**Pseudo code**

**General**

**Initialize Program** Create GUI elements  
 Start Winsock  
 Disable Server Specific Elements  
 Load last used playlist

**Wait for user Input** if Server button pressed  
 Go to Server  
 if Media button pressed  
 Go to Playback  
 if Client button pressed  
 Go to Client  
 if Exit button pressed  
 WSACleanup  
 Exit Program

**Server***See Server Pseudo code*

**Client***See Client Pseudo code*

**Playback***See Playback Pseudo code*

**Server**

**Wait for User Input** Broadcast button pressed  
 if (broadcasting)   
 unset broadcasting flag  
 else   
 Start Thread with function: Connect to Multicast group

**Connect to Multicast group**  
 Create UDP socket  
 Set broadcast option  
 Fill in Address structure for broadcast  
 Go to Check for enough data to send

**Check for enough data to send** if (file open)  
 if end of file  
 close file  
 go to Broadcast data  
 else   
 go to Check if broadcasting

**Check if broadcasting** if (broadcasting)  
 go to Check for enough data to send  
 else  
 Terminate Thread

**Broadcast data** send udp packet(s) out  
 go to Check if Broadcasting

**Listen Socket** Create a TCP Socket  
 Bind address  
 Set socket to Listen mode  
 go to Accept Socket

**Accept Socket** while servermode  
 perform asynchronous accept call  
 Start new thread with function Wait for Request

**Wait for request** if client requesting list  
 go to Prepare File list for Sending  
 if client requesting file  
 go to Transfer File

**Prepare file list for sending** search for compatible files in current directory  
 add file names to list  
 go to Send List

**Send List** Send list of file names   
 Close Client Socket, Terminate Thread

**Transfer File** Open requested file  
Send requested file  
 Close file  
 Close Client Socket, Terminate Thread

**Playback**

**asdf**

**Client**

**asdfgh**