Lab 4 Deliverables

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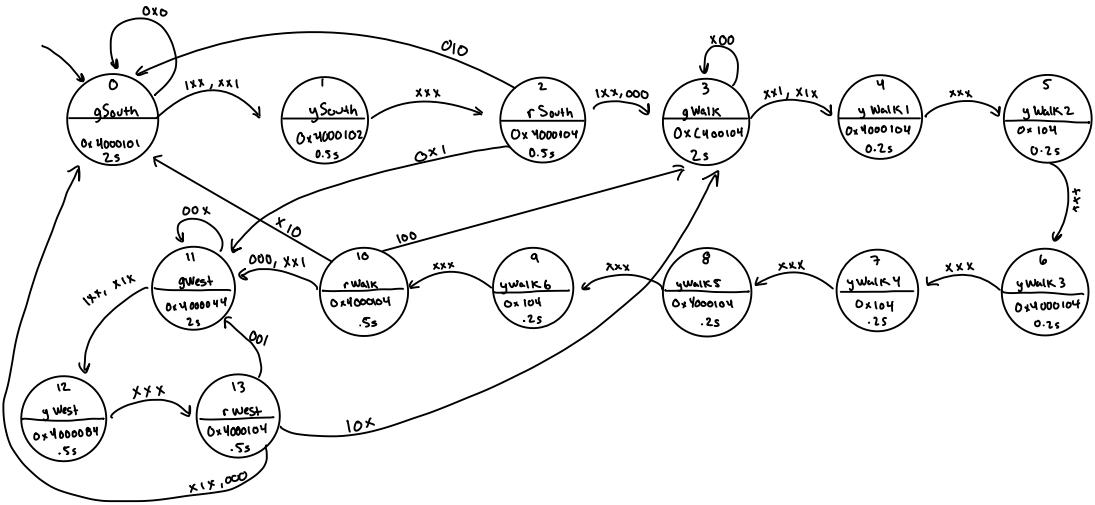
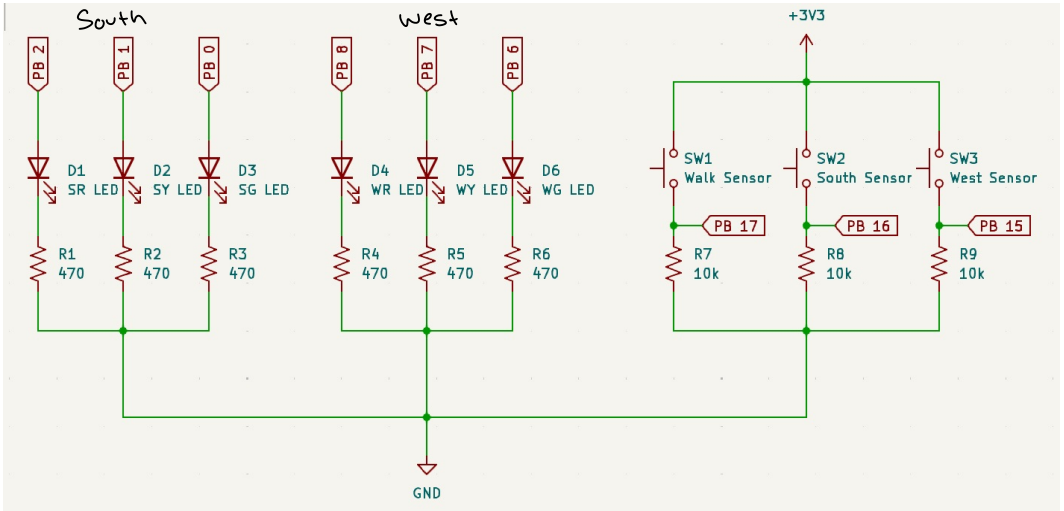


Current State	Output	Dwell in cs	Next 000	001	010	011	100	101	110	111
0	0x4000101	200	0	1	0	1	1	1	1	1
1	0x4000102	50	2	2	2	2	2	2	2	2
2	0x4000104	50	3	11	0	11	3	3	3	3
3	0xC4000104	200	3	4	4	4	3	4	4	4
4	0x4000104	20	5	5	5	5	5	5	5	5
5	0x104	20	6	6	6	6	6	6	6	6
6	0x4000104	20	7	7	7	7	7	7	7	7
7	0x104	20	8	8	8	8	8	8	8	8
8	0x4000104	20	9	9	9	9	9	9	9	9
9	0x104	20	10	10	10	10	10	10	10	10
10	0x4000104	50	11	11	0	11	3	11	0	11
11	0x40000044	200	11	11	12	12	12	12	12	12
12	0x40000084	50	13	13	13	13	13	13	13	13
13	0x4000104	50	0	11	0	0	3	3	0	0



Cycles through all used LEDs

Location DataBuffer Format 32-Bit Hex - C Style

```
0x20200000 DataBuffer __start___llvm_prf_bits
0x20200000 __start___llvm_prf_cnts __stop___llvm_prf_bits
0x20200000 __stop___llvm_prf_cnts
0x20200000 0x00000001 0x00000002 0x00000004 0x00000040
0x20200010 0x00000080 0x00000100 0x0C400000 0x04000000
0x20200020 0x00000001 0x00000002 0x00000004 0x00000040
0x20200030 0x00000080 0x00000100 0x0C400000 0x04000000
0x20200040 0x00000001 0x00000002 0x00000004 0x00000040
0x20200050 0x00000080 0x00000100 0x0C400000 0x04000000
0x20200060 0x00000001 0x00000002 0x00000004 0x00000040
0x20200070 0x00000080 0x00000100 0x0C400000 0x04000000
0x20200080 0x00000001 0x00000002 0x00000004 0x00000040
0x20200090 0x00000080 0x00000100 0x0C400000 0x04000000
0x202000A0 0x00000001 0x00000002 0x00000004 0x00000040
0x202000B0 0x00000080 0x00000100 0x0C400000 0x04000000
0x202000C0 0x00000001 0x00000002
```

0x4 is walk 0x2 is South 0x1 is west

Problems | Output | Debug Console | GEL Output | Serial Console | Debug Output

```
Lab 4, Spring 2025, Step 2. Debug switches
EID1= TMB3956
EID2= JE28736
Switch= 0x1
Switch= 0x0
Switch= 0x2
Switch= 0x0
Switch= 0x4
Switch= 0x0
Switch= 0x1
Switch= 0x0
Switch= 0x2
Switch= 0x0
Switch= 0x4
Switch= 0x0
```

Bit 7 is state (0-D) 0-13 Bits 6-0 are LED output

Location DataBuffer Format 32-Bit Hex - C Style

```
0x20200000 DataBuffer __start___llvm_prf_bits
0x20200000 __start___llvm_prf_cnts __stop___llvm_prf_bits
0x20200000 __stop___llvm_prf_cnts
0x20200000 0x04000101 0x14000102 0x24000104 0x3C400104
0x20200010 0x44000104 0x50000104 0x64000104 0x70000104
0x20200020 0x84000104 0x90000104 0xA4000104 0xB4000044
0x20200030 0xC4000084 0xD4000104 0x04000101 0x14000102
0x20200040 0x24000104 0x3C400104 0x44000104 0x50000104
0x20200050 0x64000104 0x70000104 0x84000104 0x90000104
0x20200060 0xA4000104 0xB4000044 0xC4000084 0xD4000104
0x20200070 0x04000101 0x14000102 0x24000104 0x3C400104
0x20200080 0x44000104 0x50000104 0x64000104 0x70000104
0x20200090 0x84000104 0x90000104 0xA4000104 0xB4000044
0x202000A0 0xC4000084 0xD4000104 0x04000101 0x14000102
0x202000B0 0x24000104 0x3C400104 0x44000104 0x50000104
0x202000C0 0x64000104 0x70000104
```