This python module is designed to aid MPC Substations in their NERC requirements. It checks the Mississippi Battery Database once a month and checks for missing values. It is designed to output an excel sheet and email this to \_\_\_ email list.

It should also have capabilities to check once a day for any values that are abnormal. However, due to current limitations in reaching the database, this feature has not yet been implemented.

The EmailManager class was sent by Erik Bierbrauer.

Overall Program execution order plan:

1. Initialize the spreadsheet
2. Loop through
   1. Reading type
   2. String ID
   3. Cell Number
3. For each of these, check whether there are enough readings. This is should universally be one reading per month. The condition can be a function that checks to make sure whether there is one reading or not.
4. Write to excel sheet, example of excel sheet format is

I could have a color code if there is an impedance missing,

Just get required values, Since impedance is read once amonth

Voltages we are not as concerned with

**Conditions for Alarm:**

Current Conditions for Alarm(Print to excel sheet):

1. If there is a missing value

If Impedance Iseus only show that

If Voltage issues only show htat

Need to come up with solution for both­­­

**Design Strategies:**

Each condition for alarm should be put In a separate dataframe that can be written to support easy plug and play of the various modules