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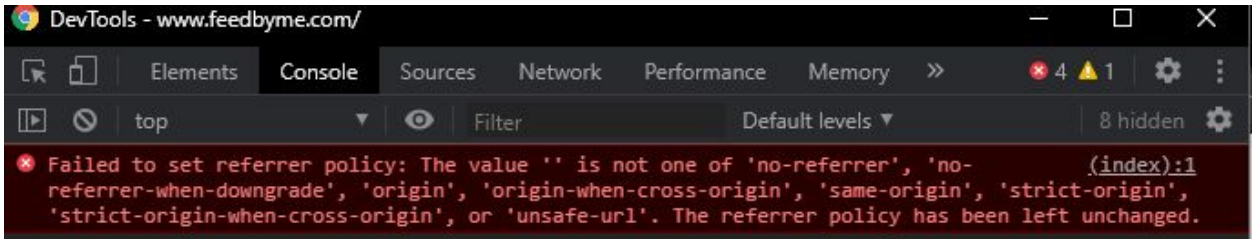
1. **Task Statement**

   Please visit our website to find the bug and necessary changes required on it. Please inform us of your report. Use doc files to create bugs and change lists.

2. **Bugs/Issues**

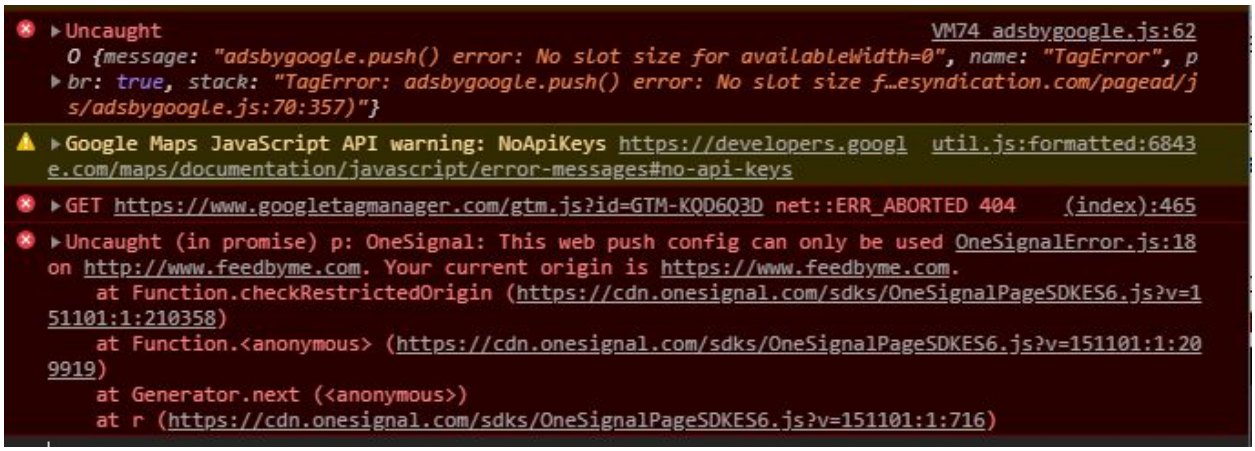
- **UI/UX**
- As the website uses the News Vibrant wordpress theme plugin, there is very less room for customisation.
- **Performance**
- First contentful paint takes 3.6s on average where the standard is 2s. This marks the time when the first image or content appears on the website.
- Speed Index is 5.6s on average where the standard is 3s. This marks the time of how quickly the contents of a page are visibly populated.
- Largest contentful paint takes 6.4s on average where the standard is 2s. This marks the time for the largest content to be painted on the screen.
- Time to interactive takes on average 7.5s where the standard is 3s. This marks the time when the website becomes fully interactive.
- Total blocking time is 880ms where the standard demands as low as possible. This is time taken by all blocking tasks that exceeds task length of 50ms.

  Note: All the data was collected using the Chrome devtools at a network speed of 200kb/s. The actual figures may vary depending on operating system, network properties and browser.
- **Security**
- There are certain issues with the cross site access policies which may lead to security breaches for some kind of content if added in future.



- Includes front-end javascript libraries with known security vulnerabilities.
  - jQuery@1.12.4
  - jQuery UI@1.11.4

- Also there are a few unresolved and unhandled errors which may lead to unexpected behaviour. Check the following image.



3. Upgrades, fixes and improvements

It will be difficult to suggest upgrades without having the insight of business goals, user behaviour and other technicals. The following are a few fixes and improvements that can be made.

- Eliminate render blocking resources. There are 10 resources that are blocking the first paint of the website. Out of which 4 are third party resources. These badly affect the performance of the website. Suggested solution is to defer loading less important resources and use inline styles and js. There are few wordpress that can be helpful in achieving these. Recommended - W3 Total Cache.
- Remove unused Javascript to reduce bytes consumed over network activity. There are about 45 resource files which aren't used at all. Out of which 14 are third party.
- Remove unused CSS to reduce bytes consumed over network activity. There are about 3 unused resource files which aren't used at all.
- Do not use document.write. On slow networks it can delay the network load time by 10s of seconds.
- Reduce load on main thread. It takes about 10.6s to parse the javascript files. This could be reduced to less than 2s.
- DOM size is too large. About 2472 elements are painted on first load this could be deferred and reduced by showing excerpts, pagination and other methods if applicable.
- Static assets can be served with an efficient caching policy. This can speed up repeated visits to the website. There are about 32 static assets.
- Avoid enormous network payloads. Large network payloads cost users real money and are highly correlated with long load times. This can be solved by showing excerpts in blog posts inside of complete posts, reducing the number of posts per page, breaking

long posts into multiple pages or using plugin based lazy-loading. There are 10 problematic assets.
- Avoid critical request chains. 82 critical request chains are found.
- Page loads on mobile devices are not fast. Average load time is 23.5s which is very poor.
- Resource requests can be parallelized, loaded earlier and avoid following requests on dependencies for improved performance of ads. There are two resources with 898ms load time and 813ms load time.

There are a lot of other issues which mostly do not have a direct impact on the final view of the website but may be problematic in certain cases. The priorities and attention to each of the above points depends on other non technical factors which may be better assessed with the exact implementational details of the website.