

3. Multiplication table with user interface

Student learning outcomes

- Students will use JavaScript to draw the contents of an HTML table.
- Students will create a form to let the user determine features of the information.

Real world applications:

- Students will explore how to display data so that it can be understood efficiently.
- Students will explore how different user interfaces can make a page more usable.

Assignment requirements:

- The page displays a 12x12 multiplication table.
- A form allows users to change the table dimensions.
- HTML elements: input, submit
- JavaScript concepts:
 - onclick
 - getElementById
 - Functions with input parameters
 - Application initialization

Multiplication Table

Rows: Columns:

1	2	3	4	5	6	7	8	9	10	11	12	13	14
2	4	6	8	10	12	14	16	18	20	22	24	26	28
3	6	9	12	15	18	21	24	27	30	33	36	39	42
4	8	12	16	20	24	28	32	36	40	44	48	52	56
5	10	15	20	25	30	35	40	45	50	55	60	65	70
6	12	18	24	30	36	42	48	54	60	66	72	78	84
7	14	21	28	35	42	49	56	63	70	77	84	91	98
8	16	24	32	40	48	56	64	72	80	88	96	104	112
9	18	27	36	45	54	63	72	81	90	99	108	117	126
10	20	30	40	50	60	70	80	90	100	110	120	130	140
11	22	33	44	55	66	77	88	99	110	121	132	143	154
12	24	36	48	60	72	84	96	108	120	132	144	156	168
13	26	39	52	65	78	91	104	117	130	143	156	169	182
14	28	42	56	70	84	98	112	126	140	154	168	182	196