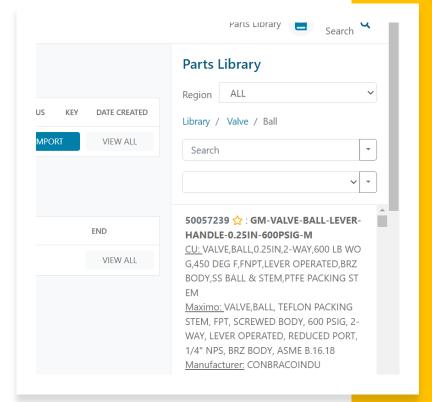
CADT -688

- Parts Library : Sort Options
- Description: As a user, I will have access to a sort function in the Parts Library. This sort function will appear below the search box in order to sort search results.
- Acceptance Criteria :
- Requested sort criteria :
 - Alphabetical
 - Most Recently Updated
 - MRC Guaranteed in Stock : Yes

Analysis:

 So here the possible solution is like we have to do frontend changes as well as backend changes

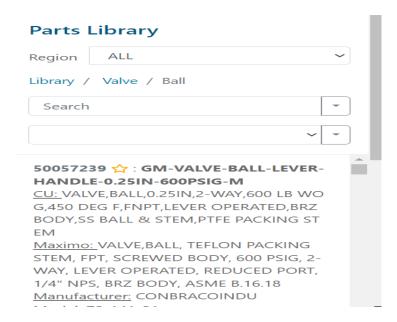
So in the frontend under the parts Library search box we have to create the select box with all options like: CU description, Maximo, Recently update, Item number so based on the user select the record we can sort the result in ascending & descending order.



• So in frontend design we can move into the correct file and write a code for an design like as shown below:

```
</div>
200
                                                            <div class="input-group px-3 pb-3">
202
                                                                     <!--<label for="Sortfeild" >Choose Feilds To Sort</label>-->
                                                                      <select class="form-control" id="sortField" name="Sort_feild" placeholder="Sort By">
203
                                                                                   <option value=""></option>
204
205
                                                                                   <option value="recentupdate">Recent update</option>
                                                                                  <option value="cu">CU</option>
                                                                                  <option value="cuname">CUName</option>
207
                                                                                   <option value="itemnum">ItemNum</option>
208
209
                                                                                   <option value="maximo">Maximo</option>
210
                                                                                   <option value="manufacturer">Manufacturer</option>
                                                                                  .
<option value="model">Model</option>
211
                                                                                  <option value="mfgpart">MFG Part#</option>
212
213
                                                                                   <option value="mrcinstock">MRC In Stock</option>
215
                                                                      <div class="input-group-append">
                                                                                  <button type="button" class="btn btn-outline-secondary dropdown-toggle dr
216
217
                                                                                               <span class="sr-only">Toggle Dropdown</span>
218
                                                                                   <div class="dropdown-menu dropdown-menu-right scrollable-menu" >
219
                                                                                              <a class="dropdown-item" href="#" id="asc">Ascending</a>
<a class="dropdown-item" href="#" id="desc">Descending</a>
220
221
222
                                                                       </div>
224
                                                           </div>
225
226
                                                            <!--<div class="input-group px-3 pb-3">
```

 So it will generate an design like there will be an dic which contains the different selections and having an sort option associated with it like ascending sorting or descending sorting as shown below:



• Now in 2nd part is that we have to get the data from the backend database using backend controller rest api, get the data from there and print it in console using logger.debug() so the data which is printing on the console that we have to sort coding part as shown below:

So here what I have did like I have to pass the field has using @RequestParam in order to bind the data inside the controller for an particular field.

```
168 167
169 168
170 169
171 - ,@RequestParam String regionCode,@RequestParam String sortField,@RequestParam String sortOrder, Ht
172 - 173 - 170 + ,@RequestParam String regionCode, HttpSession session ) {
171 + 174 172 175 173
```

• So here in the backend controller I passed sortOrder & sortField in the backend controller so based on the value which we pass from the frontend so it will bind the data and after using comparator I get the data from backend and sort that data qusing comparator and after that I print the data in console code as shown below:

```
ehubStructuredClassificationService.getById(Integer.parseInt(parentId)).getCat
247
     241
                        model.addAttribute("catl2", catl2);
248
249
     243
250
251
                    if(sortField.equalsIgnoreCase("Recentupdate") && sortOrder.equalsIgnoreCase("asc")) {
253
                        Comparator<EhubItemCUDTO> comp54=Comparator.comparing(EhubItemCUDTO::getUpdateDttm, Cc
254
                       itemCUList.sort(comp54);
255
                       itemCUList.forEach(item -> logger.debug(item.getUpdateDttm()));
256
258
                   else if(sortField.equalsIgnoreCase("Recentupdate") && sortOrder.equalsIgnoreCase("desc"))
                       Comparator<EhubitemCUDTO> comp54=Comparator.comparing(EhubitemCUDTO::getUpdateDttm, CC
259
260
                        itemCUList.sort(comp54);
261
                        itemCUList.forEach(item -> logger.debug(item.getUpdateDttm()));
262
263
264
265
                   else if(sortField.equalsIgnoreCase("Maximo") && sortOrder.equalsIgnoreCase("asc")) {
266
                        Comparator<EhubItemCUDTO> comp=Comparator.comparing(EhubItemCUDTO::getItemDesc, Compar
                       itemCUList.sort(comp);
267
268
269
271
                    else if(sortField.equalsIgnoreCase("Maximo") && sortOrder.equalsIgnoreCase("desc")) {
272
                        Comparator<EhubItemCUDTO> comp=Comparator.comparing(EhubItemCUDTO::getItemDesc, Compar
```

2nd part for the same code goes here as shown below:

```
263
      264
265
266
      - & sortOrder.equalsIgnoreCase("desc")) {
- comparing(EhubItemCUDTO::getItemDesc, Comparator.nullsFirst(String::compareTo).reversed());
272
273
274
        - em.getItemDesc()));
275
276
       - .getItemDesc()));
- er") && sortOrder.equalsIgnoreCase("asc")) {
        - r.comparing(EhubItemCUDTO::getManufactureName, Comparator.nullsFirst(String::compareTo));
280
281
        em.getManufactureName()));
282
283
        - er") && sortOrder.equalsIgnoreCase("desc")) {
284
285
        - r.comparing(EhubItemCUDTO::getManufactureName, Comparator.nullsFirst(String::compareTo).reversed()
        em.getManufactureName()));
```

• Now we move to frontend code so now we have to implement the functionality of onclick of button how the ascending & descending will treat. SO now we need to get the value in frontend code the field which are mention in the backend controller function like: parentld, strucClassId, sortOrder, Region, sortField and then we have to pass the data using an AJAX call and if it is in success then we have load the sorting data.

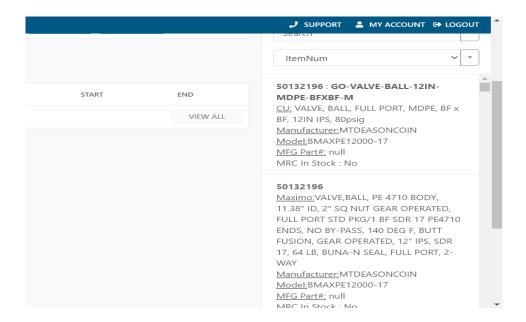
```
- $("#asc").off('click').on('click' , function(){
47
48
                 console.log("Button is clicked");
49
               var tokens= ($('a.lvl2link').attr("id")).split("_");
50
                    var parentId=tokens[1];
51
                     console.log("ParentId:"+parentId);
52
                var strucClassId=tokens[2];
//console.log("StruClassId:"+struClassId);
var strucClassId=$('.cu_library_breadcrumb_3').attr("id");
    console.log("struClassId:"+strucClassId);
53
54
55
                        console.log("StruClassId:"+strucClassId);
56
57
                    parentId = parentId == "null" ? "LABOR" : parentId == "-1" ? "Favorite" : parentId
parentId = parentId == -100 ? "LABOR" : parentId == -200 ? "ASSET" : parentId
58
59
60
                    var regionCode= $('#lib-region').val();
61
62
                     regionCode = regionCode? regionCode: 'all';
63
                     console.log("Region code:"+regionCode);
64
65
                     var sortField=$("#sortField").val();
66
              console.log("Sortfeild"+sortField);
67
68
69
               var sortOrder=$("#asc").val();
70
71
                      //console.log("SortOrder"+sortOrder);
72
74
                                    'async': false,
```

```
69 -
70 -
71 -
73 -
73 -
74 -
75 -
76 -
77 - trucClassId, "regionCode" : regionCode , "sortField" : sortField, "sortOrder" : "asc"),
78 -
80 -
81 -
82 - (parentId), 'strucClassId': (strucClassId), 'regionCode':(regionCode) ,'sortField' : (sortField)
83 -
84 -
85 -
86 -
87 -
88 -
89 -
90 -
91 -
92 -
93 -
94 -
95 -
96 -
```

•	Using the same we have to write the code similar to ascending for descending o click also.	'n

Result: So finally what we have did till yet now we have to check the implementation inside the UI as shown below:

So here the result is showing like I have sort the Itemnumber in descending order so I get an this result as shown:



• So here when I am going to sort the same result in ascending order then we are getting different result as shown below:

