## Functional Class Descriptions

1. **Void create\_wifi\_task(void)**
   1. Init flash
   2. Create semaphore
   3. Initialize wifi setting
   4. Create SSE event handler
   5. Create http server
2. **int read\_data\_wifi(int item\_size)**
   1. Take in (@param int) the size of the struct read\_data
   2. Parse the global char url string
      1. Check if first character is a “{“
      2. Divide string into token by delimiter “,”
      3. Divide the token into 2 sub-string by delimiter “:”
      4. Convert second sub-string into integer and put it into struct read\_data.data
   3. Look for the string “timestamp” in char url and return the timestamp value as int
   4. Constraint:
      1. Maximum size of the receiving string can only be 256 bytes
3. **void send\_data\_wifi(int item\_size)**
   1. Take in (@param int) the size of the struct send\_data
   2. Take in all the data in struct send\_data and convert it to a string with follow convention
      1. {dataname1:int\_data\_value,dataname2:int\_dataLvalue,debug:SYSTEM\_DEBUG\_MSG}
         1. Use value frome const char\* send\_data\_label[] from Structure.c to determine dataname.
         2. (@param char []) SYSTEM\_DEBUG\_MSG is global variable to set a debug message.
            1. SYSTEM\_DEBUG\_MSG on default is equal to “None”
            2. The debug message will always be the last element in the string.
            3. User can set the message by simply doing:

strcpy(SYSTEM\_DEBUG\_MSG, “some string”);

* 1. Constraint:
     1. Maximum size of the the sending string can only be 256 bytes
     2. Only able to convert int value