

# I HAVE NOT LEARNED WEB DEV – I WILL LEARN IT BEFORE I GRADUATE

MorseCoding - for people with only one key

## Advantages

Only Requires one button - Thus it can be extremely useful on smaller or limited hardware.

The language is very lightweight and can be easily installed anywhere

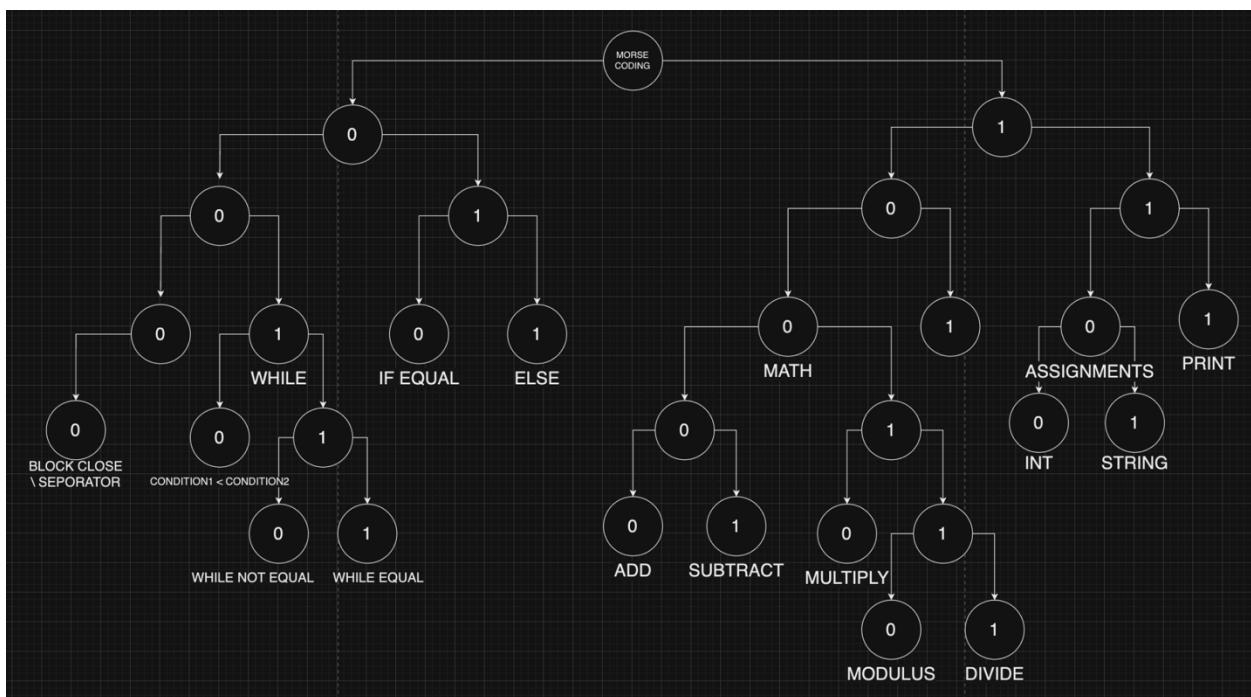
Simple, in that it can be visualized with the following tree (next slide)

## 0's and 1's

The language is written in only 0's and 1's

This can be done with a traditional keyboard by pressing 0 and 1

Or, with only one key, a program will scan the key every second to determine whether a 0 or 1 should be written. Thus, it can be written with only 1 key.



## Sample Programs

```
1101 010000
str var

110110110110100 110100 11011110110100 11011110110100 111111111100
H           E       L           L           O
110111111100 111111111100 110111110100 11011110110100 111110110100 000
W           O       R           L           D

111 010000
pnt var
```

The words, letters, and spaces are not interpreted, they just help with readability

The program could be written like this. But it is far less clear what it does in this form

```
11010100001101101101001101001101111011010011011110110100111111111100
11011111110011111111110011011111010011011110110100111110110100000111010000
```

Both these programs generate the same output

“HELLOWORLD”

```
1 1100 010000 0000000000000000
2 int var -
3
4 1100 110000 0000000000000001
5 int var -
6
7 1100 1110000 0000000000001010
8 int var -_
9
10 001 10 010000 1110000
11 while ne cond- cond2
12
13 111 010000
14 pnt var
15
16 10000 010000 110000
17 add var- var2
18
19 0000
20 }
```

Here is an example of what loops look like in Morse Coding

```

1 1100 0100010000 0000000000000000
2 int var_   -
3
4 1100 0100110000 0000000000000001
5 int var_   -
6
7 1100 0101010000 0000000000000001
8 int var2   -
9
10 1100 0101110000 0000000001100100
11 int var3   -_
12
13
14
15 1101 0110010000 11011011110100 110110100 11111110110100 11111110110100 000
16 str var4   F           I           Z           Z
17
18 1101 0101110000 111110110110100 110110111100 11111110110100 11111110110100 000
19 str var5   B           U           Z           Z
20
21 1101 0111010000 11011011110100 110110100 11111110110100 11111110110100 11111110110100 000
22 str var6   F           I           Z           Z           B           U           Z           Z
23
24
25
26 1100 0111110000 0000000000000011
27 int var7   3
28
29 1100 1100010000 0000000000000101
30 int var8   5
31
32 1100 1100110000 0000000000001111
33 int var9   -5
34
35
36
37 1100 1101010000 0000000000000000
38 int var_   -
39
40
41
42 001 0 0101010000 0101110000
43 while < var2      var3 {
44
45     10000 1101010000 0101010000
46     add  var_      var2
47
48     100110 1101010000 1100110000
49     mod  var_      var9
50
51     010 1101010000 0100010000
52     if  var_      var_ {
53
54         111 0111010000
55         pnt var6
56
57         0000 011
58     } el{
59
60         10001 1101010000 1101010000
61         minus var_      var_
62
63         10000 1101010000 0101010000
64         add  var_      var2
65
66         100110 1101010000 1100010000
67         mod  var_      var8
68
69         010 1101010000 0100010000
70         if  var_      var_ {
71
72             111 0110110000
73             pnt var5
74
75             0000 011
76         } el{
77
78             10001 1101010000 1101010000
79             minus var_      var_
80
81             10000 1101010000 0101010000
82             add  var_      var2
83
84             100110 1101010000 0111110000
85             mod  var_      var7
86
87             010 1101010000 0100010000
88             if  var_      var_ {
89
90                 111 0110010000
91                 pnt var4

```

92	0000 011
93	}
94	el{
95	111 0101010000
96	pnt var2
97	0000
98	}
99	0000
100	}
101	0000
102	0000
103	}
104	0000
105	0000
106	}
107	10001 1101010000 1101010000
108	minus var_      var_
109	10000 0101010000 0101010000
110	add  var_      var2
111	10000 0101010000 0100010000
112	add  var2      var-
113	10000 0101010000 0100010000
114	if  var_      var_ {
115	111 0000
116	}

FIZZ BUZZ