```
 1    function doGet(e) {
 2      Logger.log(JSON.stringify(e));
 3      var result = 'OK';
 4      if (e.parameter == 'undefined') {
 5        result = 'No_Parameters';
 6      }
 7      else {
 8        var sheet_id = '1k6dUtU9JzaazvbCFzyizps-m39-OMNewo6rfPgW2Eg4';  // Spreadsheet ID.
 9        var sheet_UD = 'Student_Data';  // Sheet name for user data.
10        var sheet_AT = 'Student_Attendance';  // Sheet name for attendance.
11
12        var sheet_open = SpreadsheetApp.openById(sheet_id);
13        var sheet_user_data = sheet_open.getSheetByName(sheet_UD);
14        var sheet_attendence = sheet_open.getSheetByName(sheet_AT);
15
16        // sts_val is a variable to hold the status sent by ESP32.
17        // sts_val will contain "reg" or "atc".
18        // "reg" = new user registration.
19        // "atc" = attendance (time in and time out).
20        var sts_val = "";
21
22        // uid_val is a variable to hold the UID of the RFID card or keychain sent by the
          ESP32.
23        var uid_val = "";
24
25        // UID storage column.
26        var uid_column = "B";
27
28        // Variable to retrieve the "Time In" value from the sheet.
29
30        var T1_val = "";
31          var T2_val = "";
32          var T3_val = "";
33        var T4_val = "";
34        var T5_val = "";
35        var T6_val = "";
36
37        // Variable to retrieve the "Date" value from the sheet.
38        var Date_val = "";
39
40
41        //-------------------------------------Retrieves the value of the parameter sent
          by the ESP32.
42        for (var param in e.parameter) {
43          Logger.log('In for loop, param=' + param);
44          var value = stripQuotes(e.parameter[param]);
45          Logger.log(param + ':' + e.parameter[param]);
46          switch (param) {
47            case 'sts':
48              sts_val = value;
49              break;
50
51            case 'uid':
52              uid_val = value;
53              break;
54
55            default:
56              // result += ",unsupported_parameter";
57          }
58        }
59        //-------------------------------------
60
61        //-------------------------------------Conditions for registering new users.
62        if (sts_val == 'reg') {
63          var check_new_UID = checkUID(sheet_id, sheet_UD, 2, uid_val);
64
65          // Conditions when the UID has been registered. Then registration was cancelled.
66          if (check_new_UID == true) {
67            result += ",regErr01"; // Err_01 = UID is already registered.
```

```
68
69            // Sends response payload to ESP32.
70            return ContentService.createTextOutput(result);
71          }
72
73        // Writes the new user's UID to the "user data" sheet.
74        var getLastRowUIDCol = findLastRow(sheet_id, sheet_UD, uid_column);  // Look for a
           row to write the new user's UID.
75        var newUID = sheet_open.getRange(uid_column + (getLastRowUIDCol + 1));
76        newUID.setValue(uid_val);
77        result += ",R_Successful";
78
79        // Sends response payload to ESP32.
80        return ContentService.createTextOutput(result);
81      }
82      //---------------------------------------
83
84      //---------------------------------------Conditions for filling attendance (Time In
         and Time Out).
85      if (sts_val == 'atc') {
86        // Checks whether the UID is already registered in the "user data" sheet.
87        // findUID(Spreadsheet ID, sheet name, index column, UID value)
88        // index column : 1 = column A, 2 = column B and so on.
89        var FUID = findUID(sheet_id, sheet_UD, 2, uid_val);
90
91        // "(FUID == -1)" means that the UID has not been registered in the "user data"
           sheet, so attendance filling is rejected.
92        if (FUID == -1) {
93          result += ",atcErr01"; // atcErr01 = UID not registered.
94          return ContentService.createTextOutput(result);
95        } else {
96          // After the UID has been checked and the result is that the UID has been
             registered,
97          // then take the "name" of the UID owner from the "user data" sheet.
98          // The name of the UID owner is in column "A" on the "user data" sheet.
99          var get_Range = sheet_user_data.getRange("A" + (FUID+2));
100         var user_name_by_UID = get_Range.getValue();
101
102         // Variables to determine attendance filling, whether to fill in "Time In",
             "Time Out" or attendance has been completed for today.
103         var enter_data = "one";
104
105         // Variable to get row position. This is used to fill in "Time Out".
106         var num_row;
107
108         // Variables to get the current Date and Time.
109         var Curr_Date = Utilities.formatDate(new Date(), "Asia/Kolkata", 'dd/MM/yyyy');
110         var Curr_Time = Utilities.formatDate(new Date(), "Asia/Kolkata", 'HH:mm:ss');
111
112         // Variable to get all the data from the "attendance" sheet.
113         var data = sheet_attendence.getDataRange().getDisplayValues();
114
115         //.................Check whether "Time In" or "Time Out" is filled in.
116         if (data.length > 1) {
117           for (var i = 0; i < data.length; i++) {
118             if (data[i][1] == uid_val) {
119               if (data[i][2] == Curr_Date) {
120                 if (data[i][4] == "" ) {
121                   Date_val = data[i][2];
122                   T1_val = data[i][3];
123                   enter_data = "two";
124                   num_row = i + 1;
125                   break;
126                 } else if(data[i][5] == "" ){
127
128                             Date_val = data[i][2];
129                             T1_val = data[i][3];
130                             T2_val=data[i][4];
131                             enter_data = "three";
```

```
132                                    num_row = i + 1;
133                                    break;
134                               } else if(data[i][6] == "" ){
135
136                                    Date_val = data[i][2];
137                                    T1_val = data[i][3];
138                                    T2_val=data[i][4];
139                                    T3_val=data[i][5];
140                                    enter_data = "four";
141                                    num_row = i + 1;
142                                    break;
143                               } else if(data[i][7] == "" ){
144
145                                    Date_val = data[i][2];
146                                    T1_val = data[i][3];
147                                    T2_val=data[i][4];
148                                    T3_val=data[i][5];
149                                    T4_val=data[i][6];
150                                    enter_data = "five";
151                                    num_row = i + 1;
152                                    break;
153                               } else if(data[i][8] == "" ){
154
155                                    Date_val = data[i][2];
156                                    T1_val = data[i][3];
157                                    T2_val=data[i][4];
158                                    T3_val=data[i][5];
159                                    T4_val=data[i][6];
160                                    T5_val=data[i][7];
161                                    enter_data = "six";
162                                    num_row = i + 1;
163                                    break;
164                               } else if(data[i][9] == "" ){
165
166                                    Date_val = data[i][2];
167                                    T1_val = data[i][3];
168                                    T2_val=data[i][4];
169                                    T3_val=data[i][5];
170                                    T4_val=data[i][6];
171                                    T5_val=data[i][7];
172                                    T6_val=data[i][8];
173                                    enter_data = "seven";
174                                    num_row = i + 1;
175                                    break;
176                               }
177                          }
178                     }
179                }
180           }
181      //.................
182
183      //.................Conditions for filling in "Time In" attendance.
184      if (enter_data == "one" && Curr_Time > "08:00:00" && Curr_Time < "09:10:00") {
185        sheet_attendence.insertRows(2);
186        sheet_attendence.getRange("A2").setValue(user_name_by_UID);
187        sheet_attendence.getRange("B2").setValue(uid_val);
188        sheet_attendence.getRange("C2").setValue(Curr_Date);
189        sheet_attendence.getRange("D2").setValue("Present("+Curr_Time+")");
190        SpreadsheetApp.flush();
191
192        // Sends response payload to ESP32.
193        result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date + "," +
                 Curr_Time;
194        return ContentService.createTextOutput(result);
195      }
196      if (enter_data == "one" && Curr_Time > "09:10:00" && Curr_Time < "09:50:00" ) {
197        sheet_attendence.insertRows(2);
198        sheet_attendence.getRange("A2").setValue(user_name_by_UID);
199        sheet_attendence.getRange("B2").setValue(uid_val);
```

```
200            sheet_attendence.getRange("C2").setValue(Curr_Date);
201            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
202            SpreadsheetApp.flush();
203
204            // Sends response payload to ESP32.
205            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
               ",Abscent("+Curr_Time+")" ;
206            return ContentService.createTextOutput(result);
207          }
208          if (enter_data == "one" && Curr_Time > "09:50:00" && Curr_Time < "10:00:00" ) {
209            sheet_attendence.insertRows(2);
210            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
211            sheet_attendence.getRange("B2").setValue(uid_val);
212            sheet_attendence.getRange("C2").setValue(Curr_Date);
213            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
214            sheet_attendence.getRange("E2").setValue("Present("+Curr_Time+")");
215            SpreadsheetApp.flush();
216
217            // Sends response payload to ESP32.
218            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
               ",Abscent("+Curr_Time+")" ;
219            return ContentService.createTextOutput(result);
220          }
221          if (enter_data == "one" && Curr_Time > "10:00:00" && Curr_Time < "10:50:00" ) {
222            sheet_attendence.insertRows(2);
223            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
224            sheet_attendence.getRange("B2").setValue(uid_val);
225            sheet_attendence.getRange("C2").setValue(Curr_Date);
226            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
227            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
228            SpreadsheetApp.flush();
229
230            // Sends response payload to ESP32.
231            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
               ",Abscent("+Curr_Time+")" ;
232            return ContentService.createTextOutput(result);
233          }
234          if (enter_data == "one" && Curr_Time > "10:50:00" && Curr_Time < "11:00:00" ) {
235            sheet_attendence.insertRows(2);
236            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
237            sheet_attendence.getRange("B2").setValue(uid_val);
238            sheet_attendence.getRange("C2").setValue(Curr_Date);
239            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
240            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
241            sheet_attendence.getRange("F2").setValue("Present("+Curr_Time+")");
242            SpreadsheetApp.flush();
243
244            // Sends response payload to ESP32.
245            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
               ",Abscent("+Curr_Time+")" ;
246            return ContentService.createTextOutput(result);
247          }
248          if (enter_data == "one" && Curr_Time > "11:00:00" && Curr_Time < "11:40:00" ) {
249            sheet_attendence.insertRows(2);
250            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
251            sheet_attendence.getRange("B2").setValue(uid_val);
252            sheet_attendence.getRange("C2").setValue(Curr_Date);
253            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
254            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
255            sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
256            SpreadsheetApp.flush();
257
258            // Sends response payload to ESP32.
259            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
               ",Abscent("+Curr_Time+")" ;
260            return ContentService.createTextOutput(result);
261          }
262          if (enter_data == "one" && Curr_Time > "11:40:00" && Curr_Time < "11:50:00" ) {
263            sheet_attendence.insertRows(2);
```

```
264            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
265            sheet_attendence.getRange("B2").setValue(uid_val);
266            sheet_attendence.getRange("C2").setValue(Curr_Date);
267            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
268            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
269            sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
270            sheet_attendence.getRange("G2").setValue("Present("+Curr_Time+")");
271            SpreadsheetApp.flush();
272
273            // Sends response payload to ESP32.
274            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
                   ",Abscent("+Curr_Time+")" ;
275            return ContentService.createTextOutput(result);
276          }
277          if (enter_data == "one" && Curr_Time > "11:50:00" && Curr_Time < "13:30:00" ) {
278            sheet_attendence.insertRows(2);
279            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
280            sheet_attendence.getRange("B2").setValue(uid_val);
281            sheet_attendence.getRange("C2").setValue(Curr_Date);
282            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
283            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
284            sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
285            sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
286            SpreadsheetApp.flush();
287
288            // Sends response payload to ESP32.
289            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
                   ",Abscent("+Curr_Time+")" ;
290            return ContentService.createTextOutput(result);
291          }
292          if (enter_data == "one" && Curr_Time > "13:30:00" && Curr_Time < "13:40:00" ) {
293            sheet_attendence.insertRows(2);
294            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
295            sheet_attendence.getRange("B2").setValue(uid_val);
296            sheet_attendence.getRange("C2").setValue(Curr_Date);
297            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
298            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
299            sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
300            sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
301            sheet_attendence.getRange("H2").setValue("Present("+Curr_Time+")");
302            SpreadsheetApp.flush();
303
304            // Sends response payload to ESP32.
305            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
                   ",Abscent("+Curr_Time+")" ;
306            return ContentService.createTextOutput(result);
307          }
308          if (enter_data == "one" && Curr_Time > "13:40:00" && Curr_Time < "14:20:00" ) {
309            sheet_attendence.insertRows(2);
310            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
311            sheet_attendence.getRange("B2").setValue(uid_val);
312            sheet_attendence.getRange("C2").setValue(Curr_Date);
313            sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
314            sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
315            sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
316            sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
317            sheet_attendence.getRange("H2").setValue("Abscent("+Curr_Time+")");
318            SpreadsheetApp.flush();
319
320            // Sends response payload to ESP32.
321            result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
                   ",Abscent("+Curr_Time+")" ;
322            return ContentService.createTextOutput(result);
323          }
324          if (enter_data == "one" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00" ) {
325            sheet_attendence.insertRows(2);
326            sheet_attendence.getRange("A2").setValue(user_name_by_UID);
327            sheet_attendence.getRange("B2").setValue(uid_val);
328            sheet_attendence.getRange("C2").setValue(Curr_Date);
```

```
329          sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
330          sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
331          sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
332          sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
333          sheet_attendence.getRange("H2").setValue("Abscent("+Curr_Time+")");
334          sheet_attendence.getRange("I2").setValue("Present("+Curr_Time+")");
335          SpreadsheetApp.flush();
336
337          // Sends response payload to ESP32.
338          result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
             ",Abscent("+Curr_Time+")" ;
339          return ContentService.createTextOutput(result);
340        }
341        if (enter_data == "one" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00" ) {
342          sheet_attendence.insertRows(2);
343          sheet_attendence.getRange("A2").setValue(user_name_by_UID);
344          sheet_attendence.getRange("B2").setValue(uid_val);
345          sheet_attendence.getRange("C2").setValue(Curr_Date);
346          sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
347          sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
348          sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
349          sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
350          sheet_attendence.getRange("H2").setValue("Abscent("+Curr_Time+")");
351          sheet_attendence.getRange("I2").setValue("Abscent("+Curr_Time+")");
352          SpreadsheetApp.flush();
353
354          // Sends response payload to ESP32.
355          result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
             ",Abscent("+Curr_Time+")" ;
356          return ContentService.createTextOutput(result);
357        }
358        if (enter_data == "one" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00" ) {
359          sheet_attendence.insertRows(2);
360          sheet_attendence.getRange("A2").setValue(user_name_by_UID);
361          sheet_attendence.getRange("B2").setValue(uid_val);
362          sheet_attendence.getRange("C2").setValue(Curr_Date);
363          sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
364          sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
365          sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
366          sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
367          sheet_attendence.getRange("H2").setValue("Abscent("+Curr_Time+")");
368          sheet_attendence.getRange("I2").setValue("Abscent("+Curr_Time+")");
369          sheet_attendence.getRange("J2").setValue("Present("+Curr_Time+")");
370          SpreadsheetApp.flush();
371
372          // Sends response payload to ESP32.
373          result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
             ",Abscent("+Curr_Time+")" ;
374          return ContentService.createTextOutput(result);
375        }
376        if (enter_data == "one" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00" ) {
377          sheet_attendence.insertRows(2);
378          sheet_attendence.getRange("A2").setValue(user_name_by_UID);
379          sheet_attendence.getRange("B2").setValue(uid_val);
380          sheet_attendence.getRange("C2").setValue(Curr_Date);
381          sheet_attendence.getRange("D2").setValue("Abscent("+Curr_Time+")");
382          sheet_attendence.getRange("E2").setValue("Abscent("+Curr_Time+")");
383          sheet_attendence.getRange("F2").setValue("Abscent("+Curr_Time+")");
384          sheet_attendence.getRange("G2").setValue("Abscent("+Curr_Time+")");
385          sheet_attendence.getRange("H2").setValue("Abscent("+Curr_Time+")");
386          sheet_attendence.getRange("I2").setValue("Abscent("+Curr_Time+")");
387          sheet_attendence.getRange("J2").setValue("Abscent("+Curr_Time+")");
388          SpreadsheetApp.flush();
389
390          // Sends response payload to ESP32.
391          result += ",TI_Successful" + "," + user_name_by_UID + "," + Curr_Date +
             ",Abscent("+Curr_Time+")" ;
392          return ContentService.createTextOutput(result);
393        }
```

```
394          //..................

395

396          //..................Conditions for filling in "Time Out" attendance.

397          if (enter_data == "two" && Curr_Time > "09:50:00" && Curr_Time < "10:00:00") {

398            sheet_attendence.getRange("E" + num_row).setValue("Present("+Curr_Time+")");

399            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + Curr_Time;

400

401            // Sends response payload to ESP32.

402            return ContentService.createTextOutput(result);

403          }

404          if (enter_data == "two" && Curr_Time > "10:00:00" && Curr_Time < "10:50:00") {

405            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

406            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

407

408            // Sends response payload to ESP32.

409            return ContentService.createTextOutput(result);

410          }

411          if (enter_data == "two" && Curr_Time > "10:50:00" && Curr_Time < "11:00:00") {

412            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

413            sheet_attendence.getRange("F" + num_row).setValue("Present("+Curr_Time+")");

414            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

415

416            // Sends response payload to ESP32.

417            return ContentService.createTextOutput(result);

418          }

419          if (enter_data == "two" && Curr_Time > "10:40:00" && Curr_Time < "11:40:00") {

420            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

421            sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");

422            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

423

424            // Sends response payload to ESP32.

425            return ContentService.createTextOutput(result);

426          }

427          if (enter_data == "two" && Curr_Time > "11:40:00" && Curr_Time < "11:50:00") {

428            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

429            sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");

430            sheet_attendence.getRange("G" + num_row).setValue("Present("+Curr_Time+")");

431            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

432

433            // Sends response payload to ESP32.

434            return ContentService.createTextOutput(result);

435          }

436          if (enter_data == "two" && Curr_Time > "11:50:00" && Curr_Time < "13:30:00") {

437            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

438            sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");

439            sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");

440            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

441

442            // Sends response payload to ESP32.

443            return ContentService.createTextOutput(result);

444          }

445          if (enter_data == "two" && Curr_Time > "13:30:00" && Curr_Time < "13:40:00") {

446            sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");

447            sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");

448            sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");

449            sheet_attendence.getRange("H" + num_row).setValue("Present("+Curr_Time+")");

450            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";

451

452            // Sends response payload to ESP32.

453            return ContentService.createTextOutput(result);

454          }

455          if (enter_data == "two" && Curr_Time > "13:40:00" && Curr_Time < "14:20:00") {
```

```
456          sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");
457          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
458          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
459          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
460          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";
461
462          // Sends response payload to ESP32.
463          return ContentService.createTextOutput(result);
464       }
465       if (enter_data == "two" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00") {
466          sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");
467          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
468          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
469          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
470          sheet_attendence.getRange("I" + num_row).setValue("Present("+Curr_Time+")");
471          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";
472
473          // Sends response payload to ESP32.
474          return ContentService.createTextOutput(result);
475       }
476       if (enter_data == "two" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00") {
477          sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");
478          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
479          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
480          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
481          sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
482          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";
483
484          // Sends response payload to ESP32.
485          return ContentService.createTextOutput(result);
486       }
487       if (enter_data == "two" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
488          sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");
489          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
490          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
491          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
492          sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
493          sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
494          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";
495
496          // Sends response payload to ESP32.
497          return ContentService.createTextOutput(result);
498       }
499       if (enter_data == "two" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
500          sheet_attendence.getRange("E" + num_row).setValue("Abscent("+Curr_Time+")");
501          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
502          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
503          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
504          sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
505          sheet_attendence.getRange("J" + num_row).setValue("Abscent("+Curr_Time+")");
506          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + ",Abscent("+Curr_Time+")";
507
508          // Sends response payload to ESP32.
509          return ContentService.createTextOutput(result);
510       }
511       //..................
512       if (enter_data == "three" && Curr_Time > "10:50:00" && Curr_Time < "11:00:00") {
513          sheet_attendence.getRange("F" + num_row).setValue(Curr_Time);
514          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+Curr_Time;
515
516          // Sends response payload to ESP32.
517          return ContentService.createTextOutput(result);
518       }
```

```
519              if (enter_data == "three" && Curr_Time > "11:00:00" && Curr_Time < "11:40:00") {
520                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
521                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
522
523                // Sends response payload to ESP32.
524                return ContentService.createTextOutput(result);
525              }
526              if (enter_data == "three" && Curr_Time > "11:40:00" && Curr_Time < "11:50:00") {
527                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
528                sheet_attendence.getRange("G" + num_row).setValue("Present("+Curr_Time+")");
529                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
530
531                // Sends response payload to ESP32.
532                return ContentService.createTextOutput(result);
533              }
534              if (enter_data == "three" && Curr_Time > "11:50:00" && Curr_Time < "13:30:00") {
535                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
536                sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
537                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
538
539                // Sends response payload to ESP32.
540                return ContentService.createTextOutput(result);
541              }
542              if (enter_data == "three" && Curr_Time > "13:30:00" && Curr_Time < "13:40:00") {
543                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
544                sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
545                sheet_attendence.getRange("H" + num_row).setValue("Present("+Curr_Time+")");
546                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
547
548                // Sends response payload to ESP32.
549                return ContentService.createTextOutput(result);
550              }
551              if (enter_data == "three" && Curr_Time > "13:40:00" && Curr_Time < "14:20:00") {
552                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
553                sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
554                sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
555                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
556
557                // Sends response payload to ESP32.
558                return ContentService.createTextOutput(result);
559              }
560              if (enter_data == "three" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00") {
561                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
562                sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
563                sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
564                sheet_attendence.getRange("I" + num_row).setValue("Present("+Curr_Time+")");
565                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
566
567                // Sends response payload to ESP32.
568                return ContentService.createTextOutput(result);
569              }
570              if (enter_data == "three" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00") {
571                sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
572                sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
573                sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
574                sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
575                result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                   T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
576
577                // Sends response payload to ESP32.
578                return ContentService.createTextOutput(result);
579              }
580              if (enter_data == "three" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
```

```
581          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
582          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
583          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
584          sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
585          sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
586          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
587
588          // Sends response payload to ESP32.
589          return ContentService.createTextOutput(result);
590       }
591       if (enter_data == "three" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
592          sheet_attendence.getRange("F" + num_row).setValue("Abscent("+Curr_Time+")");
593          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
594          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
595          sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
596          sheet_attendence.getRange("J" + num_row).setValue("Abscent("+Curr_Time+")");
597          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+",Abscent("+Curr_Time+")";
598
599          // Sends response payload to ESP32.
600          return ContentService.createTextOutput(result);
601       }
602       //.................
603       if (enter_data == "four" && Curr_Time > "11:40:00" && Curr_Time < "11:50:00") {
604          sheet_attendence.getRange("G" + num_row).setValue(Curr_Time);
605          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+T3_val+","+Curr_Time;
606
607          // Sends response payload to ESP32.
608          return ContentService.createTextOutput(result);
609       }
610       if (enter_data == "four" && Curr_Time > "11:50:00" && Curr_Time < "13:30:00") {
611          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
612          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
613
614          // Sends response payload to ESP32.
615          return ContentService.createTextOutput(result);
616       }
617       if (enter_data == "four" && Curr_Time > "13:30:00" && Curr_Time < "13:40:00") {
618          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
619          sheet_attendence.getRange("H" + num_row).setValue("Present("+Curr_Time+")");
620          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
621
622          // Sends response payload to ESP32.
623          return ContentService.createTextOutput(result);
624       }
625       if (enter_data == "four" && Curr_Time > "13:40:00" && Curr_Time < "14:20:00") {
626          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
627          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
628          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
629
630          // Sends response payload to ESP32.
631          return ContentService.createTextOutput(result);
632       }
633       if (enter_data == "four" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00") {
634          sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
635          sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
636          sheet_attendence.getRange("I" + num_row).setValue("Present("+Curr_Time+")");
637          result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
             T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
638
639          // Sends response payload to ESP32.
640          return ContentService.createTextOutput(result);
641       }
642       if (enter_data == "four" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00") {
```

```
643              sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
644              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
645              sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
646              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
647
648              // Sends response payload to ESP32.
649              return ContentService.createTextOutput(result);
650            }
651            if (enter_data == "four" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
652              sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
653              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
654              sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
655              sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
656              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
657
658              // Sends response payload to ESP32.
659              return ContentService.createTextOutput(result);
660            }
661            if (enter_data == "four" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
662              sheet_attendence.getRange("G" + num_row).setValue("Abscent("+Curr_Time+")");
663              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
664              sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
665              sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
666              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+",Abscent("+Curr_Time+")";
667
668              // Sends response payload to ESP32.
669              return ContentService.createTextOutput(result);
670            }
671            //.................
672            if (enter_data == "five" && Curr_Time > "13:30:00" && Curr_Time < "13:40:00") {
673              sheet_attendence.getRange("H" + num_row).setValue(Curr_Time);
674              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+","+T4_val+","+Curr_Time;
675
676              // Sends response payload to ESP32.
677              return ContentService.createTextOutput(result);
678            }
679            if (enter_data == "five" && Curr_Time > "13:40:00" && Curr_Time < "14:20:00") {
680              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
681              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+","+T4_val+",Abscent("+Curr_Time+")";
682
683              // Sends response payload to ESP32.
684              return ContentService.createTextOutput(result);
685            }
686            if (enter_data == "five" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00") {
687              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
688              sheet_attendence.getRange("I" + num_row).setValue("Present("+Curr_Time+")");
689              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+","+T4_val+",Abscent("+Curr_Time+")";
690
691              // Sends response payload to ESP32.
692              return ContentService.createTextOutput(result);
693            }
694            if (enter_data == "five" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00") {
695              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
696              sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
697              result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
                 T1_val + "," + T2_val+","+T3_val+","+T4_val+",Abscent("+Curr_Time+")";
698
699              // Sends response payload to ESP32.
700              return ContentService.createTextOutput(result);
701            }
702            if (enter_data == "five" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
703              sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
704              sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
```

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705            sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
706            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+",Abscent("+Curr_Time+")";
707
708            // Sends response payload to ESP32.
709            return ContentService.createTextOutput(result);
710          }
711          if (enter_data == "five" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
712            sheet_attendence.getRange("H" + num_row).setValue("Abscent("+Curr_Time+")");
713            sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
714            sheet_attendence.getRange("J" + num_row).setValue("Abscent("+Curr_Time+")");
715            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+",Abscent("+Curr_Time+")";
716
717            // Sends response payload to ESP32.
718            return ContentService.createTextOutput(result);
719          }
720          //..................
721          if (enter_data == "six" && Curr_Time > "14:20:00" && Curr_Time < "14:30:00") {
722            sheet_attendence.getRange("I" + num_row).setValue(Curr_Time);
723            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+","+Curr_Time;
724
725            // Sends response payload to ESP32.
726            return ContentService.createTextOutput(result);
727          }
728          if (enter_data == "six" && Curr_Time > "14:30:00" && Curr_Time < "15:10:00") {
729            sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
730            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+",Abscent("+Curr_Time+
               ")";
731
732            // Sends response payload to ESP32.
733            return ContentService.createTextOutput(result);
734          }
735          if (enter_data == "six" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
736            sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
737            sheet_attendence.getRange("J" + num_row).setValue("Present("+Curr_Time+")");
738            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+",Abscent("+Curr_Time+
               ")";
739
740            // Sends response payload to ESP32.
741            return ContentService.createTextOutput(result);
742          }
743          if (enter_data == "six" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
744            sheet_attendence.getRange("I" + num_row).setValue("Abscent("+Curr_Time+")");
745            sheet_attendence.getRange("J" + num_row).setValue("Abscent("+Curr_Time+")");
746            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+",Abscent("+Curr_Time+
               ")";
747
748            // Sends response payload to ESP32.
749            return ContentService.createTextOutput(result);
750          }
751          //..................
752          if (enter_data == "seven" && Curr_Time > "15:10:00" && Curr_Time < "15:20:00") {
753            sheet_attendence.getRange("J" + num_row).setValue(Curr_Time);
754            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+","+T6_val+","+Curr_Time
               ;
755
756            // Sends response payload to ESP32.
757            return ContentService.createTextOutput(result);
758          }
759          if (enter_data == "seven" && Curr_Time > "15:20:00" && Curr_Time < "16:00:00") {
760            sheet_attendence.getRange("J" + num_row).setValue("Abscent("+Curr_Time+")");
761            result += ",TO_Successful" + "," + user_name_by_UID + "," + Date_val + "," +
               T1_val + "," + T2_val+","+T3_val+","+T4_val+","+T5_val+","+T6_val+",Abscent("+
```

```
                  Curr_Time+")";

762
763              // Sends response payload to ESP32.
764              return ContentService.createTextOutput(result);
765            }
766          //..................Condition when "Time In" and "Time Out" are filled.
767          if (enter_data == "finish") {
768            result += ",atcInf01"; // atcInf01 = You have completed your attendance record
                for today (Time In and Time Out have been filled in for today).
769
770              // Sends response payload to ESP32.
771              return ContentService.createTextOutput(result);
772            }
773          //.................
774        }
775      }
776      //---------------------------------------
777    }
778 }
779 //_____
780
781 //_____stripQu
     otes()
782 function stripQuotes( value ) {
783    return value.replace(/^["']|['"]$/g, "");
784 }
785 //_____
786
787 //_____findLas
     tRow()
788 // Function to find the last row in a certain column.
789 // Reference :
     https://www.jsowl.com/find-the-last-row-of-a-single-column-in-google-sheets-in-apps-scrip
     t/
790 function findLastRow(id_sheet, name_sheet, name_column) {
791    var spreadsheet = SpreadsheetApp.openById(id_sheet);
792    var sheet = spreadsheet.getSheetByName(name_sheet);
793    var lastRow = sheet.getLastRow();
794
795    var range = sheet.getRange(name_column + lastRow);
796
797    if (range.getValue() !== "") {
798      return lastRow;
799    } else {
800      return range.getNextDataCell(SpreadsheetApp.Direction.UP).getRow();
801    }
802 }
803 //_____
804
805 //_____findUID
     ()
806 // Reference : https://stackoverflow.com/a/29546373
807 function findUID(id_sheet, name_sheet, column_index, searchString) {
808    var open_sheet = SpreadsheetApp.openById(id_sheet);
809    var sheet = open_sheet.getSheetByName(name_sheet);
810    var columnValues = sheet.getRange(2, column_index, sheet.getLastRow()).getValues();
       // 1st is header row.
811    var searchResult = columnValues.findIndex(searchString);  // Row Index - 2.
812
813    return searchResult;
814 }
815 //_____
816
817 //_____checkUI
     D()
818 // Reference : https://stackoverflow.com/a/29546373
819 function checkUID(id_sheet, name_sheet, column_index, searchString) {
820    var open_sheet = SpreadsheetApp.openById(id_sheet);
821    var sheet = open_sheet.getSheetByName(name_sheet);
```

```javascript
822      var columnValues = sheet.getRange(2, column_index, sheet.getLastRow()).getValues();
         // 1st is header row.
823      var searchResult = columnValues.findIndex(searchString);  // Row Index - 2.
824
825      if(searchResult != -1) {
826         // searchResult + 2 is row index.
827         sheet.setActiveRange(sheet.getRange(searchResult + 2, 3)).setValue("UID has been
            registered in this row.");
828         return true;
829      } else {
830         return false;
831      }
832   }
833   //_____
834
835   //_____findInd
      ex()
836   Array.prototype.findIndex = function(search){
837      if(search == "") return false;
838      for (var i=0; i<this.length; i++)
839         if (this[i].toString().indexOf(search) > -1 ) return i;
840
841      return -1;
842   }
843   //_____
844   //<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
      <<
```