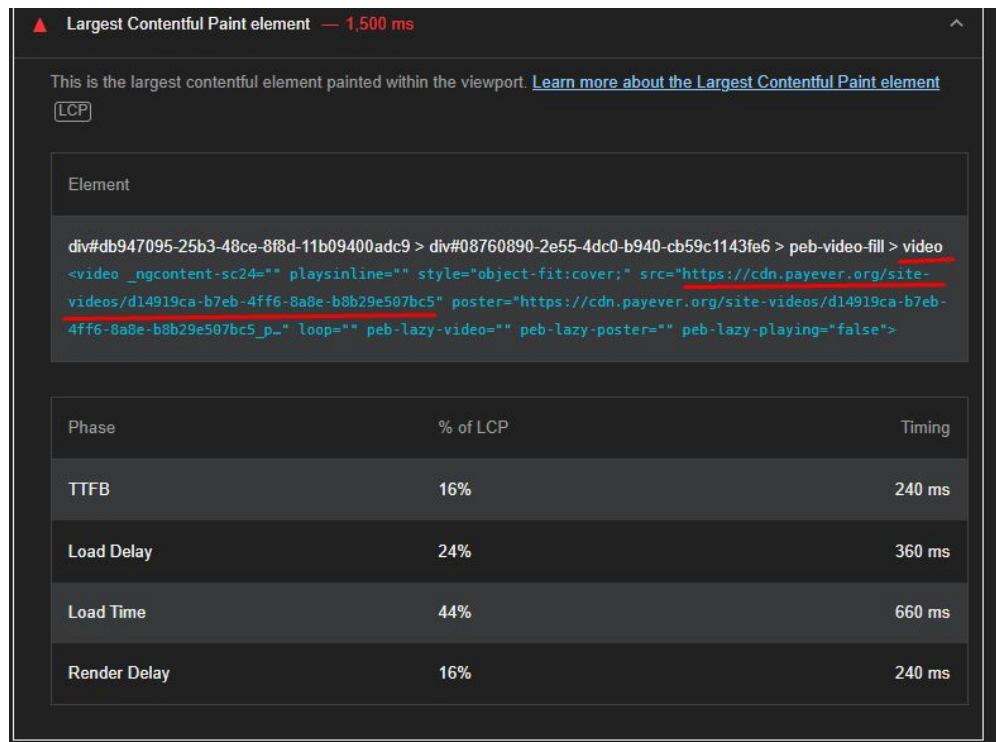


Fig -2



2.4 Security Testing

Simple security check by OWASP ZAP shows issue that can be reported as bug.

Please check information on the picture above and make decision. I did not find any sensitive information but you can send this report to your security team.

The screenshot displays the OWASP ZAP 2.14.0 interface. The main window shows an alert titled "Cloud Metadata Potentially Exposed" for the URL "https://payever.org/latest/meta-data/". The alert details include a Risk of "High", Confidence of "Low", and an internal unrouteable IP address "169.254.169.254". The description states that this attack abuses a misconfigured NGINX server to access instance metadata from cloud providers like AWS, GCP, and Azure. The solution advises not to trust any user data in NGINX configs, specifically mentioning the \$host variable. The alert tags section lists "OWASP_2021_A05" and "OWASP_2017_A06".

Alert Details:

- URL: `https://payever.org/latest/meta-data/`
- Risk: High
- Confidence: Low
- Parameter: (empty)
- Attack: 169.254.169.254
- Evidence: (empty)
- CWE ID: 0
- WASC ID: 0

Description:

The Cloud Metadata Attack attempts to abuse a misconfigured NGINX server in order to access the instance metadata maintained by cloud service providers such as AWS, GCP and Azure. All of these providers provide metadata via an internal unrouteable IP address '169.254.169.254' - this can be exposed by incorrectly configured NGINX servers

Other Info:

Based on the successful response status code cloud metadata may have been returned in the response. Check the response data to see if any cloud metadata has been returned. The meta data returned can include information that would allow an attacker to completely compromise the system.

Solution:

Do not trust any user data in NGINX configs. In this case it is probably the use of the \$host variable which is set from the 'Host' header and can be controlled by an attacker.

Reference:

<https://www.nginx.com/blog/trust-no-one-perils-of-trusting-user-input/>

Alert Tags:

Key	Value
OWASP_2021_A05	https://owasp.org/Top10/A05_2021-Security_Misconfiguration/
OWASP_2017_A06	https://owasp.org/www-project-top-ten/2017/A6_2017-Security_Misconfiguration/

OWASP ZAP report available for downloading [here](#)