

```
1 <!doctype html>
2 <html lang="">
3     <head>
4         <meta charset="utf-8">
5         <title>Page Replacement System</title>
6
7         <link rel="stylesheet" href="css/main.css">
8     </head>
9     <body data-bind="visible: true" style="display: none">
10         <!--A banner that displays any errors encountered
11         -->
12         <div class="errorBanner" data-bind="visible:
13         errorBanner">
14             <p data-bind="text: errorBanner"></p>
15         </div>
16
17         <!--A banner that displays any successes
18         encountered-->
19         <div class="successBanner" data-bind="visible:
20         successBanner">
21             <p data-bind="text: successBanner" id="
22             bannerWords"></p>
23         </div>
24
25         <!--Information needed to load the memory requests
26         from the file-->
27         <!-- ko if: fileInputNumber() == 1 -->
28         <div id="firstFileInputDiv">
29             <p id="prompt">Please enter a file to parse</p
30             >
31             <input class="fileInput" data-bind="value:
32             requestedFile">
33             <button class="fileButton button blue" data-
34             bind="click: getAllDataFromFile">Get Data</button>
35         </div>
36         <!-- /ko -->
37         <!-- ko if: fileInputNumber() == 2 -->
38         <div id="secondFileInputDiv">
39             <div id="newInput">
40                 <input class="fileInput" data-bind="value
41                 : requestedFile">
42                 <button class="fileButton button blue"
43                 data-bind="click: function(){getAllDataFromFile()}">Start
44                 New</button>
45             </div>
46             <button id="stats" class="statsButton
```

```

33 button blue" data-bind="click: function(){showStats(true
    )}, visible: !showStats()">Open Stats</button>
34         <button id="stats" class="statsButton
button blue" data-bind="click: function(){showStats(false
    )}, visible: showStats()">Close Stats</button>
35         </div>
36     </div>
37     <!-- /ko -->
38
39     <div id="pageContent" data-bind="visible: !
showStats()">
40         <!--Table containing the memory request pulled
in from the file-->
41         <div id="memoryRequestsContainer">
42             <table id="memoryRequests">
43                 <thead>
44                     <tr>
45                         <th data-bind="visible:
shouldShowMemoryRequestTitle">Loaded Memory Requests</th>
46                     </tr>
47                 </thead>
48                 <tbody data-bind="foreach: {data:
lines, as: 'line'}">
49                     <tr>
50                         <td data-bind="text: line"></
td>
51                     </tr>
52                 </tbody>
53             </table>
54         </div>
55
56         <!--Table containing the order of each process
-->
57         <div id="processOrderContainer">
58             <table id="processOrder">
59                 <thead>
60                     <tr>
61                         <th data-bind="visible:
orderedProcesses()[0]">Current Order</th>
62                     </tr>
63                 </thead>
64                 <tbody data-bind="foreach: {data:
orderedProcesses, as: 'process'}">
65                     <tr>
66                         <td data-bind="text: process">

```

```

66 </td>
67         </tr>
68     </tbody>
69 </table>
70 </div>
71
72     <!--Table containing relevant PCB information
-->
73     <div id="pcbContainer" data-bind="foreach: {
data: pcbsObservable, as: 'pcb'}">
74         <table data-bind="attr: {id: 'pcb' +
$index()}" class="pcb" >
75             <thead>
76                 <tr>
77                     <th colspan="2">PCB</th>
78                 </tr>
79             </thead>
80             <tbody>
81                 <tr>
82                     <th>Process</th>
83                     <th>Page Table</th>
84                 </tr>
85                 <tr>
86                     <td data-bind="text: pcb"></
td>
87                     <td>T<span data-bind="text:
$index"></span></td>
88                 </tr>
89             </tbody>
90         </table>
91     </div>
92
93     <!--Table representing te page table-->
94     <div id="pageTableContainer" data-bind="
foreach: {data: pageTablesObservable, as: 'tables'}">
95         <table id="pageTable" >
96             <thead>
97                 <tr>
98                     <th colspan="2">Page Table T<
span data-bind="text: $index"></span> </th>
99                 </tr>
100                <tr>
101                    <th>Logical Page</th>
102                    <th>Physical Frame</th>
103                </tr>

```

```

104                                     </thead>
105                                     <tbody data-bind="foreach: {data:
tables, as: 'table'}">
106                                     <tr data-bind="foreach: {data:
table, as: 'entry'}">
107                                     <td data-bind="text: entry['
va'], attr: {id: 'pgtV' + '_' + $parentContext.
$parentContext.$index() + '_' + $parentContext.$index()}"
></td>
108                                     <td data-bind="text: entry['
pa'], attr: {id: 'pgtP' + '_' + $parentContext.
$parentContext.$index() + '_' + $parentContext.$index()}"
></td>
109                                     </tr>
110                                 </tbody>
111                             </table>
112                         </div>
113
114                         <!--Table representing te free frame list-->
115                         <div id="freeFrameContainer" data-bind="
visible: shouldShowFreeFrameList">
116                             <table id="freeFrameTable">
117                                 <thead>
118                                     <tr>
119                                         <th>Free Frame List</th>
120                                     </tr>
121                                 </thead>
122                                 <tbody>
123                                     <!-- ko foreach: new Array(
physicalFrames()) -->
124                                     <tr>
125                                         <td data-bind="text: $index">
</td>
126                                     </tr>
127                                     <!-- /ko -->
128                                 </tbody>
129                             </table>
130                         </div>
131
132                         <!--Table representing te physical memory-->
133                         <div id="physicalMemoryContainer" data-bind="
visible: shouldShowPhysMem">
134                             <table id="physMemory" >
135                                 <thead>
136                                     <tr>

```

```

137             <th colspan="2">Physical
Memory</th>
138         </tr>
139     <tr>
140         <th>Frame Number</th>
141         <th>In Use By</th>
142     </tr>
143 </thead>
144 <tbody data-bind="foreach:
physicalMemoryObservable">
145     <tr>
146         <td data-bind="text: $index,
attr: {id: 'frameNum' + '_' + $index()}"></td>
147         <td data-bind="text: $data,
attr: {id: 'frameUse' + '_' + $index()}"></td>
148     </tr>
149 </tbody>
150 </table>
151 </div>
152 </div>
153
154 <div id="totals" data-bind="visible: showStats()"
>
155     <p>Total Page Faults: <span data-bind="text:
pageFaults"></span></p>
156 </div>
157 <div id="statsContent" data-bind="visible:
showStats()">
158     <div id="processStatsContainer" data-bind="
foreach: {data: processStatsObservable, as: 'processes'}"
>
159         <table id="processStats" >
160             <thead>
161                 <tr>
162                     <th colspan="3">Process <span
data-bind="text: ('P' + ($index()+1)), attr: {id: '
procNum' + '_' + $index()}"></span> Stats </th>
163                 </tr>
164                 <tr>
165                     <th>Total Size (Pages)</th>
166                     <th>Total Number of Memory
References</th>
167                     <th>Total Number of Page Faults</
th>
168                 </tr>

```

```
169             </thead>
170             <tbody data-bind="foreach: {data:
processes, as: 'process'}">
171                 <tr data-bind="foreach: {data:
process, as: 'stat'}">
172                     <td data-bind="text: stat['size']
"></td>
173                     <td data-bind="text: stat['
references']"></td>
174                     <td data-bind="text: stat['faults
']"></td>
175                 </tr>
176             </tbody>
177         </table>
178     </div>
179 </div>
180
181     <!--Buttons to control the simulation-->
182     <!-- ko if: errorBanner() == '' -->
183     <footer data-bind="visible: showFooter">
184         <div id="footerButtonsBox">
185             <button class="button white footerButton"
data-bind="click: function(){run(true,false,false)}">
Step Forward</button>
186             <button class="button white footerButton"
data-bind="click: function(){run(false,true,false)}">
Next Fault</button>
187             <button class="button white footerButton"
data-bind="click: function(){run(false,false,true)}">
Complete</button>
188         </div>
189     </footer>
190     <!-- /ko -->
191
192     <script src="js/vendor/jquery-1.11.0.min.js"></
script>
193     <script src="js/vendor/knockout-3.4.2.js"></
script>
194     <script src="js/vendor/ko.observableDictionary.js
"></script>
195     <script src="js/model.js"></script>
196     <script src="js/controller.js"></script>
197 </body>
198 </html>
199
```