L'erreur "Link 'rel' attribute should include 'noopener'" fait référence à une recommandation de sécurité pour les liens dans le code HTML. Le "rel" attribut spécifie la relation entre la ressource liée et le document courant. L'ajout de "noopener" à cet attribut est une pratique recommandée pour sécuriser les liens externes et éviter les attaques de type "tabnabbing".

Lorsqu'un lien utilise l'attribut "target" avec la valeur "\_blank" pour ouvrir une nouvelle fenêtre ou un nouvel onglet, une faille de sécurité peut être exploitée si le lien externe utilise la fonction "window.opener" pour modifier la page d'origine, une technique connue sous le nom de "tabnabbing".

Pour éviter cela, il est recommandé d'ajouter l'attribut "noopener" aux liens avec l'attribut "target" défini sur "\_blank". Cela empêche la page liée d'accéder à l'opener (la page d'origine) via "window.opener".

Par conséquent, si vous voyez cette erreur dans le rapport de Lighthouse, cela signifie qu'il y a des liens dans votre page HTML qui ouvrent de nouvelles fenêtres ou de nouveaux onglets avec la valeur "target='\_blank'", mais ils n'incluent pas l'attribut "noopener". Pour résoudre cette erreur, vous devez simplement ajouter l'attribut "noopener" à ces liens comme suit :

htmlCopy code

<a href="https://exemple.com" target="\_blank" rel="noopener">Lien externe</a>

Cela garantit que vos liens externes sont sécurisés et protégés contre les attaques potentielles.

Dans un prmier temps j’ai enlevé tous les problemes decelés dans la console de vscode

En analysant le code on peut voir que la semantique n’est pas folle : pas de footer header, des div partout, pas de balise title,pas de meta description,la langue non definie,pas de texte alternatif sur les photos, plusieurs H1 sur la page

Analyse au w3c validator, beaucoup d’erreurs :

1. **Error: An**img**element must have an**alt**attribute, except under certain conditions. For details, consult**[**guidance on providing text alternatives for images**](https://www.w3.org/WAI/tutorials/images/)**.**

[From line 76, column 4; to line 76, column 132](https://validator.w3.org/nu/#l76c132)

none">↩ <img data-gallery-tag="Concert" class="gallery-item" src="./assets/images/gallery/concerts/aaron-paul-wnX-fXzB6Cw-unsplash.jpg"/>↩ <i

1. **Info: Trailing slash on void elements**[**has no effect**](https://github.com/validator/validator/wiki/Markup-%C2%BB-Void-elements#trailing-slashes-in-void-element-start-tags-do-not-mark-the-start-tags-as-self-closing)**and [interacts badly with unquoted attribute values](https://github.com/validator/validator/wiki/Markup-%C2%BB-Void-elements" \l "trailing-slashes-directly-preceded-by-unquoted-attribute-values" \o "Trailing slashes directly preceded by unquoted attribute values).**

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[From line 77, column 4; to line 77, column 142](https://validator.w3.org/nu/#l77c142)

jpg"/>↩ <img data-gallery-tag="Entreprises" class="gallery-item" src="./assets/images/gallery/entreprise/ali-morshedlou-WMD64tMfc4k-unsplash.jpg"/>↩ <i

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[From line 78, column 4; to line 78, column 141](https://validator.w3.org/nu/#l78c141)

jpg"/>↩ <img data-gallery-tag="Entreprises" class="gallery-item" src="./assets/images/gallery/entreprise/jason-goodman-tHO1\_OuKbg0-unsplash.jpg"/>↩ <i

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[From line 79, column 4; to line 79, column 135](https://validator.w3.org/nu/#l79c135)

jpg"/>↩ <img data-gallery-tag="Mariages" class="gallery-item" src="./assets/images/gallery/mariage/hannah-busing-RvF2R\_qMpRk-unsplash.jpg"/>↩ <i

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[From line 80, column 4; to line 80, column 133](https://validator.w3.org/nu/#l80c133)

jpg"/>↩ <img data-gallery-tag="Portrait" class="gallery-item" src="./assets/images/gallery/portraits/ade-tunji-rVkhWWZFAtQ-unsplash.jpg"/>↩ <i

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[From line 81, column 4; to line 81, column 133](https://validator.w3.org/nu/#l81c133)

jpg"/>↩ <img data-gallery-tag="Mariages" class="gallery-item" src="./assets/images/gallery/mariage/jakob-owens-SiniLJkXhMc-unsplash.jpg"/>↩ <i

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[From line 82, column 4; to line 82, column 144](https://validator.w3.org/nu/#l82c144)

jpg"/>↩ <img data-gallery-tag="Portrait" class="gallery-item" src="./assets/images/gallery/portraits/nino-van-prattenburg--443cl1uR\_8-unsplash.jpg"/>↩ <i

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[From line 82, column 4; to line 82, column 144](https://validator.w3.org/nu/#l82c144)

jpg"/>↩ <img data-gallery-tag="Portrait" class="gallery-item" src="./assets/images/gallery/portraits/nino-van-prattenburg--443cl1uR\_8-unsplash.jpg"/>↩ <i

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[From line 83, column 4; to line 83, column 134](https://validator.w3.org/nu/#l83c134)

jpg"/>↩ <img data-gallery-tag="Concert" class="gallery-item" src="./assets/images/gallery/concerts/austin-neill-hgO1wFPXl3I-unsplash.jpg"/>↩ <i

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[From line 83, column 4; to line 83, column 134](https://validator.w3.org/nu/#l83c134)

jpg"/>↩ <img data-gallery-tag="Concert" class="gallery-item" src="./assets/images/gallery/concerts/austin-neill-hgO1wFPXl3I-unsplash.jpg"/>↩ <i

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[From line 84, column 4; to line 84, column 148](https://validator.w3.org/nu/#l84c148)

jpg"/>↩ <img data-gallery-tag="Entreprises" class="gallery-item" src="./assets/images/gallery/entreprise/mateus-campos-felipe-Fsgzm8N0hIY-unsplash.jpg"/>↩ </d

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[From line 84, column 4; to line 84, column 148](https://validator.w3.org/nu/#l84c148)

jpg"/>↩ <img data-gallery-tag="Entreprises" class="gallery-item" src="./assets/images/gallery/entreprise/mateus-campos-felipe-Fsgzm8N0hIY-unsplash.jpg"/>↩ </d

1. **Error: Bad value for attribute**action**on element**[form](https://html.spec.whatwg.org/multipage/" \l "the-form-element)**: Must be non-empty.**

[From line 145, column 4; to line 145, column 33](https://validator.w3.org/nu/#l145c33)

es</p>↩ <form action="" method="post">↩ <

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[From line 152, column 5; to line 152, column 42](https://validator.w3.org/nu/#l152c42)

area>↩ <inp