Week	Task	Week 1	2	3	4	5	6	7
1	Project Plan and Schedule							
	Create Project Plan and Schedule that identifies specific team member, task and completion	J						
	Records activity in log book							
	Audio Playback and Recording							
	Demonstrate Code to record playback audio to/from a buffer	H						
	Ability to change playback and recording parameters programfmatically		H/J					
	Queue Functionality							
	Choose a team members queue library to use, and demonstrate utility code to manipulate a queue of structures	Z						
	Integrate the queue functionality and audio playback/recording into the Project code (make a simple menu)	H						
	Diagnostics							
	Produce a short document identifying the diagnostics to be designed into the software	H						
	Optional: Linux Based Software	N/A						
	Team produces a Linux based version of the Software alongside the Windows implementation	N/A						
2	Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga		J					
	Submit updated Project Plan / Schedule							
	Records activity in log book							
	RS232 Communications							
	Demonstrate code for simple RS232 communications (optionally / when necessary over virtual com ports) between two computers		Z					
	User Interface (Home) - Design							
	Document a user interface design for the Home Station Software, including all planned user interactions *(Optional: Home & Receiver stations may have the same design and students may use the provided Qt based GUI)*		H/J					
	Proposed Screen design							
	Proposed set of user commands, descriptions, input/output and diagnostic test functions (may implement some)							
	Optional: Linux Based Software version							
3	Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga			J				
	Submit updated Project Plan / Schedule							
	Records activity in log book							
	User Interface (Receive) - Design							
	Document a user interface design for the Receive Station Software, including all planned user interactions *(Optional: Home & Receiver stations may have the same design and implementation)*			J/H				
	Proposed Screen design							
	Proposed set of user commands, descriptions, input/output and diagnostic test functions (may implement some)							
	User Interface (Home) - Implementation							
	Implement the user interface (top-level menu or equivalent) for the Home Station Software, including user interactions							

	User interface includes the ability to send RS232 messages			Z/H				
	User interface includes the ability to playback and record audio							
	User interface includes testing/diagnostic functions							
	Function implemented showing that home RS232 transmissions can be received (to confirm transmission)			Z				
	Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga							
	Submit updated Project Plan / Schedule				J			
	Records activity in log book							
4	User Interface (Receive) - Implementation							
	Implement and demonstrate the user interface for the Receive Station Software				Z/H			
	User interface includes the ability to receive RS232 messages from the home station				Z			
	User interface includes the ability to playback audio received				H			
	User interface includes testing/diagnostic functions for sending a random Fortune Cookie				C			
	Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga							
	Submit updated Project Plan / Schedule					J		
	Records activity in log book							
	Frame Design Documentation and Implementation							
	Frame / Protocol design document developed and explained					H		
	Demonstrate sending/receiveing of frames (messages preceded by a header) between home and receive stations					Z		
	Ability to turn headers on and off for diagnostic purposes (sender must inform receiver if headers included/excluded)					Z		
5	Queuing							
	Demonstrate the Queueing of messages at the reciever (optionally at the transmitter as well)					Z		
	Queued messages include the header information					H		
	Demonstrate ability to report the number of messages in the Queue					H		
	Diagnostics							
	Ability to send messages from the Fortune cookie file , print contents of a configuration file, etc.					Z		
	Compression - Text							
	Demonstrate one or more compression algorithms (e.g. RLE, Huffman) running on a buffer (text only)					J		
	Compression functionality is integrated with project code					J		
	Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga							
	Submit updated Project Plan / Schedule						J	
	Records activity in log book							
	Compression - Audio							
	Demonstrate compression via RLE algorithm (minimum) (Huffman is optional) on an audio buffer						J	
	Error Detection & Correction							

6	*Demonstrate the sending and receiving of error detected and corrected messages (correction may be only on header info)*						H	
	Error detection on payload via checksum (as a minimum)							
	Home and Receive Stations can turn on/off error detection/correction and compression						Z	
	Phonebook at Receiver							
	Demonstrate the manipulation of messages (insertion/display) in a phonebook (may use a Binary Tree or other data structure)						Z	
	Can display the IDs of the senders and the number of messages from that sender						H	
	Optional: Send/Receive encrypted data using Viginere/XOR cipher)						J	
7	Final Project Status Report & Updated Project Plan / Schedule							
	Submit updated project status report in standard format found in eConestoga							J
	Submit updated Project Plan / Schedule - Self Assessment of your Project's Completeness							
	Records activity in log book							
	Decompression							
	Demonstrate decompression via RLE algorithm (minimum) (Huffman is optional) on an audio buffer							J
	Completed Project							
	Demonstration and presentation of system operation that meets the MuSCoW requirements in the Project Charter							
	Completion of Shoulds depending on Project Team Size (e.g. Message Encryption using Viginere/XOR cipher, Broadcast capability, saved audio messages for replay later, robust error handling of the header information etc.)							J/H/Z
	Submission of Final Report including all Project Code / videos							