Boggle Protocol

- All data types are Java data types.

<table>
<thead>
<tr>
<th>*- Asterisk</th>
<th>Byte Frame Type</th>
<th>Payload</th>
</tr>
</thead>
</table>

Frames

LoginFrame – Frame Type 1 – Client $$\leftrightarrow$$ Server

- Client sends this when he logs on.
- Server also sends this out to all players when each additional player logs in. The purpose of this is so that every player knows who else is currently player. For example, if three people are logged in and one person joins, he receives the names of all the other players in a sequence of three separate login frames. All the other players receive a login frame with the player that just logged in.

<table>
<thead>
<tr>
<th>String UserName</th>
</tr>
</thead>
</table>

ReadyFrame – Frame Type 2 – Client $$\rightarrow$$ Server

- Client sends this to the Server to notify he is ready to play the game. Contents of the string are not important.

<table>
<thead>
<tr>
<th>String</th>
</tr>
</thead>
</table>

MessageFrame – Frame Type 3 – Client $$\leftrightarrow$$ Server

- The purpose of this is to implement the non-existing chat function.

<table>
<thead>
<tr>
<th>String UserName</th>
<th>String Message</th>
</tr>
</thead>
</table>

GameStart – Frame Type 4 – Server $$\rightarrow$$ Client

- The purpose of this frame is to start the game. The server sends the client the number of players followed by the names of those players (order is very important – directly corresponds to the order of scores in GameEnd). The server then sends the time to be played and the board (as 16 chars in order from left to right four letters in a row).

| Int - # of Players | Player Names – Several Strings | Int Time (s) | Board – 16 chars |
**Word** – Frame Type 5 – Client → Server

- Client sends a frame with a possible word.

  String

**GameEnd** – Frame Type 6 – Server → Client

- At the end of the game, the server sends each client their scores based on the order of players given in GameStart.

  List of Ints (Corresponds with Player names in Frame Type 4)

**Client – Frame 1 – Username – Login → Server**

  ← Login frames for other players Frame 1
  ← Login frames when player joins Frame 1

**Client – Frame 2 – Ready → Server**

  ← Starting in – Frame 3
  ← GameStart – Frame 4

**Client – Frame 5 – Word →**

  ← Game End – Frame 6

**Contact Information**

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