

NOU-SMF

Branch : main

VERSION NOT PROVIDED

Code analysis

nou-smf

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INTRODUCTION

This document contains results of the code analysis of nou-smf.

CONFIGURATION

- Quality Profiles
 - o Names: Sonar way [CSS]; Sonar way [Flex]; Sonar way [JavaScript]; Sonar way [PHP]; Sonar way [HTML]; Sonar way [XML];
 - o Files: b65247b7-928f-4920-a23c-b2b334dee7e5.json; 1b1b0be9-644b-48dc-8b68-064e0a959416.json; 22a866d3-7bcd-4182-b3f2-1355427b457e.json; 41a2dcf5-724a-4bf6-b3cb-9df06e07e04a.json; 03a11e35-c9bb-4dc1-9bf8-8530a50ce956.json; a62596c9-3a52-4341-9b5a-b1ba7d1668f9.json;
- Quality Gate
 - o Name: Sonar way
 - o File: Sonar way.xml

SYNTHESIS

ANALYSIS STATUS

Reliability	Security	Security Review	Maintainability
E	E	E	A

QUALITY GATE STATUS

Quality Gate Status	Passed
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METRICS

Coverage	Duplication	Comment density	Median number of lines of code per file	Adherence to coding standard
0.0 %	14.7 %	12.9 %	82.0	95.3 %

TESTS

Total	Success Rate	Skipped	Errors	Failures
0	0 %	0	0	0

DETAILED TECHNICAL DEBT

Reliability	Security	Maintainability	Total
4d 1h 24min	0d 0h 35min	185d 4h 19min	189d 6h 18min

METRICS RANGE

	Cyclomatic Complexity	Cognitive Complexity	Lines of code per file	Comment density (%)	Coverage	Duplication (%)
Min	0.0	0.0	0.0	0.0	0.0	0.0
Max	44552.0	25336.0	265122.0	100.0	0.0	98.8

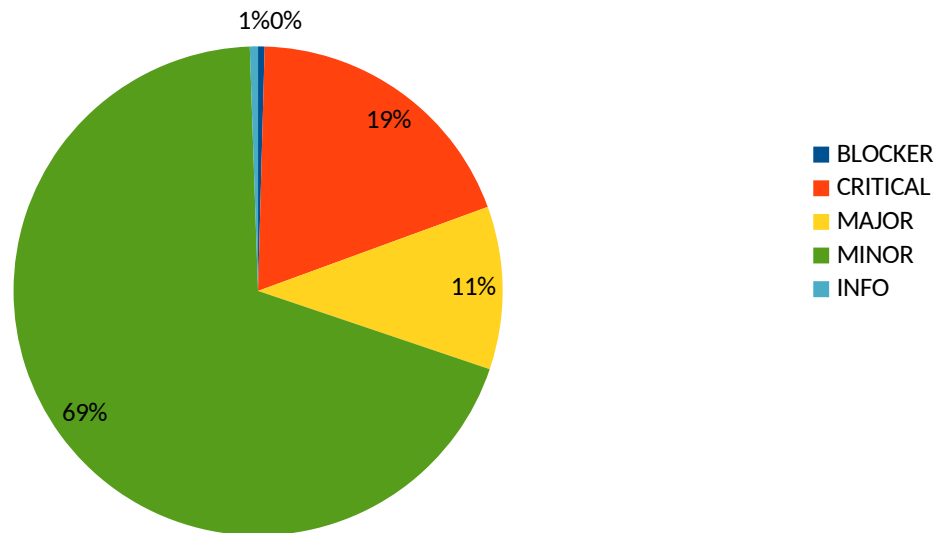
VOLUME

Language	Number
<null>	57
CSS	17698
Flex	2288
JavaScript	15366
PHP	240755
HTML	88
XML	151
Total	276403

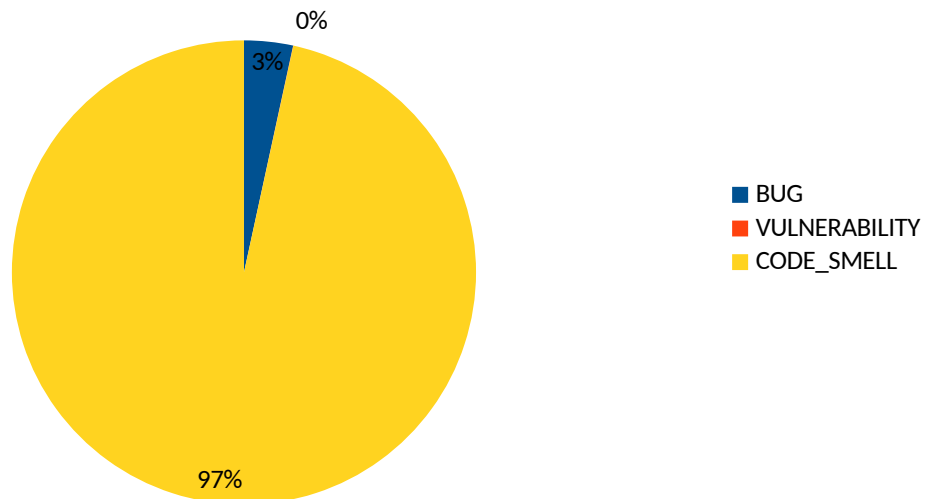
ISSUES

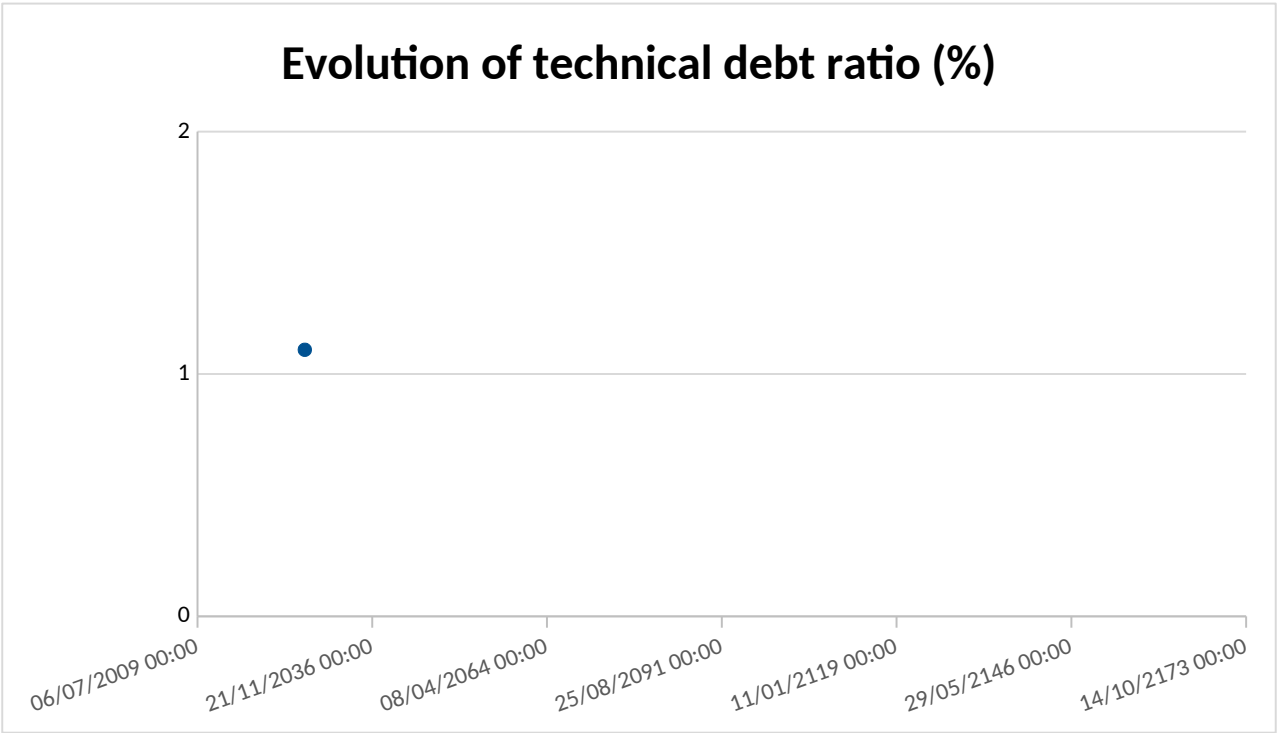
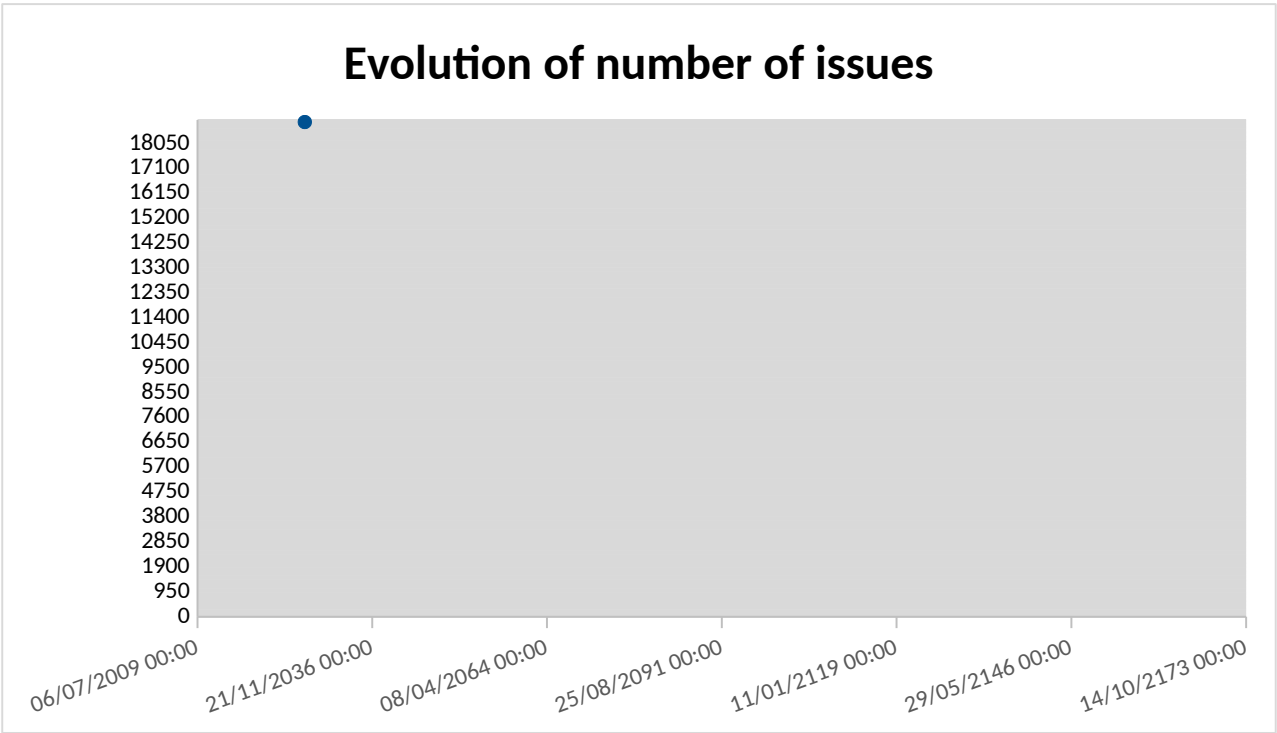
CHARTS

Number of issues by severity



Number of issues by type





ISSUES COUNT BY SEVERITY AND TYPE

Type / Severity	INFO	MINOR	MAJOR	CRITICAL	BLOCKER
BUG	0	7	56	15	3
VULNERABILITY	0	0	0	3	0
CODE_SMELL	39	7605	765	1472	35

ISSUES LIST

Name	Description	Type	Severity	Number
CSS properties should be valid		BUG	BLOCKER	1
"\$this" should not be used in a static context		BUG	BLOCKER	2
Shorthand properties that override related longhand properties should be avoided		BUG	CRITICAL	7
"typeof" expressions should only be compared to valid values		BUG	CRITICAL	2
References used in "foreach" loops should be "unset"		BUG	CRITICAL	6
Font declarations should contain at least one generic font family		BUG	MAJOR	3

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Properties should not be duplicated	BUG	MAJOR	21
Media features should be valid	BUG	MAJOR	11
Alternatives in regular expressions should be grouped when used with anchors	BUG	MAJOR	2
Binary expressions should not always return the same value	BUG	MAJOR	2
Non-empty statements should change control flow or have at least one side-effect	BUG	MAJOR	1
All code should be reachable	BUG	MAJOR	5
Related "if/else if" statements and "cases" in a "switch" should not have the same condition	BUG	MAJOR	1
The output of functions that don't return anything should not be used	BUG	MAJOR	2
All branches in a conditional structure should not have exactly the same implementation	BUG	MAJOR	1
Variables should be initialized before use	BUG	MAJOR	7

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Method visibility should be explicitly declared	BUG	MINOR	4
"require_once" and "include_once" should be used instead of "require" and "include"	BUG	MINOR	2
Repeated patterns in regular expressions should not match the empty string	BUG	MINOR	1
Variables should be declared explicitly	CODE_SMELL	BLOCKER	21
Function returns should not be invariant	CODE_SMELL	BLOCKER	3
Switch cases should end with an unconditional "break" statement	CODE_SMELL	BLOCKER	7
Variable variables should not be used	CODE_SMELL	BLOCKER	4
Functions should not be empty	CODE_SMELL	CRITICAL	3
Functions should not be nested too deeply	CODE_SMELL	CRITICAL	7
Constructor names should start with an upper case letter	CODE_SMELL	CRITICAL	9
Variables should be declared with "let" or "const"	CODE_SMELL	CRITICAL	960

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Cognitive Complexity of functions should not be too high	CODE_SMELL	CRITICAL	22
Methods should not be empty	CODE_SMELL	CRITICAL	11
String literals should not be duplicated	CODE_SMELL	CRITICAL	165
Control structures should use curly braces	CODE_SMELL	CRITICAL	67
"switch" statements should have "default" clauses	CODE_SMELL	CRITICAL	91
Cognitive Complexity of functions should not be too high	CODE_SMELL	CRITICAL	117
Unnecessary parentheses should not be used for constructs	CODE_SMELL	CRITICAL	20
Track uses of "TODO" tags	CODE_SMELL	INFO	8
Track uses of "TODO" tags	CODE_SMELL	INFO	31
Sections of code should not be commented out	CODE_SMELL	MAJOR	19
Empty blocks should be removed	CODE_SMELL	MAJOR	22
Selectors should not be duplicated	CODE_SMELL	MAJOR	17

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CSS files should not be empty	CODE_SMELL	MAJOR	2
Functions should not have too many parameters	CODE_SMELL	MAJOR	4
Assignments should not be made from within sub-expressions	CODE_SMELL	MAJOR	11
Sections of code should not be commented out	CODE_SMELL	MAJOR	23
Functions should not be defined inside loops	CODE_SMELL	MAJOR	1
Unused assignments should be removed	CODE_SMELL	MAJOR	14
Variables should be used in the blocks where they are declared	CODE_SMELL	MAJOR	24
Variables and functions should not be redeclared	CODE_SMELL	MAJOR	29
Ternary operators should not be nested	CODE_SMELL	MAJOR	5
Literals should not be thrown	CODE_SMELL	MAJOR	1
Functions should always return the same type	CODE_SMELL	MAJOR	1
Unnecessary character escapes	CODE_SMELL	MAJOR	12

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should be removed			
Ends of strings should be checked with "startsWith()" and "endsWith()"	CODE_SMELL	MAJOR	2
Optional chaining should be preferred	CODE_SMELL	MAJOR	35
Prototypes of builtin objects should not be modified	CODE_SMELL	MAJOR	1
If statements should not be the only statement in else blocks	CODE_SMELL	MAJOR	4
Spread syntax should be used instead of "apply()"	CODE_SMELL	MAJOR	3
Calls to ".call()" and ".apply()" methods should not be redundant	CODE_SMELL	MAJOR	1
Mergeable "if" statements should be combined	CODE_SMELL	MAJOR	75
Functions should not have too many parameters	CODE_SMELL	MAJOR	2
Nested blocks of code should not be left empty	CODE_SMELL	MAJOR	5
Redundant pairs of parentheses should be removed	CODE_SMELL	MAJOR	11
Generic exceptions	CODE_SMELL	MAJOR	5

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ErrorException,
RuntimeException
and Exception
should not be
thrown

Track uses of "FIXME" tags	CODE_SMELL	MAJOR	1
Functions should not contain too many return statements	CODE_SMELL	MAJOR	46
Unused "private" methods should be removed	CODE_SMELL	MAJOR	1
Unused function parameters should be removed	CODE_SMELL	MAJOR	33
Sections of code should not be commented out	CODE_SMELL	MAJOR	32
Functions should not have too many lines of code	CODE_SMELL	MAJOR	70
Classes should not have too many methods	CODE_SMELL	MAJOR	209
Unused assignments should be removed	CODE_SMELL	MAJOR	13
Two branches in a conditional structure should not have exactly the same implementation	CODE_SMELL	MAJOR	1
Ternary operators should not be nested	CODE_SMELL	MAJOR	1

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Functions should use "return" consistently	CODE_SMELL	MAJOR	5
Methods should not have identical implementations	CODE_SMELL	MAJOR	3
Use of namespaces should be preferred to "include" or "require" functions	CODE_SMELL	MAJOR	9
Regular expressions should not be too complicated	CODE_SMELL	MAJOR	1
Character classes in regular expressions should not contain the same character twice	CODE_SMELL	MAJOR	2
Reluctant quantifiers in regular expressions should be followed by an expression that can't match the empty string	CODE_SMELL	MAJOR	1
Character classes in regular expressions should not contain only one character	CODE_SMELL	MAJOR	8
Extra semicolons should be removed	CODE_SMELL	MINOR	1
Arguments in long RUN instructions should be sorted	CODE_SMELL	MINOR	2
Reduce the amount of consecutive RUN instructions	CODE_SMELL	MINOR	1

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"if" statements should be preferred over "switch" when simpler	CODE_SMELL	MINOR	2
Function call arguments should not start on new lines	CODE_SMELL	MINOR	1
Unused local variables and functions should be removed	CODE_SMELL	MINOR	10
Deprecated APIs should not be used	CODE_SMELL	MINOR	33
Jump statements should not be redundant	CODE_SMELL	MINOR	3
"for of" should be used with Iterables	CODE_SMELL	MINOR	61
Regular expression literals should be used when possible	CODE_SMELL	MINOR	1
Regular expression quantifiers and character classes should be used concisely	CODE_SMELL	MINOR	2
Objects and classes converted or coerced to strings should define a "toString()" method	CODE_SMELL	MINOR	4
"RegExp.exec()" should be preferred over "String.match()"	CODE_SMELL	MINOR	10

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Ternary operator should not be used instead of simpler alternatives	CODE_SMELL	MINOR	1
Function names should comply with a naming convention	CODE_SMELL	MINOR	40
Class names should comply with a naming convention	CODE_SMELL	MINOR	2956
Tabulation characters should not be used	CODE_SMELL	MINOR	64
Empty statements should be removed	CODE_SMELL	MINOR	1
Boolean literals should not be redundant	CODE_SMELL	MINOR	17
Files should end with a newline	CODE_SMELL	MINOR	14
Lines should not end with trailing whitespaces	CODE_SMELL	MINOR	461
"empty()" should be used to test for emptiness	CODE_SMELL	MINOR	11
Field names should comply with a naming convention	CODE_SMELL	MINOR	3443
Local variable and function parameter names should comply with a naming convention	CODE_SMELL	MINOR	15

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Overriding methods should do more than simply call the same method in the super class

CODE_SMELL

MINOR

2

"switch" statements should have at least 3 "case" clauses

CODE_SMELL

MINOR

57

Unused local variables should be removed

CODE_SMELL

MINOR

84

Local variables should not be declared and then immediately returned or thrown

CODE_SMELL

MINOR

55

Closing tag ">" should be omitted on files containing only PHP

CODE_SMELL

MINOR

1

PHP keywords and constants "true", "false", "null" should be lower case

CODE_SMELL

MINOR

196

"elseif" keyword should be used in place of "else if" keywords

CODE_SMELL

MINOR

41

Jump statements should not be redundant

CODE_SMELL

MINOR

4

Character classes should be preferred over reluctant quantifiers in regular expressions

CODE_SMELL

MINOR

3

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Regular expression quantifiers and character classes should be used concisely	CODE_SMELL	MINOR	8
Server certificates should be verified during SSL/TLS connections	VULNERABILITY	CRITICAL	2
LDAP connections should be authenticated	VULNERABILITY	CRITICAL	1

SECURITY HOTSPOTS

SECURITY HOTSPOTS COUNT BY CATEGORY AND PRIORITY

Category / Priority	LOW	MEDIUM	HIGH
LDAP Injection	0	0	0
Object Injection	0	0	0
Server-Side Request Forgery (SSRF)	0	0	0
XML External Entity (XXE)	0	0	0
Insecure Configuration	59	0	0
XPath Injection	0	0	0
Authentication	0	0	1
Weak Cryptography	0	20	0
Denial of Service (DoS)	0	14	0
Log Injection	0	0	0
Cross-Site Request Forgery (CSRF)	0	0	0
Open Redirect	0	0	0
Permission	0	12	0
SQL Injection	0	0	0
Encryption of Sensitive Data	42	0	0
Traceability	0	0	0
Buffer Overflow	0	0	0
File Manipulation	0	0	0

Code Injection (RCE)	0	16	0
Cross-Site Scripting (XSS)	0	0	0
Command Injection	0	0	0
Path Traversal Injection	0	0	0
HTTP Response Splitting	0	0	0
Others	85	0	0

SECURITY HOTSPOTS LIST

Category	Name	Priority	Severity	Count
Denial of Service (DoS)	Using slow regular expressions is security-sensitive	MEDIUM	CRITICAL	14
Permission	Running containers as a privileged user is security-sensitive	MEDIUM	MINOR	1
Encryption of Sensitive Data	Using clear-text protocols is security-sensitive	LOW	CRITICAL	3
Encryption of Sensitive Data	Using clear-text protocols is security-sensitive	LOW	CRITICAL	39
Others	Automatically installing recommended packages is security-sensitive	LOW	MINOR	4
Others	Creating cookies without the "HttpOnly" flag is security-sensitive	LOW	MINOR	8

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Others	Using intrusive permissions is security-sensitive	LOW	MAJOR	6
Others	Using remote artifacts without integrity checks is security-sensitive	LOW	MINOR	3
Others	Using weak hashing algorithms is security-sensitive	LOW	CRITICAL	52
Code Injection (RCE)	Dynamically executing code is security-sensitive	MEDIUM	CRITICAL	4
Others	Allowing shell scripts execution during package installation is security-sensitive	LOW	MAJOR	1
Insecure Configuration	Creating cookies without the "secure" flag is security-sensitive	LOW	MINOR	9
Others	Allowing downgrades to a clear-text protocol is security-sensitive	LOW	MAJOR	1
Permission	Setting loose POSIX file permissions is security-sensitive	MEDIUM	MAJOR	11
Code Injection (RCE)	Dynamically executing code is security-sensitive	MEDIUM	CRITICAL	12
Others	Using hardcoded IP addresses is security-sensitive	LOW	MINOR	10
Weak Cryptography	Using pseudorandom	MEDIUM	CRITICAL	20

	number generators (PRNGs) is security-sensitive			
Insecure Configuration	Delivering code in production with debug features activated is security-sensitive	LOW	MINOR	50
Authentication	Hard-coded secrets are security-sensitive	HIGH	BLOCKER	1