o void initServo(void);

initServo uses Timer 3 and OC1. It sets the 20 millisecond PWM cycle. OC1 sets the actual PWM for the servo and enables it.

- $\circ$   $\,$  void setServo(int Val); setServo sets OC1RS to the argument.
  - o void initPushButton(void);

initPushbutton uses Timer 2, its interrupt, IC1, and its interrupt. Timer 2 is set for a period of 1 second with an interrupt set whenever the timer goes off. IC1 is set to send an interrupt whenever the button is pressed.

The main area I struggled in this lab was the double press detection. It turned out I simply was thinking too hard and noticed the solution talking to one of my peers about troubleshooting. Sometimes the button interrupt didn't work properly, which was fixed by rewiring the button.