

```
1  /**
2   * @module User/PieChart
3   * @memberof User
4   */
5
6  import { Chart as ChartJS, ArcElement, Tooltip, Legend } from 'chart.js';
7  import { Pie } from 'react-chartjs-2';
8  import { useEffect, useState } from "react";
9
10
11 /**
12  * Displays user stats, regarding their performance in quizzes.
13  * @function
14  * @return {HTML}
15  */
16 export default function PieChart(){
17
18   /**
19    * Stores how many quizzes a user has done correctly, and a function to change the
    value of "done".
20    * @constant
21    * @type {Array.<String, Function>}
22    * @property {}
23    */
24    const [done, set_done] = useState(5)
25    /**
26     * Stores how many quizzes a user has attempted, and a function to change the value
    of "attempted".
27     * @constant
28     * @type {Array.<String, Function>}
29     * @param
30     */
31    const [attempted, set_attempted] = useState(7)
32    /**
33     * Stores how many quizzes a user has remaining, and a function to change the value
    of "remaining".
34     * @constant
35     * @type {Array.<String, Function>}
36     */
37    const [remaining, set_remaining] = useState(5)
38
39    useEffect(
40      ()=>{
41        console.log(localStorage.getItem("id"))
42        fetch("http://localhost:8000/user/quiz/stats/overall",{
43          method: "POST",
44          headers: {
45            'Content-Type': 'application/json',
46          },
47          body: JSON.stringify(
48            {
49              "student": true,
50              "id": localStorage.getItem("id")
51            }
52          )
53        })
54        .then(response => response.json())
55        .then(data => {
56          const quiz_stats = data
```

```
57         set_done(quiz_stats["done"])
58         set_attempted(quiz_stats["attempted"])
59         set_remaining(quiz_stats["remaining"])
60     })
61 }, []
62 )
63
64 ChartJS.register(ArcElement, Tooltip, Legend);
65
66 /**
67  * Stores labels for the Pie chart.
68  * @constant
69  * @property {string} "Quizes done"
70  * @property {string} "Quizes attempted"
71  * @property {string} "Quizes remaining"
72  *
73  */
74 const labels = [
75     "Quizes done",
76     "Quizes attempted",
77     "Questions remaining"
78 ]
79
80 /**
81  * @constant
82  * @property {Object} labels.labels
83  * @property {Object.Array} datasets[0]
84  * @property {string} datasets[0].label
85  * @property {Object.Array} "(datasets[0].data[done] |
86 datasets[0].data[attempted] | datasets[0].data[remaining])"
87  * @property {Object.Array} "(datasets[0].backgroundColor[0] |
88 datasets[0].backgroundColor[1] | datasets[0].backgroundColor[2])"
89  * @property {Object.Array} "(datasets[0].borderColor[0] |
90 datasets[0].borderColor[1] | datasets[0].borderColor[2])"
91  * @property {integet} datasets[0].borderWidth
92  * @property {string} datasets[0].label
93  */
94 const data = {
95     labels: labels,
96     datasets: [{
97         label: '',
98         data: [done, attempted, remaining],
99         backgroundColor: [
100             '#569D1B',
101             '#CC350B',
102             '#004586',
103         ],
104         borderColor: [
105             '#569D1B',
106             '#CC350B',
107             '#FFD320',
108         ],
109         borderWidth: 1
110     }]
111 };
112
113 /**
114  * @constant
115  * @property {Object} plugins
116  * @property {Object} legend
```

```
114     * @property {string} plugins.legend.position
115     * @property {string} plugins.legend.align
116     * @property {Object} plugins.legend.labels
117     * @property {Object} plugins.legend.labels.font
118     * @property {String} plugins.legend.labels.font.size
119     */
120     const options = {
121       plugins: {
122         legend: {
123           position: "right",
124           align: "middle",
125           labels: {
126             font: {
127               size: "20"
128             }
129           }
130         }
131       }
132     }
133   }
134
135   return(
136     <Pie className="pie-chart" data={data} options={options} height="50"
width="50" />
137   )
138 }
```