**BitTorrent Programming Assignment Phase 1**

**Group members**

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**Overview**

Basic idea of our project was to connect with the tracker to receive all information about the other peers out there in order to make connections with them to get the data we need.

In tracker.java, there are functions that helps to retrieve the information, such as peer id, IP address, and port number, about other peers. We are able to communicate with the tracker with the given metadata file and bencoding functionality.

When we receive all information necessary to make peer to peer communication, we generate handshake request to one of the peers and wait until handshake is successful.

Once the handshake is successful, connection is made with the peer to obtain the data we are looking for.

**Class Overview**

Tracker Class

As mentioned above, tracker class is responsible for communicating with the tracker to get information about other peers.

TorrentManager

Peer

The peer class is responsible for the creating the peer to peer connection. Our peer requests handshakes to the other peers and wait for a response. When the handshake request is confirmed, then we connect to the peer to see if we need any of their downloaded content.

Message

In the message class,

**UML Diagram**

