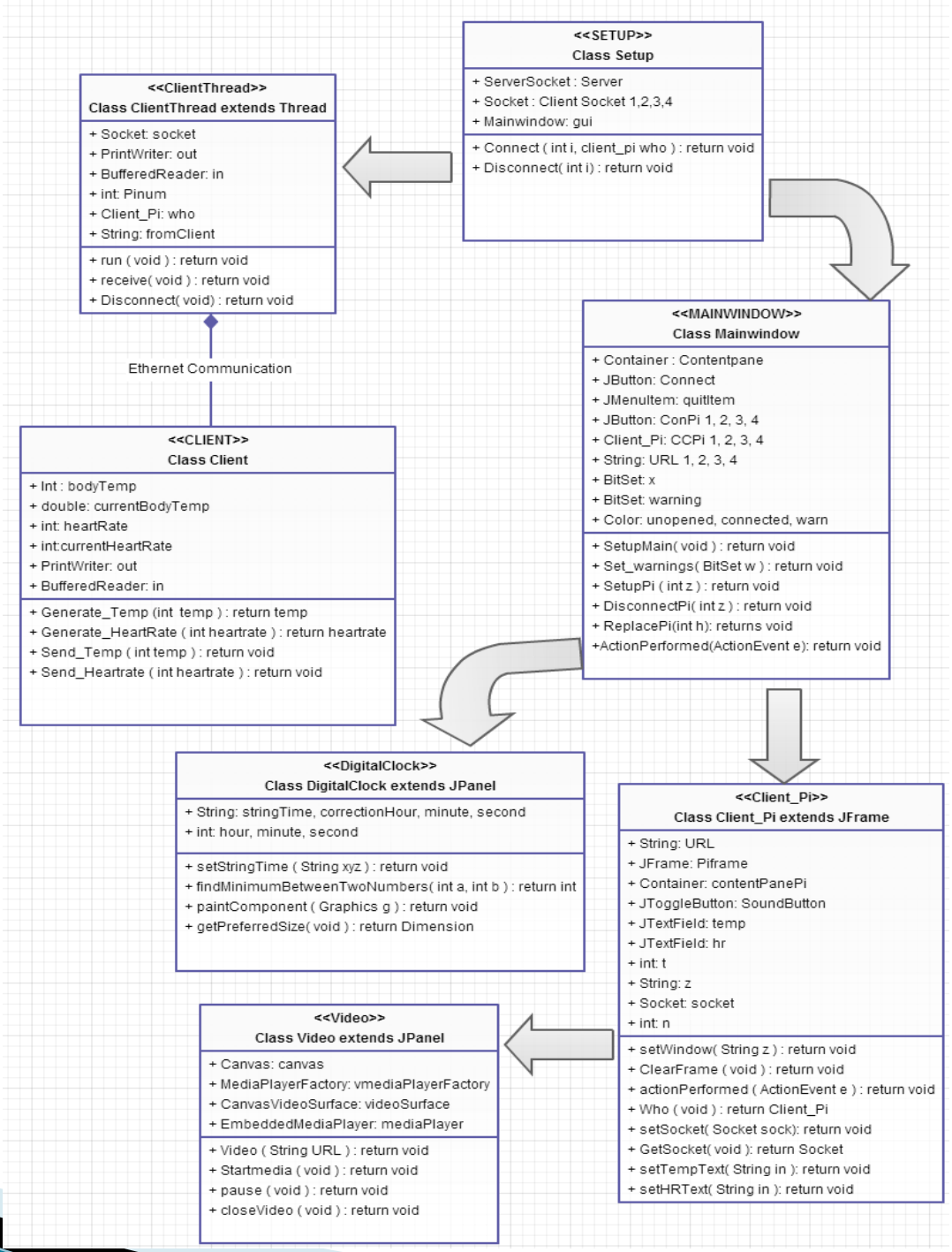
Patient Monitor System

Code Review

UML:


<<SETUP>>
Class Setup
+ ServerSocket : Server
+ Socket : Client Socket 1,2,3,4
+ Mainwindow: gui
+ Connect (int i, client_pi who) : return void
+ Disconnect(int i) : return void
<<ClientThread>>
Class ClientThread extends Thread
+ Socket: socket
+ PrintWriter: out
+ BufferedReader: in
+ int: Pinum
+ Client_Pi: who
+ String: fromClient
+ run (void) : return void
+ receive(void) : return void
+ Disconnect(void) : return void
Ethernet Communication
<<CLIENT>>
Class Client
+ Int : bodyTemp
+ double: currentBodyTemp
+ int: heartRate
+ int:currentHeartRate
+ PrintWriter: out
+ BufferedReader: in
+ Generate_Temp (int temp) : return temp
+ Generate_HeartRate (int heartrate) : return heartrate
+ Send_Temp (int temp) : return void
+ Send_Heartrate (int heartrate) : return void
<<MAINWINDOW>>
Class Mainwindow
+ Container : Contentpane
+ JButton: Connect
+ JMenuItem: quitItem
+ JButton: ConPi 1, 2, 3, 4
+ Client_Pi: CCPi 1, 2, 3, 4
+ String: URL 1, 2, 3, 4
+ BitSet: x
+ BitSet: warning
+ Color: unopened, connected, warn
+ SetupMain(void) : return void
+ Set_warnings(BitSet w) : return void
+ SetupPi (int z) : return void
+ DisconnectPi(int z) : return void
+ ReplacePi(int h): returns void
+ActionPerformed(ActionEvent e): return void
<<DigitalClock>>
Class DigitalClock extends JPanel
+ String: stringTime, correctionHour, minute, second
+ int: hour, minute, second
+ setStringTime (String xyz) : return void
+ findMinimumBetweenTwoNumbers(int a, int b) : return int
+ paintComponent (Graphics g) : return void
+ getPreferredSize(void) : return Dimension
<<Client_Pi>>
Class Client_Pi extends JFrame
+ String: URL
+ JFrame: Piframe
+ Container: contentPanePi
+ JToggleButton: SoundButton
+ JTextField: temp
+ JTextField: hr
+ int: t
+ String: z
+ Socket: socket
+ int: n
+ setWindow(String z) : return void
+ ClearFrame (void) : return void
+ actionPerformed (ActionEvent e) : return void
+ Who (void) : return Client_Pi
+ setSocket(Socket sock): return void
+ GetSocket(void): return Socket
+ setTempText(String in): return void
+ setHRText(String in): return void
<<Video>>
Class Video extends JPanel
+ Canvas: canvas
+ MediaPlayerFactory: vmediaPlayerFactory
+ CanvasVideoSurface: videoSurface
+ EmbeddedMediaPlayer: mediaPlayer
+ Video (String URL) : return void
+ Startmedia (void) : return void
+ pause (void) : return void
+ closeVideo (void) : return void

Server/Client

- Client runs concurently with the webcam stream.
- Server will be run on on PC since the computer needs to have VLC installed which so far is difficult do implement.
- https://github.com/AndrewDeCHamplain/Patient-Monitor-System/tree/master/Server

Video/Audio

- Using VLC format for streaming the video/audio.
- Allows server to access stream based on standard port and specific IP.
- https://docs.google.com/document/d/1ZTukiJl_785UH66MFq9o3gLpc3-2P7b8yLVTWuuLWKM/edit

Questions?