# Keyboard to 7-Segment Display

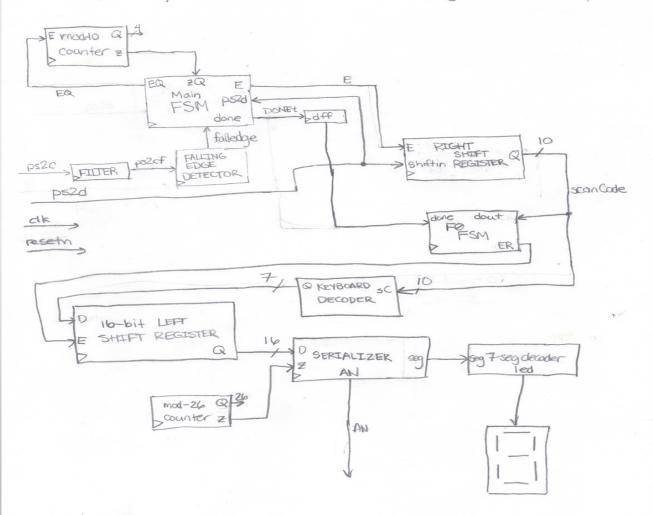
Chris Mathewson, Jason Mansour, and Kristine Miller

#### Introduction

- Input a number (o-9) from a keyboard
- Display the number on the 7-segment display
- Shift the previously entered numbers to the left when a new number is entered

#### **Top-Level** Design

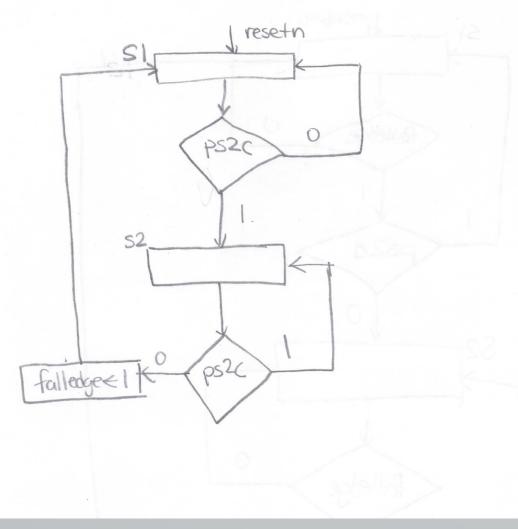
PS/2 Keyboard to Seven-Segment Display



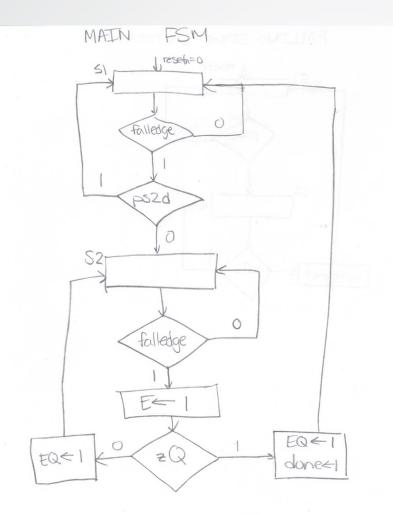
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### Falling Edge Finite State Machine

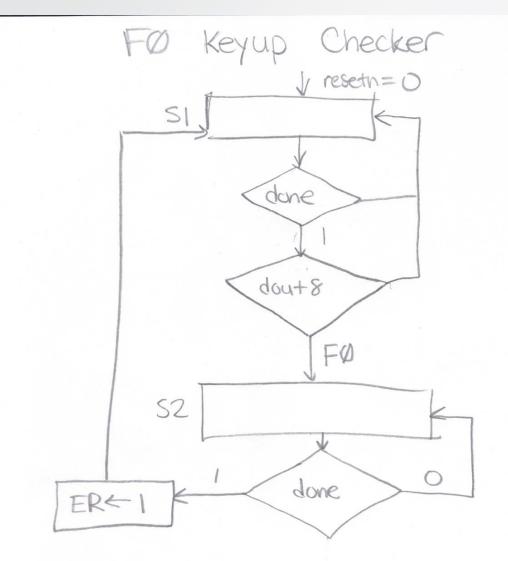
FALLING EDGE DETECTOR



#### Main Finite State Machine



#### Fo Detector Finite State Machine



# Challenges

- Getting the Correct Scan Code
- Designing the FSM's
- Dealing with the Keyup Signal
- Creating the filter\5

## Conclusion

- The Program mostly works
- Three FSM's were used
- A number (o-9) is input from a Keyboard and output onto a 7-segment display

