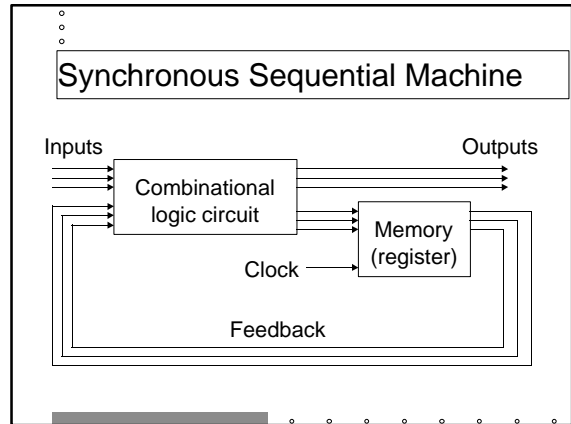


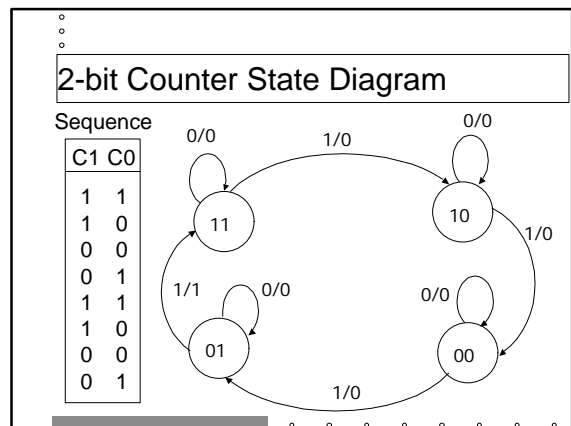
State Diagrams

- Like sequential digital circuits
 - Remember EE-290?
- Concepts
 - Event
 - State
 - Transition
- UML notation is similar
 - But has enhanced capabilities



2-bit Counter State Table

Sequence	Current State	Input	Next State	Output
C1 C0	C1 C0	E	C1 C0	T
1 1	0 0	0	0 0	0
1 0	0 0	1	0 1	0
0 0	0 1	0	0 1	0
0 1	0 1	1	1 1	1
1 1	1 0	0	1 0	0
1 0	1 0	1	0 0	0
0 0	1 1	0	1 1	0
0 1	1 1	1	1 0	0



- ### UML State Diagrams
- Based on Harel state charts
 - David Harel (1987)
 - Permit nested states
 - Associated with classes
 - Describe object state
 - Used in analysis and design
 - Primarily a documentation tool
 - No Rose code generation (yet?)

