Eliminate Noise by Removing High Frequency Values

Keep Track of Time Elapsed in Milli Seconds,

int SampleCounter+=2

Send BPM Values Serially

Get the runningTotal variable To Get The Realistic BPM

Measure Time between Beats Using IBI variable

Read Analog Input at Pin A0

Call ISR for Timer2 and Disable all Interrupts.

YES

NO

If Beat Happens, i.e. BV == TRUE

Initialize Timer2 to Throw an Interrupt at every 2ms.

Initialization: A0 Pin as Input, BV=FALSE, B.R.=115200, IBI=600,

Caption:

A0-> Analog 0 Chanel of Arduino

BV-> Beat Occurrence Variable

BR-> Baud Rate

IBI-> Inter Beat Interval

ISR-> Interrupt Service Routine

SampleCounter-> Keeps track of time elapsed

runningTotal-> Keep track of total time elapsed

BPM-> Beats per minute