

**TO:** *Jason^2*

**FROM:** *Jason*

**DATE:** *September 12, 2018*

**SUBJECT:** *Specification for Spreadsheet Program*

Based on our decision to use Java for this project, I propose that we move forward using the latest version of Java (8).

After looking at the requirements, I have come up with a specification for a prototype spreadsheet program. We can refine this and send it to our team in Codemanistan.

The spreadsheet will be represented by a `Spreadsheet` class that stores a two-dimensional array of integers, known as “Formulas.” The services that we will support:

- Constructing a spreadsheet from a arrangement of input specified by the user.
- Get the value of a formula given its location in the `Spreadsheet`
- Set a new formula in the `Spreadsheet` given a location.

Formulas consist of three components:

- Constants
- References to other Formulas (cells) of the spreadsheet
- Operations, specifically addition and multiplication

Users should be able to make a spreadsheet by passing in a JSON representation of a rectangular arrangement of formulas. The completed program should be in one Java 8 package that is extensible and deployable.

Thanks,

Jason

