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|  | **2014** |
|  | BCIT  Ramzi Chennaffi  Shane Spoor  Abhishek Bhardwaj |

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| **[Comm Audio – Progress Report 2]** |
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# Complete Tasks and Progress Summary

Work on the game caused significant delays this week. With that work slowing down, we will have more time to work on Comm Audio. However, we will likely remove some features, namely database storage, server search and text chat, to save time.

This week we completed:

* **Client Network Thread (April 1st, Abhishek Bhardwaj)**: The client starts a network thread with a TCP and UDP socket for communication with the server. The sockets are associated with completion routines for sending and receiving data, and they communicate with the GUI using QT’s signals and slots.
* **Server Unicast Receive (April 1st, Shane Spoor)**: The server receives a file request, finds and loads the file, and transmits the file (in chunks) to a client.
* **Client Request File (March 30th, Ramzi Chennafi)**: The client sends a request to the server for a particular file. If the server finds this file, it begins transmitting the file to the server.

# Upcoming Tasks

We have removed the database query in favour of simply reading the data from the embedded file headers to save time, as this is considerably easier to do.

The tasks we intend to complete this week are:

* **Client Receive Audio (By April 2nd, Ramzi Chennafi)**: In addition to playing back audio as it streams, the client will also update the GUI with song metadata and a slider showing the song’s progress.
* **Server Connection Manager (By April 3rd, Shane Spoor)**: The server will receive requests for audio files and voice data. It will route these requests to the correct completion routines and add them to an internal list detailing the service each client is receiving.
* **Server Multicast Send (By April 3rd, Abhishek Bhardwaj)**: The server will send an audio stream to clients who have joined the correct multicast group.
* **Client Save File (By April 4th, Shane Spoor)**: The client will be able to save a file to their local machine as it streams to them.
* **Client Microphone Support (By April 5th, Abhishek Bhardwaj)**: The client will be able to listen for and transmit voice data from a microphone when the client activates this option. They will also receive and play back voice data from other clients.
* **Server Microphone Support (By April 5th, Ramzi Chennafi)**: The server will receive microphone data from clients and will relay the data to all clients indicating they are listening to the chat.

# Task Summary

The following table summarises the complete tasks, tasks remaining, the people responsible for completion of these tasks, and task completion dates. The stage of completion is indicated in parentheses beside the name.

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| Task Name | Task Description | Developer Responsible | Completion Date |
| Client GUI | Features playlist bar, pause/resume button, chat window, and file options | Abhishek Bhardwaj | March 15th, 2014 **(complete)** |
| Audio playback | Client receives and plays back audio | Ramzi Chenaffi | March 24th, 2014 **(complete)** |
| Server Unicast Send | Server sends file chunks successively with completion routine to single connected client | Shane Spoor | March 25th, 2014  **(complete)** |
| Client Network Thread | Client creates a thread to handle sending and receiving | Abhishek Bhardwaj | March 27th, 2014 **complete)** |
| Server Unicast Receive | Server receives client command and processes it | Shane Spoor | April 1st, 2014 **(complete)** |
| Client Send Request | Client can request a file | Ramzi Chennafi | March 30th, 2014 **(in progress)** |
| Client Receive Audio | Client receives and buffers audio | Ramzi Chennafi | April 2nd, 2014 **(in progress)** |
| Server Connection Manager | Server receives requests for microphone chat and unicast audio streams and routes them to the correct threads | Shane Spoor | April 3rd, 2014 **(in progress)** |
| Server Multicast Send | Server sends an audio stream to multiple clients listening on multicast | Abhishek Bhardwaj | April 3rd, 2014 **(in progress)** |
| Client Save File | Client can save incoming audio to a local file | Shane Spoor | April 4th, 2014, **(in progress)** |
| Client Microphone Support | Clients can retrieve microphone data and send it to the server | Ramzi Chennafi | April 5th, 2014 **(not started)** |
| Server Microphone Support | Server allows parties sending microphone data to communicate | Abhishek Bhardwaj | April 5th, 2014 **(not started)** |
| Final Testing | Rigorously test all features and document results | Shane Spoor, Ramzi Chennafi, Abhishek Bhardwaj | April 6th, 2014 **(in progress)** |
| Project Deadline | Project is fully tested and documented, all features are finalised | Shane Spoor, Ramzi Chennafi, Abhishek Bhardwaj | April 7th, 2014 **(in progress)** |