

FSM Design Report

Delay Component

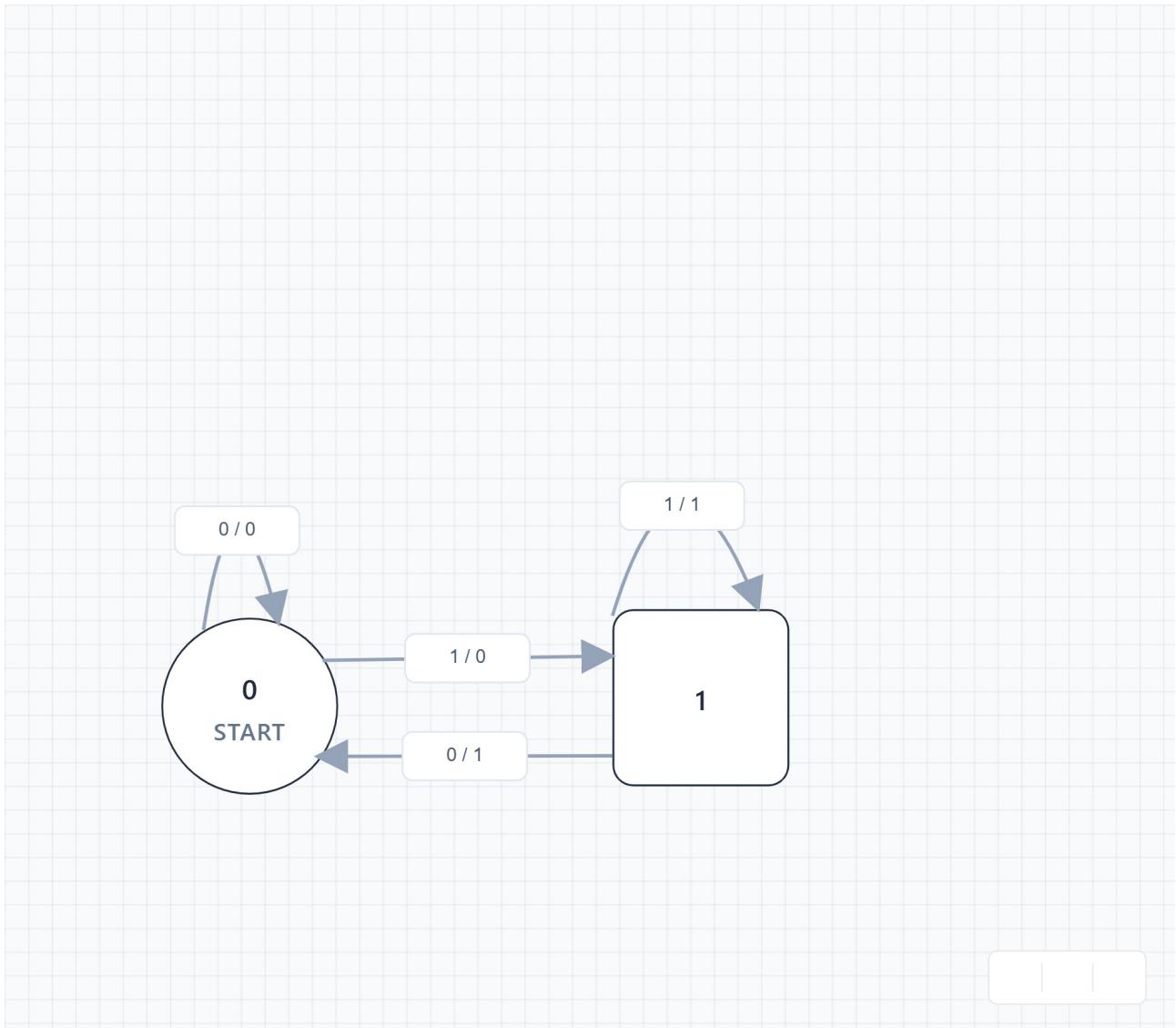
Type: Mealy Machine

Generated: 23/11/2025, 00:49:16

Mealy machine that delays Boolean input by one cycle. From CPS Systems book Figure 2.3.

| Statistic | Value |
|---------------------------|-------|
| Total States | 2 |
| Total Transitions | 4 |
| Input Variables | 0 |
| Output Variables | 0 |
| Internal Variables | 0 |

System Diagram



State Definitions

| State Name | Initial | Final | Notes |
|------------|---------|-------|-------|
| 0 | Yes | No | - |
| 1 | No | No | - |

Transition Logic

| From | To | Input | Guard | Action | Output |
|------|----|-------|-------|--------|--------|
| 0 | 0 | 0 | - | - | 0 |
| 0 | 1 | 1 | - | - | 0 |
| 1 | 0 | 0 | - | - | 1 |
| 1 | 1 | 1 | - | - | 1 |

Verification Report

' PASSED: Valid Model Structure

No issues detected.

Test Case Execution

| Test Name | Inputs | Expected Output | Status |
|-----------|--------|-----------------|--------|
| | | | |