**MEETING MINUTES – 2/16/2011**

Team: AutoBev

Leader: Alex Macomber

Minutes: Elizabeth Clark

Present: Lori Garcia, Mark Pomerenke

1. Interface Between PC and Microcontroller
   1. Character-based framing (to tell start and end of message)
      1. Handle EOF marker appropriately
      2. Be able to perform error-checking
      3. Some sort of framing to indicate start of message
         1. Send additional start/stop byte
         2. Develop handshaking protocol to continuously check PC/microcontroller availability
         3. Be able to handle ‘end of message’ (7E) before it is expected
2. Customer Proofing Design (Cup Sensor)
   1. Light Vs. Weight
      1. Cup probably too light to use a weight sensor
      2. Option to use proximity light sensor or ‘through beam’ sensor
         1. Decision to use proximity based on assumption that cups could be transparent
            1. Photo resistor or LDR—resistance decreases with increasing incident light intensity
            2. Transmitted radiation must reflect off the object in order to reach the receiver—object detected when the receiver sees the transmitted source
            3. Should be interrupt driven—constantly polled
      3. Could do something mechanical (similar to self-service soda machines)
3. User Interface
   1. Connect kit board to COMM port
      1. Test by sending characters from PC to LCD display
      2. Will communicate by sending bytes of data, not ASCII code
         1. No set protocol, simply must be consistent between what is sent and received
   2. Serial over USB
      1. Running at 576 Baud or 10 bits/char
      2. Can send up to 5700 characters. Second
      3. Must decide when to send interrupt to indicate to PC that microcontroller is still pouring
   3. Option to complete transaction before end of night
      1. Investigate using security code as signature to close tab
4. Board/ Hardware
   1. Implement emergency stop in hardware that will disable/ cancel pouring