

To: Jason^2
From: Jason Hemann
Date: September 17, 2018
Subject: Spreadsheet Micro-service Protocol

After lengthy discussion with my team, we have outlined a protocol for the upcoming spreadsheet microservice project. Attached on the next page is a visual representation of the protocol below as well.

We will be using a TCP server. Once our server opens a port for listening, the client can request to connect to it. Once accepted, the client is able to send commands to the server. If the command is valid, the server executes the command and sends any updates to the spreadsheet and then the client; if the command isn't valid, the client will be prompted for another. The client can send as many commands as needed until they decide to close their connection to the server.

For this project, there will be three different kinds of requests the client can send via JSON values: make a spreadsheet, add to a cell in the spreadsheet, or evaluate a cell in the spreadsheet. Each of the different formulas is represented by JSON values as well, number, cell reference, or function. The client must be sure to generate a new spreadsheet and give it a unique name before they are able to add cells to and evaluate cells in a certain spreadsheet. The client should be sure to validate that their input is formatted in the correct way or else the invalid request will quit the program.

If you have any further questions about the described protocol please don't hesitate to contact me.

Sincerely,
Jason Hemann

