# Report HW4 20210318 Web\_Flask

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Project Structure Functions

## **Project Structure**

```
| hotel.csv
2
3
  ⊢.idea
  | | .gitignore
   | | misc.xml
  | | modules.xml
   | | web_flask.iml
8
  | | workspace.xml
9
10
   11
       profiles_settings.xml
12
13
  ⊢apps
14
  | | app.py
15
   | | settings.py
16
17
  18 | | | css
19
            style.css
20
21 | | |-js
22
             jquery.js
23
24 | | └jslib
25
              jquery.min.js
26
  27
28 | | index.html
29
30 | └__pycache__
       settings.cpython-38.pyc
31
32
33 └─__pycache__
```

### **Functions**

All functions are shown in my demo.mp4

Choose a .csv file and upload it:

```
1  $("#displayFile").click(function () {
2     var reader = new FileReader();
3     reader.onload = function (e) {
```

```
var table = $("");
 5
              var datas = e.target.result.split("\n");
 6
              for (\text{var } i = 0; i < \text{datas.length}; ++i) {
 7
                  var row_datas = datas[i].split(",");
 8
                  var row = $("");
9
                  if (i % 2 == 0) {
10
                      row = $("");
11
                  } else {
                      row = $("");
12
13
                  if (i == 0) {
14
15
                      row = $("");
16
                  for (\text{var } j = 0; j < \text{row\_datas.length}; ++j) {
17
18
                      var column = $("");
19
                      column.html(row_datas[j]);
20
                      row.append(column);
21
                  if (i !== 0 && i % 2 == 1) {
22
23
                      row.append('<input type="button" value="Delete Row"</pre>
   id="deleteRow" class="deodd">');
24
                  } else if (i !== 0 && i % 2 == 0) {
25
                      row.append('<input type="button" value="Delete Row"</pre>
   id="deleteRow" class="deeven">');
26
                  } else {
27
                      row.append('Operation');
                  }
28
29
                  table.append(row);
30
              }
31
              $("#dpCSV").html('').append(table);
32
           };
33
           reader.readAsText($("#uploadFile")[0].files[0]);
34
       });
```

#### • features:

- o declare thead so the head can have a unique color
- declare tr in odd row and even row separately to make rows with different index in different color
- not only the given .csv file can be displayed correctly, the js code can be suitable for the .csv files with different number of columns or rows

#### Add a new row to the html page:

```
$("#addRow").click(function () {
1
2
           var add_datas = prompt("Input new row,split column data with ','");
 3
           if (add_datas.length > 0) {
               if (document.getElementById("data_table")) {
4
                  var cells_cnt =
   document.getElementById("data_table").rows[0].cells.length;
6
                  add_datas = add_datas.split(',');
7
                  var new_row = $("");
8
                  var row_cnt = $("table tr").size();
9
                  if (row_cnt % 2 == 0) {
10
                      new_row = $("");
                  } else {
11
12
                      new_row = $("");
```

```
13
14
                   for (var i = 0; i < cells_cnt - 1; ++i) {
15
                       var new_col = $("");
16
                       if (add_datas[i]) {
17
                           new_col.html(add_datas[i]);
18
                       } else {
                           new_col.html("NULL");
19
20
21
                       new_row.append(new_col);
22
                   if (row_cnt % 2 == 1) {
23
24
                       new_row.append('<input type="button" value="Delete</pre>
    Row" id="deleteRow" class="deodd">');
25
                   } else if (row_cnt % 2 == 0) {
26
                       new_row.append('<input type="button" value="Delete</pre>
    Row" id="deleteRow" class="deeven">');
27
                   } else {
                       new_row.append('Operation');
28
29
                   }
30
                   $("#data_table").append(new_row);
31
               } else {
32
                   alert("Please load a file first!");
33
           } else {
34
35
               alert("Invalid Input!")
36
           }
37
38
        });
```

#### • feature:

• the new added row can also be identified as odd row or even row, then we can render them in different color

#### **Delete row:**

```
1     $("body").on("click", "#deleteRow", function () {
2     var rowIndex =
     $(this).parent().parent().find("tr").index($(this).parent().parent());
3     document.getElementById("data_table").deleteRow(rowIndex);
4     });
```

#### Save current table to .csv file:

```
1
    $("#saveFile").click(function () {
            var tableInfo = "";
 2
 3
            var tableObj = document.getElementById("data_table");
4
            for (var i = 0; i < tableobj.rows.length; i++) {</pre>
 5
                for (var j = 0; j < tableObj.rows[i].cells.length; j++) {
6
                     tableInfo += tableObj.rows[i].cells[j].innerText;
                     tableInfo += ",";
 7
8
                tableInfo += "\n";
9
            }
10
            createAndDownloadFile("hotel_new.csv", tableInfo);
11
12
        });
```

```
function createAndDownloadFile(fileName, content) {
    var aTag = document.createElement('a');
    var blob = new Blob([content]);
    aTag.download = fileName;
    aTag.href = URL.createObjectURL(blob);
    aTag.click();
    URL.revokeObjectURL(blob);
```

#### • feature:

• just a single click can we download the file, without the burden of redirect to another page or choose local directory or rename the file