过 PARASOFT。

C/C++test® Report

Builtin configuration: MISRA C 2023 (MISRA C 2012) 2025-05-19T10:57:54-04:00

STATIC ANALYSIS

Tasks: 203 total, 0 suppressed

All Tasks by Category

- [1] Rule 8.6 (Required) An identifier with external linkage shall have exactly one external definition (MISRAC2012-RULE_8_6)
 - [1] An identifier with external linkage shall have external definition (MISRAC2012-RULE 8 6-b-2)
- [1] Rule 11.5 (Advisory) A conversion should not be performed from pointer to void into pointer to object (MISRAC2012-RULE_11_5)
 - [1] A conversion should not be performed from pointer to void into pointer to object (MISRAC2012-RULE_11_5-a-4)
- [4] Rule 8.4 (Required) A compatible declaration shall be visible when an object or function with external linkage is defined (MISRAC2012-RULE 8 4)
 - [4] A declaration shall be visible when an object or function with external linkage is defined (MISRAC2012-RULE_8_4-a-2)
- [2] Rule 11.9 (Required) The macro NULL shall be the only permitted form of integer null pointer constant (MISRAC2012-RULE_11_9)
 - [1] Literal zero (0) shall not be used as the null-pointer-constant (MISRAC2012-RULE_11_9-a-2)
 - [1] Use NULL instead of literal zero (0) as the null-pointer-constant (MISRAC2012-RULE_11_9-b-2)
- [6] Rule 8.7 (Advisory) Functions and objects should not be defined with external linkage if they are referenced in only one translation unit (MISRAC2012-RULE 8 7)
 - [6] Functions and objects should not be defined with external linkage if they are referenced in only one translation unit (MISRAC2012-RULE_8_7-a-4)
- [2] Dir 4.12 (Required) Dynamic memory allocation shall not be used (MISRAC2012-DIR 4 12)
 - [2] Dynamic heap memory allocation shall not be used (MISRAC2012-DIR 4 12-a-2)
- [22] Rule 8.2 (Required) Function types shall be in prototype form with named parameters (MISRAC2012-RULE_8_2)
 - [5] Identifiers shall be given for all of the parameters in a function prototype declaration (MISRAC2012-RULE_8_2-a-2)
 - [17] Function types shall be in prototype form (MISRAC2012-RULE 8 2-c-2)
- [1] Rule 10.4 (Required) Both operands of an operator in which the usual arithmetic conversions are performed shall have the same essential type category (MISRAC2012-RULE_10_4)
- [1] Both operands of an operator in which the usual arithmetic conversions are performed shall have the same essential type category (MISRAC2012-RULE_10_4-a-2)
- [26] Rule 7.4 (Required) A string literal shall not be assigned to an object unless the object's type is "pointer to const-qualified char" (MISRAC2012-RULE 7 4)
 - [26] A string literal shall not be modified (MISRAC2012-RULE_7_4-a-2)
- [1] Rule 18.1 (Required) A pointer resulting from arithmetic on a pointer operand shall address an element of the same array as that pointer operand (MISRAC2012-RULE_18_1)
 - [1] Avoid accessing arrays out of bounds (MISRAC2012-RULE_18_1-a-2)
- [1] Rule 10.3 (Required) The value of an expression shall not be assigned to an object with a narrower essential type or of a different essential type category (MISRAC2012-RULE 10 3)
 - [1] The value of an expression shall not be assigned to an object of a different essential type category (MISRAC2012-RULE_10_3-b-2)
- [3] Rule 21.6 (Required) The Standard Library input/output functions shall not be used (MISRAC2012-RULE_21_6)
 - [3] The input/output functions from the 'cstdio' and 'cwchar' libraries should not be used (MISRAC2012-RULE _21_6-a-2)
- [1] Rule 21.7 (Required) The atof, atoi, atoi and atoll functions of <stdlib.h> shall not be used (MISRAC2012-RULE_21_7)
 - [1] The 'atof', 'atol', 'atol' and 'atoll' functions from the 'stdlib.h' or 'cstdlib' library should not be used (MISRAC2012-RULE_21_7-a-2)
- [4] Rule 21.1 (Required) #define and #undef shall not be used on a reserved identifier or reserved macro name (MISRAC2012-RULE 21 1)
 - [4] Do not #define or #undef identifiers with names which start with underscore (MISRAC2012-RULE_21_1-a-2)
- [2] Rule 21.3 (Required) The memory allocation and deallocation functions of <stdlib.h> shall not be used (MISRAC2012-RULE_21_3)
 - [2] Dynamic heap memory allocation shall not be used (MISRAC2012-RULE_21_3-a-2)
- [1] Rule 13.3 (Advisory) A full expression containing an increment (++) or decrement (--) operator should have no other potential side effects other than that caused by the increment or decrement operator (MISRAC2012-RULE_13_3)
 - [1] A full expression containing an increment (++) or decrement (--) operator should have no other potential side effects (MISRAC2012-RULE_13_3-a-4)
- [1] Rule 2.7 (Advisory) A function should not contain unused parameters (MISRAC2012-RULE_2_7)
 - [1] There should be no unused parameters in functions (MISRAC2012-RULE_2_7-a-4)
- $\textbf{[5]} \quad \textbf{Rule 2.8 (Advisory) A project should not contain unused object definitions} \\ \textbf{(MISRAC2012-RULE_2_8)} \\ \textbf{(MISRAC2012-RULE_$
 - $\textbf{[5]} \quad \text{A project should not contain unused local variables} \\ \text{(MISRAC2012-RULE_2_8-c-4)}$
- [1] Dir 4.8 (Advisory) If a pointer to a structure or union is never dereferenced within a translation unit, then the implementation of the object should be hidden (MISRAC2012-DIR 4 8)
- [1] If a pointer to a structure or union is never dereferenced within a translation unit, then the implementation of the object should be hidden (MISRAC2012-DIR_4_8-a-4)
- [1] Dir 4.7 (Required) If a function returns error information, then that error information shall be tested (MISRAC2012-DIR_4_7)
 - [1] Always check the returned value of non-void function (MISRAC2012-DIR_4_7-b-2)
- [22] Dir 4.6 (Advisory) typedefs that indicate size and signedness should be used in place of the basic numerical types (MISRAC2012-DIR_4_6)
 - $\begin{tabular}{ll} \textbf{[22]} & type defs should be used in place of the basic types (MISRAC2012-DIR_4_6-b-4) \\ \end{tabular}$
- $\textbf{[2]} \ \ \textbf{Dir 4.1 (Required) Run-time failures shall be minimized} \ (\texttt{MISRAC2012-DIR}_4_1)$
 - $\textbf{[1]} \ \ \ \textbf{Avoid accessing arrays out of bounds} \ (\texttt{MISRAC2012-DIR}_4_1-a-2)$
 - [1] Avoid null pointer dereferencing (MISRAC2012-DIR_4_1-b-2)
- [1] Rule 8.13 (Advisory) A pointer should point to a const-qualified type whenever possible (MISRAC2012-RULE_8_13)
- [1] A pointer parameter in a function prototype should be declared as pointer to const if the pointer is not used to modify the addressed object (MISRAC2012-RULE_8_13-a-4)

[17] Rule 1.5 (Required) Obsolescent language features shall not be used (MISRAC2012-RULE_1_5) [17] Function types shall be in prototype form (MISRAC2012-RULE_1_5-c-2) [3] Rule 15.5 (Advisory) A function should have a single point of exit at the end (MISRAC2012-RULE_15_5) [3] A function shall have a single point of exit at the end of the function (MISRAC2012-RULE_15_5-a-4) [1] Rule 14.3 (Required) Controlling expressions shall not be invariant (MISRAC2012-RULE_14_3) [1] Avoid conditions that always evaluate to the same value (MISRAC2012-RULE_14_3-ac-2) [2] Rule 14.4 (Required) The controlling expression of an if statement and the controlling expression of an iteration-statement shall have essentially Boolean type (MISRAC2012-RULE 14 4) [2] Tests of a value against zero should be made explicit, unless the operand is effectively Boolean (MISRAC2012-RULE_14_4-a-2) [19] Rule 21.10 (Required) The Standard Library time and date functions shall not be used (MISRAC2012-RULE 21 10) [2] The standard header files <time.h> or <ctime> shall not be used (MISRAC2012-RULE 21 10-a-2) [10] The time handling functions and macros of the library <time.h> shall not be used (MISRAC2012-RULE_21_10-b-2) [7] The types defined in the library <time.h> shall not be used (MISRAC2012-RULE 21 10-c-2) [15] Rule 17.3 (Mandatory) A function shall not be declared implicitly (MISRAC2012-RULE_17_3) [15] Functions shall always have visible prototype at the function call (MISRAC2012-RULE_17_3-a-1) [35] Rule 17.7 (Required) The value returned by a function having non-void return type shall be used (MISRAC2012-RULE_17_7) [35] The value returned by a function having non-void return type shall be used (MISRAC2012-RULE_17_7-a-2) syoung Total Tasks: 203 /Timer/Timer/clock.c MISRAC2012-RULE_1_5-c-2 13: Function 'display_time' is not in prototype form 13: Function 'display_time' is not in prototype form MISRAC2012-RULE_8_2-c-2 16: The 'time_t' identifier should not be used MISRAC2012-RULE_21_10-c-2 MISRAC2012-RULE_21_10-b-2 16: Usage of 'time' function is not allowed 17: Usage of 'ctime' function is not allowed MISRAC2012-RULE 21 10-b-2 19: The 'sprintf' library function should not be used MISRAC2012-RULE 21 6-a-2 19: Unused function's "sprintf" return value MISRAC2012-RULE_17_7-a-2 MISRAC2012-RULE 17 7-a-2 20: Unused function's "print_string" return value 27: Parameter 'new_time' is not used in function 'set_time' MISRAC2012-RULE_2_7-a-4 27: The 'time_t' identifier should not be used MISRAC2012-RULE_21_10-c-2 /Timer/Timer/clock.h 3: Do not use reserved identifiers: clock h MISRAC2012-RULE 21 1-a-2 5: Do not include the <time.h> header file MISRAC2012-RULE_21_10-a-2 8: Function 'display_time' is not in prototype form MISRAC2012-RULE_1_5-c-2 MISRAC2012-RULE 8 2-c-2 8: Function 'display_time' is not in prototype form 11: Names shall be given for all the parameters in function 'set_time' MISRAC2012-RULE_8_2-a-2 11: The 'time_t' identifier should not be used MISRAC2012-RULE_21_10-c-2 /Timer/Timer/consts.h 3: Do not use reserved identifiers : _consts_h_ MISRAC2012-RULE_21_1-a-2 /Timer/Timer/driver.c MISRAC2012-RULE 1 5-c-2 13: Function 'print_menu_get_action' is not in prototype form 13: Function 'print_menu_get_action' is not in prototype form MISRAC2012-RULE 8 2-c-2 13: Prototype of function 'print_menu_get_action' does not precede function definition MISRAC2012-RULE 8 4-a-2 13: The basic numerical type 'int' should not be used MISRAC2012-DIR 4 6-b-4 13: The function 'print_menu_get_action' is referenced only in the translation unit where it is defined MISRAC2012-RULE 8 7-a-4 MISRAC2012-RULE_7_4-a-2 pointer to non-const object 15: Unused function's "print_string" return value MISRAC2012-RULE_17_7-a-2 16: String literal "* Timer Menu *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE_7_4-a-2 16: Unused function's "print_string" return value MISRAC2012-RULE_17_7-a-2 17: String literal "* -+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+ *" is passed to function 'print_string' as MISRAC2012-RULE_7_4-a-2 pointer to non-const object 17: Unused function's "print_string" return value MISRAC2012-RULE 17 7-a-2 18: String literal "* *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE 7 4-a-2 MISRAC2012-RULE 17 7-a-2 18: Unused function's "print_string" return value 19: String literal "* 1) Add a timer *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE_7_4-a-2 MISRAC2012-RULE_17_7-a-2 19: Unused function's "print_string" return value 20: String literal "* 2) Remove a timer *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE_7_4-a-2 MISRAC2012-RULE_17_7-a-2 20: Unused function's "print string" return value 21: String literal "* 3) List all timers *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE 7 4-a-2 21: Unused function's "print string" return value MISRAC2012-RULE 17 7-a-2 22: String literal "* 4) Show time *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE 7 4-a-2 22: Unused function's "print_string" return value MISRAC2012-RULE_17_7-a-2 23: String literal "* *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE 7 4-a-2 23: Unused function's "print_string" return value MISRAC2012-RULE_17_7-a-2 24: String literal "* 9) Exit *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE_7_4-a-2 24: Unused function's "print_string" return value MISRAC2012-RULE 17 7-a-2 25: String literal "* *" is passed to function 'print_string' as pointer to non-const object MISRAC2012-RULE_7_4-a-2

25: Unused function's "print_string" return value

26: Unused function's "print string" return value

pointer to non-const object

MISRAC2012-RULE_17_7-a-2

MISRAC2012-RULE_7_4-a-2

MISRAC2012-RULE 17 7-a-2

		MIODA 00040 DIII E 7 4 0
28:	String literal "Enter selection, when done press <enter> > " is passed to function 'print_string' as</enter>	MISRAC2012-RULE_7_4-a-2
20.	pointer to non-const object	MISDA C2012 DI II E 17 7 2 2
	Unused function's "print_string" return value	MISRAC2012-RULE_17_7-a-2
	Prototype of function 'get_input_digit' does not precede function call	MISRAC2012-RULE_17_3-a-1
32:	Function 'main_loop' is not in prototype form	MISRAC2012-RULE_1_5-c-2
32:	Function 'main_loop' is not in prototype form	MISRAC2012-RULE_8_2-c-2
32:	Prototype of function 'main_loop' does not precede function definition	MISRAC2012-RULE_8_4-a-2
32:	The function 'main_loop' is referenced only in the translation unit where it is defined	MISRAC2012-RULE_8_7-a-4
35:	Prototype of function 'print_menu_get_action' does not precede function call	MISRAC2012-RULE_17_3-a-1
35:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
40:	Prototype of function 'add_timer' does not precede function call	MISRAC2012-RULE_17_3-a-1
42:	String literal "Error timer not added!" is passed to function 'print string' as pointer to non-const	MISRAC2012-RULE_7_4-a-2
	object	
42:	Unused function's "print_string" return value	MISRAC2012-RULE_17_7-a-2
	String literal "Timer added!" is passed to function 'print_string' as pointer to non-const object	MISRAC2012-RULE 7 4-a-2
	Unused function's "print_string" return value	MISRAC2012-RULE 17 7-a-2
	String literal "Which timer should I nuke? > " is passed to function 'print_string' as pointer to non-const	MISRAC2012-RULE_7_4-a-2
40.	object	WISKACZUTZ-KOLL_T_4-a-Z
48.	Unused function's "print_string" return value	MISRAC2012-RULE 17 7-a-2
	Prototype of function 'get_input_digit' does not precede function call	MISRAC2012-RULE_17_3-a-1
	Prototype of function 'list_timers' does not precede function call	MISRAC2012-RULE_17_3-a-1
	Prototype of function 'display_time' does not precede function call	MISRAC2012-RULE_17_3-a-1
59:		MISRAC2012-RULE_7_4-a-2
59:	Unused function's "print_string" return value	MISRAC2012-RULE_17_7-a-2
60:	'return' statement should be at the end of the 'main_loop' function	MISRAC2012-RULE_15_5-a-4
63:	String literal "Invalid Action try again!" is passed to function 'print_string' as pointer to non-const	MISRAC2012-RULE_7_4-a-2
	object	
63:	Unused function's "print_string" return value	MISRAC2012-RULE_17_7-a-2
69:	Function 'main' is not in prototype form	MISRAC2012-RULE_1_5-c-2
69:	Function 'main' is not in prototype form	MISRAC2012-RULE_8_2-c-2
71:	Prototype of function 'init_timer' does not precede function call	MISRAC2012-RULE_17_3-a-1
72:	Prototype of function 'main_loop' does not precede function call	MISRAC2012-RULE_17_3-a-1
	Prototype of function 'uninit_timer' does not precede function call	MISRAC2012-RULE_17_3-a-1
	imer/inout.h	
	Do not use reserved identifiers : _input_h_	MISRAC2012-RULE_21_1-a-2
	Function 'get_input_digit' is not in prototype form	MISRAC2012-RULE_1_5-c-2
	Function 'get_input_digit' is not in prototype form	MISRAC2012-RULE_8_2-c-2
	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
9:	Names shall be given for all the parameters in function 'print_string'	MISRAC2012-RULE_8_2-a-2
9:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
12:	Function 'print_string_array' is not in prototype form	MISRAC2012-RULE_1_5-c-2
12:	Function 'print_string_array' is not in prototype form	MISRAC2012-RULE_8_2-c-2
12:	The 'print_string_array' function has no definition	MISRAC2012-RULE_8_6-b-2
12:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
/Timer/Timer/stdinout.c		
16:	Function 'get_input_digit' is not in prototype form	MISRAC2012-RULE_1_5-c-2
16:	Function 'get_input_digit' is not in prototype form	MISRAC2012-RULE_8_2-c-2
16:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
	Local variable 'c' declared but not used	MISRAC2012-RULE_2_8-c-4
	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
	Do not use the 'atoi' function	MISRAC2012-DIN_4_0-0-0-4
	Pass parameter "str" with const specifier The hard parameter "str" with character at the const specifier.	MISRAC2012-RULE_8_13-a-4
	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
	The 'printf' library function should not be used	MISRAC2012-RULE_21_6-a-2
/Timer/Timer/timer.c		
17:	Declaration of object 'max_records' does not precede its definition	MISRAC2012-RULE_8_4-a-2
17:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
17:	The object 'max_records' is referenced only in the translation unit where it is defined	MISRAC2012-RULE_8_7-a-4
18:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
	Function 'init_timer' is not in prototype form	MISRAC2012-RULE_1_5-c-2
	Function 'init_timer' is not in prototype form	MISRAC2012-RULE_8_2-c-2
22:		MISRAC2012-RULE_10_4-a-2
	Unused function's "memset" return value	MISRAC2012-RULE_17_7-a-2
	Function 'uninit_timer' is not in prototype form	MISRAC2012-RULE_1_5-c-2
25:		MISRAC2012-RULE_8_2-c-2
28:	The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
38:	Function 'query_user' is not in prototype form	MISRAC2012-RULE_1_5-c-2
38:	Function 'query_user' is not in prototype form	MISRAC2012-RULE_8_2-c-2
38:	Prototype of function 'query_user' does not precede function definition	MISRAC2012-RULE_8_4-a-2
38:	The function 'query_user' is referenced only in the translation unit where it is defined	MISRAC2012-RULE_8_7-a-4
40:	· · · · · ·	MISRAC2012-RULE_2_8-c-4
	Local variable 'end_m' declared but not used	MISRAC2012-RULE_2_8-c-4
	-	

```
40: Local variable 'start_h' declared but not used
                                                                                                                       MISRAC2012-RULE_2_8-c-4
                                                                                                                      MISRAC2012-RULE 2 8-c-4
40: Local variable 'start m' declared but not used
                                                                                                                        MISRAC2012-DIR 4 6-b-4
40: The basic numerical type 'int' should not be used
42: The 'time_t' identifier should not be used
                                                                                                                    MISRAC2012-RULE_21_10-c-2
43: The 'tm' identifier should not be used
                                                                                                                    MISRAC2012-RULE 21 10-c-2
45: Usage of 'time' function is not allowed
                                                                                                                    MISRAC2012-RULE 21 10-b-2
46: Usage of 'localtime' function is not allowed
                                                                                                                    MISRAC2012-RULE_21_10-b-2
48: 'malloc' function should not be used
                                                                                                                     MISRAC2012-RULE_21_3-a-2
                                                                                                                       MISRAC2012-DIR_4_12-a-2
48: 'malloc' function should not be used
48: Pointer to void type should not be converted to pointer to object type 'struct timer record *'
                                                                                                                     MISRAC2012-RULE 11 5-a-4
                                                                                                                        MISRAC2012-DIR 4 1-b-2
49: "the_record" may possibly be null
     timer.c (40): int start_h, start_m, end_h, end_m;
     timer.c (41): struct timer record* the record;
     timer.c (42): time t timer;
     timer.c (43): struct tm* tm_tmp;
     timer.c (45): timer = time(NULL);
     timer.c (46): tm_tmp = localtime(&timer);
     Source of null value
     timer.c (48): malloc(...) *** Null value carrier: malloc(...)
     timer.c (48): the_record = (struct timer_record*)malloc(sizeof(struct timer_record)); *** Null value carrier: malloc(...) -> the_record
     Null pointer dereferencing point
     timer.c (49): memset(the_record, 0, sizeof(struct timer_record)); *** Null value carrier: the_record
                                                                                                                     MISRAC2012-RULE_17_7-a-2
49: Unused function's "memset" return value
49: Value returned from method "malloc" should be checked
                                                                                                                        MISRAC2012-DIR 4 7-b-2
     timer.c (40): int start_h, start_m, end_h, end_m;
     timer.c (41): struct timer record* the record;
     timer.c (42): time t timer;
     timer.c (43): struct tm* tm tmp;
     timer.c (45): timer = time(NULL);
     timer.c (46): tm_tmp = localtime(&timer);
     Method call
     timer.c (48): malloc(...)
     timer.c (48): the record = (struct timer record*)malloc(sizeof(struct timer record));
     Point by which returned value should be checked
     timer.c (49): memset(the record, 0, sizeof(struct timer record));
52: String literal "Please enter the start hour [0-23] > " is passed to function 'print_string' as pointer to non-
                                                                                                                      MISRAC2012-RULE 7 4-a-2
    const object
52: Unused function's "print_string" return value
                                                                                                                     MISRAC2012-RULE 17 7-a-2
                                                                                                                     MISRAC2012-RULE_17_3-a-1
53: Prototype of function 'get_input_digit' does not precede function call
54: String literal "Please enter the start minute [0-59] > " is passed to function 'print_string' as pointer to
                                                                                                                      MISRAC2012-RULE_7_4-a-2
    non-const object
54: Unused function's "print_string" return value
                                                                                                                     MISRAC2012-RULE_17_7-a-2
                                                                                                                     MISRAC2012-RULE_17_3-a-1
55: Prototype of function 'get_input_digit' does not precede function call
57: Usage of 'mktime' function is not allowed
                                                                                                                    MISRAC2012-RULE_21_10-b-2
60: String literal "Please enter the end hour [0-23] > " is passed to function 'print_string' as pointer to non-
                                                                                                                      MISRAC2012-RULE_7_4-a-2
     const object
                                                                                                                     MISRAC2012-RULE_17_7-a-2
60: Unused function's "print_string" return value
                                                                                                                     MISRAC2012-RULE 17 3-a-1
61: Prototype of function 'get_input_digit' does not precede function call
62: String literal "Please enter the end minute [0-59] > " is passed to function 'print_string' as pointer to
                                                                                                                      MISRAC2012-RULE 7 4-a-2
     non-const object
                                                                                                                     MISRAC2012-RULE_17_7-a-2
62: Unused function's "print_string" return value
63: Prototype of function 'get_input_digit' does not precede function call
                                                                                                                     MISRAC2012-RULE 17 3-a-1
65: Usage of 'mktime' function is not allowed
                                                                                                                    MISRAC2012-RULE_21_10-b-2
68: String literal "Please enter the channel to record > " is passed to function 'print_string' as pointer to
                                                                                                                      MISRAC2012-RULE_7_4-a-2
     non-const object
68: Unused function's "print_string" return value
                                                                                                                     MISRAC2012-RULE 17 7-a-2
69: Prototype of function 'get input digit' does not precede function call
                                                                                                                     MISRAC2012-RULE 17 3-a-1
69: The expression of the 'essentially signed' type is assigned to an object with the 'essentially unsigned'
                                                                                                                     MISRAC2012-RULE_10_3-b-2
     type
                                                                                                                      MISRAC2012-RULE_1_5-c-2
74: Function 'add_timer' is not in prototype form
74: Function 'add_timer' is not in prototype form
                                                                                                                      MISRAC2012-RULE_8_2-c-2
74: The basic numerical type 'int' should not be used
                                                                                                                        MISRAC2012-DIR 4 6-b-4
 78: Prototype of function 'query_user' does not precede function call
                                                                                                                     MISRAC2012-RULE_17_3-a-1
80: Test of a value against zero should be made explicit
                                                                                                                     MISRAC2012-RULE 14 4-a-2
83: Provide only one exit point in 'add_timer' function
                                                                                                                     MISRAC2012-RULE_15_5-a-4
85: Provide only one exit point in 'add_timer' function
                                                                                                                     MISRAC2012-RULE_15_5-a-4
                                                                                                                      MISRAC2012-RULE_8_7-a-4
88: The function 'add timer record' is referenced only in the translation unit where it is defined
98: The '++' operator should cause the only side effect in an expression
                                                                                                                     MISRAC2012-RULE_13_3-a-4
100: String literal "All timers used ... timer not added" is passed to function 'print_string' as pointer to non-
                                                                                                                      MISRAC2012-RULE_7_4-a-2
     const object
                                                                                                                     MISRAC2012-RULE_17_7-a-2
100: Unused function's "print_string" return value
108: The basic numerical type 'int' should not be used
                                                                                                                        MISRAC2012-DIR 4 6-b-4
111: The basic numerical type 'int' should not be used
                                                                                                                        MISRAC2012-DIR_4_6-b-4
116: Expression of pointer type is compared with '0'
                                                                                                                      MISRAC2012-RULE_11_9-a-2
```

```
116: Expression of pointer type is compared with '0'
                                                                                                                        MISRAC2012-RULE_11_9-b-2
   116: Possibly accessing array "timer_records" out of bounds at index -1. Correct index(es): [0...99]
                                                                                                                           MISRAC2012-DIR 4 1-a-2
         Start of the path
         timer.c (25): void uninit_timer()
         timer.c (28): int i;
         timer.c (30): for (i = 0; i < max_records; i++) { *** Loop condition evaluation: (i < 100) (true) *** Entering the loop
         timer.c (31): delete timer record(i);
             timer.c (110): struct timer record* tr = timer records[idx];
             timer.c (111): int i:
             timer.c (114): for (i = idx-1; i < curr_index; i++) *** Loop condition evaluation: (i < curr_index) (assuming true) *** Entering the
             Out of bounds access point
              timer.c (116): if (0 == timer_records[i]) {
   116: Possibly accessing array "timer_records" out of bounds at index -1. Correct index(es): [0...99]
                                                                                                                        MISRAC2012-RULE_18_1-a-2
         Start of the path
         timer.c (25): void uninit_timer()
         timer.c (28): int i:
         timer.c (30): for (i = 0; i < max_records; i++) { *** Loop condition evaluation: (i < 100) (true) *** Entering the loop
         timer.c (31): delete timer record(i);
             timer.c (110): struct timer record* tr = timer records[idx];
             timer.c (111): int i;
             timer.c (114): for (i = idx-1; i < curr_index; i++) *** Loop condition evaluation: (i < curr_index) (assuming true) *** Entering the
         loop
             Out of bounds access point
              timer.c (116): if (0 == timer_records[i]) {
   123: 'free' function should not be used
                                                                                                                        MISRAC2012-RULE_21_3-a-2
   123: 'free' function should not be used
                                                                                                                          MISRAC2012-DIR_4_12-a-2
   126: The basic numerical type 'int' should not be used
                                                                                                                           MISRAC2012-DIR 4 6-b-4
   126: The function 'format_timer_record' is referenced only in the translation unit where it is defined
                                                                                                                         MISRAC2012-RULE_8_7-a-4
   133: Unused function's "strftime" return value
                                                                                                                        MISRAC2012-RULE 17 7-a-2
                                                                                                                       MISRAC2012-RULE 21 10-b-2
   133: Usage of 'localtime' function is not allowed
   133: Usage of 'strftime' function is not allowed
                                                                                                                       MISRAC2012-RULE_21_10-b-2
   134: Unused function's "strftime" return value
                                                                                                                        MISRAC2012-RULE_17_7-a-2
                                                                                                                       MISRAC2012-RULE_21_10-b-2
   134: Usage of 'localtime' function is not allowed
                                                                                                                       MISRAC2012-RULE 21 10-b-2
   134: Usage of 'strftime' function is not allowed
   136: Condition "tr" always evaluates to true
                                                                                                                       MISRAC2012-RULE 14 3-ac-2
         Start of the path
         timer.c (126): void format timer record(int idx, char* buf)
         timer.c (128): char start[BUF_SIZE]:
         timer.c (129): char end[BUF SIZE];
         timer.c (131): struct timer record* tr = timer records[idx];
         timer.c (133): strftime(start, BUF_SIZE, "%I:%M %p", localtime(&tr->starttime));
         timer.c (134): strftime(end, BUF SIZE, "%I:%M %p", localtime(&tr->endtime));
         Point where senseless condition is used
         timer.c (136): if (tr) {
   136: Test of a value against zero should be made explicit
                                                                                                                        MISRAC2012-RULE_14_4-a-2
   137: The 'sprintf' library function should not be used
                                                                                                                        MISRAC2012-RULE_21_6-a-2
   137: Unused function's "sprintf" return value
                                                                                                                        MISRAC2012-RULE_17_7-a-2
                                                                                                                         MISRAC2012-RULE 1 5-c-2
   142: Function 'list timers' is not in prototype form
                                                                                                                         MISRAC2012-RULE 8 2-c-2
   142: Function 'list timers' is not in prototype form
                                                                                                                           MISRAC2012-DIR 4 6-b-4
   145: The basic numerical type 'int' should not be used
                                                                                                                         MISRAC2012-RULE_7_4-a-2
   146: String literal "Current Set Timers" is passed to function 'print_string' as pointer to non-const object
                                                                                                                        MISRAC2012-RULE_17_7-a-2
   146: Unused function's "print string" return value
   147: String literal "Record# Start Time End Time Channel" is passed to function 'print_string' as pointer to
                                                                                                                         MISRAC2012-RULE_7_4-a-2
        non-const object
   147: Unused function's "print_string" return value
                                                                                                                        MISRAC2012-RULE_17_7-a-2
                                                                                                                        MISRAC2012-RULE_17_7-a-2
   151: Unused function's "print_string" return value
                                                                                                                        MISRAC2012-RULE_17_7-a-2
   153: Unused function's "print_string" return value
/Timer/Timer/timer.h
     3: Do not use reserved identifiers : _timer_h_
                                                                                                                        MISRAC2012-RULE 21 1-a-2
     5: Do not include the <time.h> header file
                                                                                                                       MISRAC2012-RULE 21 10-a-2
     9: Consider hiding the implementation of the structure 'timer_record' in a translation unit 'driver.c'
                                                                                                                           MISRAC2012-DIR_4_8-a-4
    11: The 'time_t' identifier should not be used
                                                                                                                       MISRAC2012-RULE_21_10-c-2
                                                                                                                       MISRAC2012-RULE_21_10-c-2
    12: The 'time t' identifier should not be used
    13: The basic numerical type 'unsigned' should not be used
                                                                                                                           MISRAC2012-DIR_4_6-b-4
    17: Function 'init_timer' is not in prototype form
                                                                                                                         MISRAC2012-RULE_1_5-c-2
                                                                                                                         MISRAC2012-RULE 8 2-c-2
    17: Function 'init timer' is not in prototype form
    18: Function 'uninit timer' is not in prototype form
                                                                                                                         MISRAC2012-RULE 1 5-c-2
    18: Function 'uninit_timer' is not in prototype form
                                                                                                                         MISRAC2012-RULE 8 2-c-2
    21: Function 'add_timer' is not in prototype form
                                                                                                                         MISRAC2012-RULE 1 5-c-2
    21: Function 'add_timer' is not in prototype form
                                                                                                                         MISRAC2012-RULE 8 2-c-2
    21: The basic numerical type 'int' should not be used
                                                                                                                           MISRAC2012-DIR_4_6-b-4
    24: Names shall be given for all the parameters in function 'add_timer_record'
                                                                                                                         MISRAC2012-RULE_8_2-a-2
```

27: Names shall be given for all the parameters in function 'delete_timer_record'	MISRAC2012-RULE_8_2-a-2
27: The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
30: Names shall be given for all the parameters in function 'format_timer_record'	MISRAC2012-RULE_8_2-a-2
30: The basic numerical type 'int' should not be used	MISRAC2012-DIR_4_6-b-4
33: Function 'list_timers' is not in prototype form	MISRAC2012-RULE_1_5-c-2
33: Function 'list_timers' is not in prototype form	MISRAC2012-RULE_8_2-c-2

Flow Analysis Legend:

Message - violation cause Message - violation point Message - path element annotation

©Parasoft Corp. - C++test 2024.2.0.20241115B2628 Reporting System