

TABLE I: JavaScript Patterns

ID	Pattern	#	API	SEC	Dyn	OOP	Neg	Tools
1	unset_element_array	1			S		✓	$\overline{L}--\overline{FC}$
	unset_element_array	1			S			L--FC
2	uri	1			S			L-cFC
	uri	1		✓	S		✓	-- \bar{c} -- \bar{C}
3	evaluated_call_time	1			S		✓	L-- \overline{FC}
	evaluated_call_time	1			S			L--FC
4	function_apply	1			S			---FC
5	variadic	1			S			---F-
6	callback_function	2			D1-D3			----C
7	array_unshift	1			S			L--F-
8	send_unpack	1			S			---FC
9	late_static_binding	1			D2			L-cFC
10	spread_properties	1			S			---FC
11	closure_scope_chain	1			S			L-cF-
12	NaN	1			S			L-cF-
13	function_declared_immediately_executed	1			S			-----
14	template_literals	1		✓	S			L-cFC
15	reflect_delete	2			S-D4		✓	--- \overline{FC}
	reflect_delete	1			D4			---FC
16	nullish_coalescing_operator	1			S			L-c---
17	call	2			S			L--FC
18	arguments	1			S			L--F-
19	nested_function	1			S			L-cFC
20	too_function_calls	2			S			L-c-C
21	new_target	1			S			L-cF-
22	reduce	1			S			---FC
23	forEach_in_nested	1			S			L-c---
24	finite	1			S			L-cFC
25	weak_map	1	✓		D2			L--FC
	weak_map	1	✓		D2		✓	$\overline{L}--\overline{FC}$
26	computed_properties	1			S			---FC
27	cast_string_array	1			S			L-cFC
28	closures	2			D2			L-cFC
	closures	1			D2			L-----
29	recursion	2			D1			L-cFC
30	generator_delegation	1			D2			---F-
	generator_delegation	1			D4			----C
31	generatorfunction_constructor	1			D3			----C
32	array_shift	1			S			L--FC
	array_shift	1			S		✓	$\overline{L}--\overline{FC}$
33	array_lenght	1			S		✓	$\overline{L}--\overline{FC}$
	array_lenght	1			S			L--FC
34	bind	1			D1			----C
35	async_methods	1			D1			L-----
36	returned_function	1			S			L-cF-
37	generators	1			D3			---F-
	generators	1			D3			----C
	generators	1			D3			---FC
	generators	1			D3		✓	--- \overline{FC}
38	while_break	1			S			L-cFC
39	function_get_arguments	1			D1			L-cFC
	function_get_arguments	1			D2			---F-
	function_get_arguments	1			D4			-----
40	function_name_conflict	1			S			L-cFC
41	symbol	1	✓		S			---FC
42	anonymous_object	1			D1			L-----
43	window_global	1			S			L-c---
44	array_map	1			D2			L--FC
45	escape_unescape(deprecated)	1	✓	✓	S		✓	-- \bar{c} \overline{FC}
	escape_unescape(deprecated)	1	✓		S			--cFC
46	continue	1			S			L-cFC
47	check_type	1	✓		S			L-cFC
48	compare_variables	1			S			---FC

49	arrow_function	1			D2			L-c-C
50	conditional_assign	1			S			L-cFC
51	global_variable	1			S			L-c-C
52	super_property	1			D1	✓		-----
53	simple_set	1			S	✓		---FC
54	define_property	1			D1	✓		L-c-C
	define_property	1			D1	✓	✓	$\overline{L}-\bar{c}-\overline{C}$
55	inheritance	1			S	✓		---C
56	weak_ref	1	✓		D2	✓		---C
57	object_seal	1			S	✓		---FC
58	object_freeze	1			S	✓		---FC
59	simple_object	1		✓	S	✓		L---C
60	object_create	1			D1	✓		---FC
61	delete_properties	1			S	✓	✓	$\overline{L}---\overline{C}$
	delete_properties	1			S1	✓		---C
62	static_variable	1			S	✓		---C
63	to_string	1	✓		S	✓		L--F-
64	assign_object	1			S	✓		--c--
65	proto	1			D4	✓		---F-
66	static_methods_and_prop	1			S	✓		L---C
67	symbol_to_string_tag	1	✓		D1	✓		---F-
68	promise	1			S	✓		L--FC
	promise	2			S	✓		L-cFC
69	set_and_get	1			S	✓		L-cFC
	set_and_get	1			S	✓		L--FC
70	reflect_get	1		✓	S	✓		---FC
	reflect_get	1		✓	S	✓		---C
71	named_class	1			D1	✓		L----
	named_class	1			D1	✓		L--F-
	named_class	1			D1	✓	✓	$\overline{L}--\overline{F}-$
72	errors	7		✓	S	✓		L--F-
73	weak_set	1	✓		S	✓		---FC
74	object_argument	1			S	✓		--cF-
75	functions_in_object	1			D1	✓		---C
76	reference_argument	1			S	✓		--c--
77	object_clone	1			S	✓		-----
78	asynchronous_event_handler	1	✓		D2			L-c-C
	asynchronous_event_handler	1	✓		D4			L-c--
79	inline_function	1			D1			L-c-C
80	json	1	✓		S			L-cFC
81	text_encoder	1	✓		S			---FC
82	location_assign_with_search	1	✓	✓	S			L-c-C
83	getAttribute	1	✓	✓	S			---C
84	try_catch	1			S			L-c-C
	try_catch	1		✓	D2			L-c-C
	try_catch	1		✓	D2		✓	$\overline{L}-\bar{c}-\overline{C}$
85	block_scope	1			S			L-cF-
86	type_juggling	1			D3			-----
	type_juggling	2			D3			L--FC
	type_juggling	1			D3		✓	$\overline{L}--\overline{FC}$
87	modules	1			D2			---C
88	with(deprecated)	1			S			L--FC
89	proxy	1	✓		S			L--FC
	proxy	1	✓		S		✓	$\overline{L}--\overline{FC}$
90	simple_array	1			S			L-cFC
	simple_array	1			S		✓	$\overline{L}-c\overline{FC}$
91	destructuring	1			S			L-cFC
92	set_to_array	1			S		✓	---C
	set_to_array	1			S			---C

93	for_of	1			S			L--FC
94	matrix	1			S			--cFC
	matrix	1			S			---FC
	matrix	1			S		✓	---FC
95	arithmetic_operation_array_index	1			S			L---C
	arithmetic_operation_array_index	1			S		✓	L---C
96	object_literals	1			S			L--FC
	object_literals	1			S			L-cFC
	object_literals	1			S			L-c-C
97	vulnerable_key_dictionary	2			S-D4			-----
98	throw_exception	1		✓	D2			L-----
	throw_exception	1		✓	D4			-----
99	GET_ajax	1	✓	✓	D2			L-cFC
100	replace_substring	1	✓		S			L-cFC
101	innerHTML_outerHTML	2	✓	✓	S			L---C
	Total	153	22	22		40	20	

Legenda for column Tools: LGTM (L), NodeJsScan (N), Coverity (c), Fortify (F), Checkmarx(C)