

## ## Redirects

Redirect permanent /@ <https://twitter.com/drublic>

Redirect permanent /~ <https://github.com/drublic>

Redirect permanent /+ <https://plus.google.com/+HansChristianReinl/posts>

Redirect permanent /f <https://www.facebook.com/hans.reinl>

Redirect permanent /blog/learnings-from-using-sass-in-large-scale-projects/  
<https://drublic.de/archive/learnings-from-using-sass-in-large-scale-projects/>

Redirect permanent /blog/init-boilerplate-framework-front-end-projects/  
<https://drublic.de/archive/init-boilerplate-framework-front-end-projects/>

Redirect permanent /blog/add-main-element-modernizr/ <https://drublic.de/archive/add-main-element-modernizr/>

Redirect permanent /blog/accessible-dialogs-modals/  
<https://drublic.de/archive/accessible-dialogs-modals/>

Redirect permanent /blog/introducing-css-modal/  
<https://drublic.de/archive/introducing-css-modal/>

Redirect permanent /blog/printing-the-web/ <https://drublic.de/archive/printing-the-web/>

Redirect permanent /blog/speaking-engagements-net-awards-freelancing/  
<https://drublic.de/archive/speaking-engagements-net-awards-freelancing/>

Redirect permanent /blog/takeoff-conference-talking-about-good-code/  
<https://drublic.de/archive/takeoff-conference-talking-about-good-code/>

Redirect permanent /blog/rem-fallback-sass-less/ <https://drublic.de/archive/rem-fallback-sass-less/>

Redirect permanent /blog/working-draft-100/ <https://drublic.de/archive/working-draft-100/>

Redirect permanent /blog/the-nitty-gritty-new-resource-for-web-devs/  
<https://drublic.de/archive/the-nitty-gritty-new-resource-for-web-devs/>

Redirect permanent /blog/conference-test-the-web-forward/  
<https://drublic.de/archive/conference-test-the-web-forward/>

Redirect permanent /blog/writing-awesome-code/ <https://drublic.de/archive/writing-awesome-code/>

Redirect permanent /blog/yeoman/ <https://drublic.de/archive/yeoman/>

Redirect permanent /blog/html5bp-v4-0-0/ <https://drublic.de/archive/html5bp-v4-0-0/>

Redirect permanent /blog/building-advanced-initial-boilerplate/  
<https://drublic.de/archive/building-advanced-initial-boilerplate/>

Redirect permanent /blog/principles-of-writing-consistent-idiomatic-css/  
<https://drublic.de/archive/principles-of-writing-consistent-idiomatic-css/>

Redirect permanent /blog/sass-vs-less/ <https://drublic.de/archive/sass-vs-less/>

Redirect permanent /blog/my-coding-style-and-guidelines/  
<https://drublic.de/archive/my-coding-style-and-guidelines/>

<https://drublic.de/archive/my-cooling-style-and-gui-defines/>

**Redirect** permanent /blog/twitter-recess-css-cleaning-tool-build-on-less/

<https://drublic.de/archive/twitter-recess-css-cleaning-tool-build-on-less/>

**Redirect** permanent /blog/about-css-variables/ <https://drublic.de/archive/about-css-variables/>

**Redirect** permanent /blog/the-css-hierarchies-module-level-3/

<https://drublic.de/archive/the-css-hierarchies-module-level-3/>

**Redirect** permanent /blog/dabbl-et-chrome-app/ <https://drublic.de/archive/dabbl-et-chrome-app/>

**Redirect** permanent /blog/about-gits-cherry-picking/ <https://drublic.de/archive/about-gits-cherry-picking/>

**Redirect** permanent /blog/effects-for-the-web/ <https://drublic.de/archive/effects-for-the-web/>

**Redirect** permanent /blog/is-mothereffin-jquery-up/ <https://drublic.de/archive/is-mothereffin-jquery-up/>

**Redirect** permanent /blog/responsive-media/ <https://drublic.de/archive/responsive-media/>

**Redirect** permanent /blog/a-travel-through-time-and-back/

<https://drublic.de/archive/a-travel-through-time-and-back/>

**Redirect** permanent /blog/lea-verous-animatable/ <https://drublic.de/archive/lea-verous-animatable/>

**Redirect** permanent /blog/how-to-build-accordion-using-css-and-jquery/

<https://drublic.de/archive/how-to-build-accordion-using-css-and-jquery/>

**Redirect** permanent /blog/restrict-textareas-resize-css3/

<https://drublic.de/archive/restrict-textareas-resize-css3/>

**Redirect** permanent /blog/wo-sind-meine-abgerundeten-ecken/

<https://drublic.de/archive/wo-sind-meine-abgerundeten-ecken/>

**Redirect** permanent /blog/where-are-my-rounded-corners/

<https://drublic.de/archive/where-are-my-rounded-corners/>

**Redirect** permanent /blog/css3-rotate-images-on-click/

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**Redirect** permanent /blog/touch-icons-for-android-devices-y-u-no-working/

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**Redirect** permanent /blog/text-shadow-in-internet-explorer/

<https://drublic.de/archive/text-shadow-in-internet-explorer/>

**Redirect** permanent /blog/html5-boilerplate-favicons-psd-template/

<https://drublic.de/archive/html5-boilerplate-favicons-psd-template/>

**Redirect** permanent /blog/pseudo-classes-in-print-styles-for-references-in-links/

<https://drublic.de/archive/pseudo-classes-in-print-styles-for-references-in-links/>

**Redirect** permanent /blog/style-syntax-in-comments/ <https://drublic.de/archive/style-syntax-in-comments/>

<https://drublic.de/>

```
Redirect permanent /blog/offer-files-as-download-with-aownload/  
https://drublic.de/archive/offer-files-as-download-with-aownload/  
Redirect permanent /blog/mobile-design-is-not-only-responsive/  
https://drublic.de/archive/mobile-design-is-not-only-responsive/  
Redirect permanent /blog/css3-auto-hyphenation-for-text-elements/  
https://drublic.de/archive/css3-auto-hyphenation-for-text-elements/  
Redirect permanent /blog/the-difference-between-push-and-pull/  
https://drublic.de/archive/the-difference-between-push-and-pull/  
Redirect permanent /blog/this-is-what-its-all-about/  
https://drublic.de/archive/this-is-what-its-all-about/
```

*## Blog*

```
# Apache Server Configs v2.8.0 | MIT License  
# https://github.com/h5bp/server-configs-apache
```

```
# (!) Using `.htaccess` files slows down Apache, therefore, if you have access  
# to the main server config file (usually called `httpd.conf`), you should add  
# this logic there: http://httpd.apache.org/docs/current/howto/htaccess.html.
```

```
# #####  
# # CROSS-ORIGIN RESOURCE SHARING (CORS) #  
# #####
```

```
# -----  
# | Cross-origin requests |  
# -----
```

```
# Allow cross-origin requests.
```

```
# http://enable-cors.org/  
# http://www.w3.org/TR/cors/  
# https://code.google.com/p/html5security/wiki/CrossOriginRequestSecurity
```

```
# <IfModule mod_headers.c>  
#   Header set Access-Control-Allow-Origin "*"   
# </IfModule>
```

```
# -----
```

```
# By default allow cross-origin access to web fonts.
```

```

<IfModule mod_headers.c>
    <FilesMatch "\.(eot|otfltt[cf]|woff2?)$">
        Header set Access-Control-Allow-Origin "*"
    </FilesMatch>
</IfModule>

# -----
# | Cross-origin resource timing |
# -----

# Allow cross-origin access to the timing information for all resources.

# If a resource isn't served with a `Timing-Allow-Origin` header that would
# allow its timing information to be shared with the current document, some of
# the attributes of the `PerformanceResourceTiming` object will be set to zero.

# http://www.w3.org/TR/resource-timing/

# <IfModule mod_headers.c>
#     Header set Timing-Allow-Origin: "*"
# </IfModule>

# -----
# | CORS-enabled images |
# -----

# Send the CORS header for images when browsers request it.

# https://developer.mozilla.org/en-US/docs/Web/HTML/CORS_enabled_image
# http://blog.chromium.org/2011/07/using-cross-domain-images-in-webgl-and.html
# http://hacks.mozilla.org/2011/11/using-cors-to-load-webgl-textures-from-cross-domain-images/

<IfModule mod_setenvif.c>
    <IfModule mod_headers.c>
        <FilesMatch "\.(curl gif|ico|jpe?g|png|svgz?|webp)$">
            SetEnvIf Origin ":" IS_CORS
            Header set Access-Control-Allow-Origin "*" env=IS_CORS
        </FilesMatch>
    </IfModule>

```

</IfModule>

```
# #####
# # ERRORS #
# #####

# -----
# | 404 error prevention |
# -----

# Disable the pattern matching based on filenames.

# This setting prevents Apache from returning a 404 error as the result
# of a rewrite when the directory with the same name does not exist.

# http://httpd.apache.org/docs/current/content-negotiation.html#multiviews
# http://www.webmasterworld.com/apache/3808792.htm
```

#### Options -MultiViews

```
# -----
# | Custom error messages / pages |
# -----

# Customize what Apache returns to the client in case of an error.
# http://httpd.apache.org/docs/current/mod/core.html#error.document

# ErrorDocument 404 /404.html

# #####
# # INTERNET EXPLORER #
# #####

# -----
# | Better website experience |
# -----

# Force Internet Explorer to render pages in the highest available
# mode in the various cases when it may not.
# https://hsivonen.fi/doctype/#ie8
```

```

<IfModule mod_headers.c>
    Header set X-UA-Compatible "IE=edge"
    # `mod_headers` cannot match based on the content-type, however, this header
    # should be send only for HTML documents and not for the other resources
    <FilesMatch "\.(appcache|atom|crx|css|curl|eot|f4[abpv]|flv|geojson|gif|htc|icol|jpe?
gl|jst|json|ld)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safariextz|svgz?
|swf|topojson|tt[cf]|txt|vcf|vtt|webapp|web[mp]|woff2?|xml|xpi)$">
        Header unset X-UA-Compatible
    </FilesMatch>
</IfModule>

# -----
# | Cookie setting from iframes |
# -----

# Allow cookies to be set from iframes in Internet Explorer.

# http://msdn.microsoft.com/en-us/library/ms537343.aspx
# http://www.w3.org/TR/2000/CR-P3P-20001215/

# <IfModule mod_headers.c>
#     Header set P3P "policyref=\"/w3c/p3p.xml\", CP=\"IDC DSP COR ADM DEVI TAIi PSA PSD
IVAI IVDi CONi HIS OUR IND CNT\""
# </IfModule>

# #####
# # MEDIA TYPES AND CHARACTER ENCODINGS #
# #####

# -----
# | Media types |
# -----

# Serve resources with the proper media types (formerly known as MIME types).
# http://www.iana.org/assignments/media-types/media-types.xhtml

<IfModule mod_mime.c>

    # Audio
    AddType audio/mp4 f4a f4b m4a

```

```
AddType audio/ogg oga ogg opus
```

### *# Data interchange*

```
AddType application/json json map topojson
```

```
AddType application/ld+json jsonld
```

```
AddType application/vnd.geo+json geojson
```

### *# JavaScript*

*# Normalize to standard type.*

*# <http://tools.ietf.org/html/rfc4329#section-7.2>*

```
AddType application/javascript js
```

### *# Manifest files*

*# If you are providing a web application manifest file (see the  
# specification: <http://w3c.github.io/manifest/>), it is recommended  
# that you serve it with the `application/manifest+json` media type.  
#*

*# Because the web application manifest file doesn't have its own  
# unique file extension, you can set its media type either by matching:  
#*

*# 1) the exact location of the file (this can be done using a directive  
# such as ``), but it will NOT work in the `.htaccess` file,  
# so you will have to do it in the main server configuration file or  
# inside of a `` container)  
#*

*# e.g.:*

```
#     <Location "/.well-known/manifest.json">  
#         AddType application/manifest+json      json  
#     </Location>  
#
```

*# 2) the filename (this can be problematic as you will need to ensure  
# that you don't have any other file with the same name as the one  
# you gave to your web application manifest file)  
#*

*# e.g.:*

```
#     <Files "manifest.json">  
#         AddType application/manifest+json      json  
#     </Files>
```

```
AddType application/x-web-app-manifest+json      webapp
AddType text/cache-manifest                      appcache manifest
```

#### *# Video*

```
AddType video/mp4                               f4v f4p m4v mp4
AddType video/ogg                                ogv
AddType video/webm                               webm
AddType video/x-flv                              flv
```

#### *# Web fonts*

```
AddType application/font-woff                  woff
AddType application/font-woff2                 woff2
AddType application/vnd.ms-fontobject          eot
```

*# Browsers usually ignore the font media types and simply sniff  
# the bytes to figure out the font type.  
# <http://mimesniff.spec.whatwg.org/#matching-a-font-type-pattern>*

*# Chrome however, shows a warning if any other media types are used  
# for the following two font types.*

```
AddType application/x-font-ttf                 ttc ttf
AddType font/opentype                          otf
```

```
AddType image/svg+xml                        svg svgz
```

#### *# Other*

```
AddType application/octet-stream              safariextz
AddType application/x-chrome-extension         crx
AddType application/x-opera-extension          oex
AddType application/x-xpinstall                xpi
AddType application/xml                       atom rdf rss xml
AddType image/webp                            webp
AddType image/x-icon                          cur ico
AddType text/vtt                              vtt
AddType text/x-component                      htc
AddType text/x-vcard                          vcf
```

</IfModule>

```

# -----
# | Character encodings |
# -----

# Set `UTF-8` as the character encoding for all resources served with
# the media type of `text/html` or `text/plain`.
AddDefaultCharset utf-8

# Set `UTF-8` as the character encoding for other certain resources.
<IfModule mod_mime.c>
    AddCharset utf-8 .atom \
                .css \
                .geojson \
                .js \
                .json \
                .jsonld \
                .rdf \
                .rss \
                .topojson \
                .vtt \
                .webapp \
                .xml
</IfModule>

# #####
# # URL REWRITES #
# #####

# -----
# | Rewrite engine |
# -----

# (1) Turn on the rewrite engine
#     (this is necessary in order for the `RewriteRule` directives to work).
#     http://httpd.apache.org/docs/current/mod/mod\_rewrite.html#RewriteEngine
#
# (2) Enable the `FollowSymLinks` option if it isn't already.
#     http://httpd.apache.org/docs/current/mod/core.html#options
#
# (3) If your web host doesn't allow the `FollowSymLinks` option, you may
#     need to comment it out and use `Options +SymLinksIfOwnerMatch` but

```

```

#      need to comment it out and use options +FollowSymLinks instead, but
#      be aware of the performance impact.
#      http://httpd.apache.org/docs/current/misc/perf-tuning.html#symlinks
#
# (4) Some cloud hosting services will also require `RewriteBase` to be set.
#      http://www.rackspace.com/knowledge_center/frequently-asked-question/why-is-
modrewrite-not-working-on-my-site
#
# (5) Depending on how your server is set up, you may need to use the
#      `RewriteOptions` directive to enable some options for the rewrite engine.
#      http://httpd.apache.org/docs/current/mod/mod_rewrite.html#rewriteoptions

```

```
<IfModule mod_rewrite.c>
```

```
    # (1)
```

```
    RewriteEngine On
```

```
    # (2)
```

```
    Options +FollowSymLinks
```

```
    # (3)
```

```
    # Options +SymLinksIfOwnerMatch
```

```
    # (4)
```

```
    RewriteBase /
```

```
    # (5)
```

```
    # RewriteOptions <options>
```

```
    #
```

```

# -----
# | Secure Sockets Layer (SSL)                                |
# -----

```

```
# Rewrite secure requests properly in order to prevent SSL certificate warnings.
```

```
# E.g.: prevent `https://www.example.com` when your certificate only allows
```

```
# `https://secure.example.com`.
```

```
# RewriteCond %{SERVER_PORT} !^443
```

```
# RewriteRule ^https://drublic.de%{REQUEST_URI} [R=301,L]
```

```
# Rewrite to index.php
```

```
Redirect 301 %{REQUEST_FILENAME} /index.php
```

```
#
```

```

RewriteCond %{REQUEST_FILENAME} !-f
RewriteCond %{REQUEST_FILENAME} !-d
RewriteRule ^([\^?]*)$ /index.php?file=$1 [NC,L,QSA]
</IfModule>

# -----
# | Suppressing / Forcing the `www.` at the beginning of URLs |
# -----

# The same content should never be available under two different URLs,
# especially not with and without `www.` at the beginning. This can cause
# SEO problems (duplicate content), and therefore, you should choose one
# of the alternatives and redirect the other one.

# By default `Option 1` (no `www.`) is activated.
# http://no-www.org/faq.php?q=class_b

# If you would prefer to use `Option 2`, just comment out all the lines
# from `Option 1` and uncomment the ones from `Option 2`.

# IMPORTANT: NEVER USE BOTH RULES AT THE SAME TIME!

# -----

# Option 1: rewrite www.example.com → example.com

<IfModule mod_rewrite.c>
    RewriteCond %{HTTPS} !=on
    RewriteCond %{HTTP_HOST} ^www\.(.+$) [NC]
    RewriteRule ^ http://%1%{REQUEST_URI} [R=301,L]
</IfModule>

# -----

# Option 2: rewrite example.com → www.example.com

# Be aware that the following might not be a good idea if you use "real"
# subdomains for certain parts of your website.

# <IfModule mod_rewrite.c>
#     RewriteCond %{HTTPS} !=on
#     RewriteCond %{HTTP_HOST} !^www\.(.+$) [NC]
#     RewriteRule ^ http://www.%1%{REQUEST_URI} [R=301,L]
# </IfModule>

```

```
# RewriteCond %{HTTP_HOST} !^www\. [NC]
# RewriteCond %{SERVER_ADDR} !=127.0.0.1
# RewriteCond %{SERVER_ADDR} !=::1
# RewriteRule ^ http://www.%{HTTP_HOST}%{REQUEST_URI} [R=301,L]
# </IfModule>

#####
# # SECURITY #
# #####

# -----
# | Clickjacking |
# -----

# Protect website against clickjacking.

# The example below sends the `X-Frame-Options` response header with the value
# `DENY`, informing browsers not to display the web page content in any frame.

# This might not be the best setting for everyone. You should read about the
# other two possible values for `X-Frame-Options`: `SAMEORIGIN` & `ALLOW-FROM`.
# http://tools.ietf.org/html/rfc7034#section-2.1

# Keep in mind that while you could send the `X-Frame-Options` header for all
# of your site's pages, this has the potential downside that it forbids even
# non-malicious framing of your content (e.g.: when users visit your site using
# a Google Image Search results page).

# Nonetheless, you should ensure that you send the `X-Frame-Options` header for
# all pages that allow a user to make a state changing operation (e.g: pages
# that contain one-click purchase links, checkout or bank-transfer confirmation
# pages, pages that make permanent configuration changes, etc.).

# Sending the `X-Frame-Options` header can also protect your website against
# more than just clickjacking attacks: https://cure53.de/xfo-clickjacking.pdf.

# http://tools.ietf.org/html/rfc7034
# http://blogs.msdn.com/b/ieinternals/archive/2010/03/30/combating-clickjacking-with-x-
frame-options.aspx
# https://www.owasp.org/index.php/Clickjacking
```

```
# <IfModule mod_headers.c>
#   Header set X-Frame-Options "DENY"
#   <FilesMatch "\.(appcache|atom|crx|css|curl|eot|f4[abpw]|flv|geo.json|gif|htc|icol|jpe?
gl|js|json|1d)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safariextz|svgz?
|swf|topo.json|tt[cf]|txt|vcf|vtt|webapp|web[mp]|woff2?|xml|xpi)$">
#       Header unset X-Frame-Options
#   </FilesMatch>
# </IfModule>
```

```
# -----
# | Content Security Policy (CSP) |
# -----
```

*# Mitigate the risk of cross-site scripting and other content-injection attacks.*

*# This can be done by setting a `Content Security Policy` which whitelists  
# trusted sources of content for your website.*

*# The example header below allows ONLY scripts that are loaded from the current  
# site's origin (no inline scripts, no CDN, etc). This almost certainly won't  
# work as-is for your site!*

*# For more details on how to craft a reasonable policy for your site, read:  
# <http://www.html5rocks.com/en/tutorials/security/content-security-policy/> (or  
# the specification: <http://www.w3.org/TR/CSP1/>). Also, to make things easier,  
# you can use an online CSP header generator such as: <http://cspisawesome.com/>.*

```
# <IfModule mod_headers.c>
#   Header set Content-Security-Policy "script-src 'self'; object-src 'self'"
#   <FilesMatch "\.(appcache|atom|crx|css|curl|eot|f4[abpw]|flv|geo.json|gif|htc|icol|jpe?
gl|js|json|1d)?
|m4[av]|manifest|map|mp4|oex|og[agv]|opus|otf|pdf|png|rdf|rss|safariextz|svgz?
|swf|topo.json|tt[cf]|txt|vcf|vtt|webapp|web[mp]|woff2?|xml|xpi)$">
#       Header unset Content-Security-Policy
#   </FilesMatch>
# </IfModule>
```

```
# -----
# | File access |
# -----
```

```
# Block access to directories without a default document.

# You should leave the following uncommented, as you shouldn't allow anyone to
# surf through every directory on your server (which may includes rather private
# places such as the CMS's directories).

<IfModule mod_autoindex.c>
    Options -Indexes
</IfModule>

# -----

# Block access to all hidden files and directories with the exception of the
# visible content from within the `/.well-known/` hidden directory.

# These types of files usually contain user preferences or the preserved state
# of an utility, and can include rather private places like, for example, the
# `.git` or `.svn` directories.

# The `/.well-known/` directory represents the standard (RFC 5785) path prefix
# for "well-known locations" (e.g.: `/.well-known/manifest.json`,
# `/.well-known/keybase.txt`), and therefore, access to its visible content
# should not be blocked.

# https://www.mnot.net/blog/2010/04/07/well-known
# http://tools.ietf.org/html/rfc5785

<IfModule mod_rewrite.c>
    RewriteCond %{REQUEST_URI} "!(^/)\.well-known/([^\./]+/?.+)$" [NC]
    RewriteCond %{SCRIPT_FILENAME} -d [OR]
    RewriteCond %{SCRIPT_FILENAME} -f
    RewriteRule "(^/)\." - [F]
</IfModule>

# -----

# Block access to files that can expose sensitive information.

# By default, block access to backup and source files that may be left by some
# text editors and can pose a security risk when anyone has access to them.
```

```
# http://feross.org/cmsploit/

# IMPORTANT: Update the `<FilesMatch>` regular expression from below to include
# any files that might end up on your production server and can expose sensitive
# information about your website. These files may include: configuration files,
# files that contain metadata about the project (e.g.: project dependencies),
# build scripts, etc..

<FilesMatch "(^#.#|\.(bak|conf|dist|fla|in|ci|log|psd|sh|sql|sw[op])|")$" >

    # Apache < 2.3
    <IfModule !mod_authz_core.c>
        Order allow,deny
        Deny from all
        Satisfy All
    </IfModule>

    # Apache ≥ 2.3
    <IfModule mod_authz_core.c>
        Require all denied
    </IfModule>

</FilesMatch>

# -----
# | Reducing MIME type security risks |
# -----

# Prevent some browsers from MIME-sniffing the response.

# This reduces exposure to drive-by download attacks and cross-origin data
# leaks, and should be left uncommented, especially if the web server is
# serving user-uploaded content or content that could potentially be treated
# as executable by the browser.

# http://www.slideshare.net/hasegawayosuke/owasp-hasegawa
# http://blogs.msdn.com/b/ie/archive/2008/07/02/ie8-security-part-v-comprehensive-protection.aspx
# http://msdn.microsoft.com/en-us/library/ie/gg622941.aspx
# http://mimesniff.spec.whatwg.org/
```

```

<IfModule mod_headers.c>
    Header set X-Content-Type-Options "nosniff"
</IfModule>

# -----
# | Reflected Cross-Site Scripting (XSS) attacks |
# -----

# (1) Try to re-enable the Cross-Site Scripting (XSS) filter built into the
#     most recent web browsers.
#
#     The filter is usually enabled by default, but in some cases it may be
#     disabled by the user. However, in Internet Explorer for example, it can
#     be re-enabled just by sending the `X-XSS-Protection` header with the
#     value of `1`.
#
# (2) Prevent web browsers from rendering the web page if a potential reflected
#     (a.k. a non-persistent) XSS attack is detected by the filter.
#
#     By default, if the filter is enabled and browsers detect a reflected
#     XSS attack, they will attempt to block the attack by making the smallest
#     possible modifications to the returned web page.
#
#     Unfortunately, in some browsers (e.g.: Internet Explorer), this default
#     behavior may allow the XSS filter to be exploited, thereby, it's better
#     to tell browsers to prevent the rendering of the page altogether, instead
#     of attempting to modify it.
#
#     http://hackademix.net/2009/11/21/ies-xss-filter-creates-xss-vulnerabilities
#
# IMPORTANT: Do not rely on the XSS filter to prevent XSS attacks! Ensure that
# you are taking all possible measures to prevent XSS attacks, the most obvious
# being: validating and sanitizing your site's inputs.
#
# http://blogs.msdn.com/b/ie/archive/2008/07/02/ie8-security-part-iv-the-xss-filter.aspx
# http://blogs.msdn.com/b/ieinternals/archive/2011/01/31/controlling-the-internet-explorer-xss-filter-with-the-x-xss-protection-http-header.aspx
# https://www.owasp.org/index.php/Cross-site\_Scripting\_%28XSS%29

# <IfModule mod_headers.c>
#     # (1) (2)

```

```
# Header set X-XSS-Protection "1; mode=block"
# <FilesMatch "\.(appcache|atom|crx|css|curl|eot|f4[abpv]|flv|geojson|gif|htcl|icol|jpe?
gl|jsl|json|ld)?
|m4[av]|manifest|map|mp4|oexl|og[agv]|opus|otf|pdf|png|rdf|rss|safari-extend|svgz?
|swf|topojson|tt[cf]|txt|vcf|vtt|webapp|web[mp]|woff2?|xml|xpi)$">
# Header unset X-XSS-Protection
# </FilesMatch>
# </IfModule>

# -----
# | HTTP Strict Transport Security (HSTS) |
# -----

# Force client-side SSL redirection.

# If a user types `example.com` in his browser, the above rule will redirect
# him to the secure version of the site. That still leaves a window of
# opportunity (the initial HTTP connection) for an attacker to downgrade or
# redirect the request.

# The following header ensures that browser will ONLY connect to your server
# via HTTPS, regardless of what the users type in the address bar.

# IMPORTANT: Remove the `includeSubDomains` optional directive if the subdomains
# are not using HTTPS.

# http://tools.ietf.org/html/draft-ietf-websec-strict-transport-sec-14#section-6.1
# http://www.html5rocks.com/en/tutorials/security/transport-layer-security/
# http://blogs.msdn.com/b/ieinternals/archive/2014/08/18/hsts-strict-transport-security-
attacks-mitigations-deployment-https.aspx

# <IfModule mod_headers.c>
# Header set Strict-Transport-Security "max-age=16070400; includeSubDomains"
# </IfModule>

# -----
# | Server software information |
# -----

# Avoid displaying the exact Apache version number, the description of the
# generic OS-tuple and the information about Apache's compiled-in modules.
```

```

# IMPORTANT: The `ServerTokens` directive will not work in the `.htaccess` file,
# so you will need to add the following in the main server configuration file.

# ServerTokens Prod

# #####
# # WEB PERFORMANCE #
# #####

# -----
# | Compression |
# -----

<IfModule mod_deflate.c>

# Force compression for mangled headers.
# https://developer.yahoo.com/blogs/ym/pushing-beyond-gzipping-25601.html

<IfModule mod_setenvif.c>
  <IfModule mod_headers.c>
    SetEnvIfNoCase ^(\Accept-EncodXng|X-cept-Encoding|X(15)|^(15)|-(15))$
    ^((gzip|deflate)\s*,?\s*)+([X^-]{4,13})$ HAVE_Accept-Encoding
    RequestHeader append Accept-Encoding "gzip,deflate" env=HAVE_Accept-Encoding
  </IfModule>
</IfModule>

# -----

# Map certain file types to the specified encoding type in order to
# make Apache serve them with the appropriate `Content-Encoding` HTTP
# response header (this will NOT make Apache compress them!).

# If the following file types wouldn't be served without the appropriate
# `Content-Enable` HTTP response header, client applications (e.g.:
# browsers) wouldn't know that they first need to uncompress the response,
# and thus, wouldn't be able to understand the content.

# http://httpd.apache.org/docs/current/mod/mod_mime.html#addencoding

<IfModule mod_mime.c>

```

```
<!-- MODULE: mod_mime.c -->
    AddEncoding gzip          svgz
</IfModule>

# -----

# Compress all output labeled with one of the following media types.

# IMPORTANT: For Apache versions below 2.3.7 you don't need to enable
# `mod_filter` and can remove the `<IfModule mod_filter.c>` & `</IfModule>`
# lines as AddOutputFilterByType is still in the core directives.

<IfModule mod_filter.c>
    AddOutputFilterByType DEFLATE "application/atom+xml" \
        "application/javascript" \
        "application/json" \
        "application/ld+json" \
        "application/manifest+json" \
        "application/rdf+xml" \
        "application/rss+xml" \
        "application/schema+json" \
        "application/vnd.geo+json" \
        "application/vnd.ms-fontobject" \
        "application/x-font-ttf" \
        "application/x-web-app-manifest+json" \
        "application/xhtml+xml" \
        "application/xml" \
        "font/opentype" \
        "image/svg+xml" \
        "image/x-icon" \
        "text/cache-manifest" \
        "text/css" \
        "text/html" \
        "text/javascript" \
        "text/plain" \
        "text/vtt" \
        "text/x-component" \
        "text/xml"

</IfModule>

</IfModule>
```

```
# -----  
# | Content transformation |  
# -----
```

```
# Prevent mobile network providers from modifying the website's content.  
# http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.9.5.
```

```
# <IfModule mod_headers.c>  
#     Header merge Cache-Control "no-transform"  
# </IfModule>
```

```
# -----  
# | ETags |  
# -----
```

```
# Remove `ETags` as resources are sent with far-future expires headers.  
# https://developer.yahoo.com/performance/rules.html#etags
```

```
# `FileETag None` doesn't work in all cases.
```

```
<IfModule mod_headers.c>  
    Header unset ETag  
</IfModule>
```

FileETag None

```
# -----  
# | Expires headers |  
# -----
```

```
# Serve resources with far-future expires headers.
```

```
# IMPORTANT: If you don't control versioning with filename-based cache  
# busting, consider lowering the cache times to something like one week.
```

```
<IfModule mod_expires.c>
```

```
    ExpiresActive on  
    ExpiresDefault "access plus 1 month"
```

```
# CSS  
# -----  
# | CSS |  
# -----
```

```

ExpiresByType text/css "access plus 1 year"

# Data interchange
ExpiresByType application/json "access plus 0 seconds"
ExpiresByType application/ld+json "access plus 0 seconds"
ExpiresByType application/schema+json "access plus 0 seconds"
ExpiresByType application/vnd.geo+json "access plus 0 seconds"
ExpiresByType application/xml "access plus 0 seconds"
ExpiresByType text/xml "access plus 0 seconds"

# Favicon (cannot be renamed!) and cursor images
ExpiresByType image/x-icon "access plus 1 week"

# HTML components (HTCs)
ExpiresByType text/x-component "access plus 1 month"

# HTML
ExpiresByType text/html "access plus 0 seconds"

# JavaScript
ExpiresByType application/javascript "access plus 1 year"
ExpiresByType text/javascript "access plus 1 year"

# Manifest files
ExpiresByType application/manifest+json "access plus 1 year"
ExpiresByType application/x-web-app-manifest+json "access plus 0 seconds"
ExpiresByType text/cache-manifest "access plus 0 seconds"

# Media
ExpiresByType audio/ogg "access plus 1 month"
ExpiresByType image/gif "access plus 1 month"
ExpiresByType image/jpeg "access plus 1 month"
ExpiresByType image/png "access plus 1 month"
ExpiresByType video/mp4 "access plus 1 month"
ExpiresByType video/ogg "access plus 1 month"
ExpiresByType video/webm "access plus 1 month"

# Web feeds
ExpiresByType application/atom+xml "access plus 1 hour"
ExpiresByType application/rdf+xml "access plus 1 hour"
ExpiresByType application/rss+xml "access plus 1 hour"

```

```
# Web fonts
ExpiresByType application/font-woff          "access plus 1 month"
ExpiresByType application/font-woff2        "access plus 1 month"
ExpiresByType application/vnd.ms-fontobject "access plus 1 month"
ExpiresByType application/x-font-ttf        "access plus 1 month"
ExpiresByType font/opentype                 "access plus 1 month"
ExpiresByType image/svg+xml                 "access plus 1 month"
```

```
</IfModule>
```

```
# -----
# | Filename-based cache busting |
# -----
```

```
# If you're not using a build process to manage your filename version revving,
# you might want to consider enabling the following directives to route all
# requests such as /css/style.12345.css to /css/style.css.
```

```
# To understand why this is important and a better idea than *.css?v231, read:
# http://www.stevesouders.com/blog/2008/08/23/revving-filenames-dont-use-querystring/
```

```
# <IfModule mod_rewrite.c>
#     RewriteCond %{REQUEST_FILENAME} !-f
#     RewriteRule ^(.+)\.(\d+)\.(css|curl|gif|ico|jpe?g|js|png|svgz?!webp)$ $1.$3 [L]
# </IfModule>
```

```
# -----
# | File concatenation |
# -----
```

```
# Allow concatenation from within specific files.
```

```
# e.g.:
```

```
#
# If you have the following lines in a file called, for example,
# main.combined.js:
#
#     <!--#include file="js/jquery.js" -->
#     <!--#include file="js/jquery.timer.js" -->
#
```

```
# Apache will replace those lines with the content of the specified files.

# <IfModule mod_include.c>
#
#   <FilesMatch "\.combined\.js$">
#       Options +Includes
#       AddOutputFilterByType INCLUDES application/javascript text/javascript
#       SetOutputFilter INCLUDES
#   </FilesMatch>
#
#   <FilesMatch "\.combined\.css$">
#       Options +Includes
#       AddOutputFilterByType INCLUDES text/css
#       SetOutputFilter INCLUDES
#   </FilesMatch>
#
# </IfModule>
```