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1  /*-----
2  :*              CV SOFTWARE STUDIO
3  :*
4  :*              FECHA DE INICIO AGO-DIC/2021
5  :*
6  :*              Clase que genera las graficas
7  :*
8  :* Archivo      : graficas.js
9  :* Autor        : Equipo de desarrollo Cv Studio
10 :* Fecha        : 15/Octubre/2021
11 :* Compilador   :
12 :* Descripcion  : Diferentes graficas
13 :* Ultima modif : 14/11/2021
14 :* Fecha      Modificacion      Motivo
15 :*=====
16 :*
17 :*-----
18 */
19 //-----
20 -//
21 //
22 //-----
23 -//
24 import {getFirestore, collection, getDocs, query, onSnapshot}
25 from "https://www.gstatic.com/firebasejs/9.3.0/firebase-firestore.js";
26 import {firebaseApp} from "./credenciales.js"
27 import {auth} from "./auth.js";
28 import {onAuthStateChanged}
29 from "https://www.gstatic.com/firebasejs/9.3.0/firebase-auth.js";
30 //-----//
31 // DOM
32 //-----//
33 const db = getFirestore(firebaseApp);
34 var ctx3 = document.getElementById("grafic3").getContext("2d");
35 var ctx4 = document.getElementById("pieChart").getContext("2d");
36 var gradosDonus = document.getElementById("grados-Donus");
37 var pulsosLinea = document.getElementById("pulos-line");
38 //-----
39 -//
40 //-----
41 -//
42 var tem1, tem2, tem3;
43 var pulso1, pulso2, pulso3;
44 const fecha = new Date();
45
46 var hoy = fecha.getDate() + "/" + fecha.getMonth() + "/" +
47           fecha.getFullYear() + " " + fecha.toLocaleTimeString();
48 //-----
49 -//
50 //-----
51 -//
52 onAuthStateChanged(auth, (user) =>{
53     obtBPM();
54     obtTemp();
55 });
56 //-----
57 -//
58 // Configuraciones de Grafica linea

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52 //-----
53 -//
54 function obtBPM(){
55     var index2;
56     const q2 = query(collection(db, "BPM"));
57     const unsubscribe2 = onSnapshot(q2, (querySnapshot) => {
58         const cities = [];
59         querySnapshot.forEach((doc) => {
60             cities.push(doc.data());
61         });
62         //6 a 12 mañana, de 12 a 19 tarde, 19 a 24 noche
63         for (let i = 0; i < cities.length; i++) {
64             if(hoy <= cities[i].ult_fech_Tmp){
65                 hoy = cities[i].ult_fech_Tmp;
66                 for (let j = 0; j < cities.length; j++) {
67                     if(hoy >= cities[j].ult_fech_Tmp){
68                         hoy = cities[j].ult_fech_Tmp;
69                         index2 = j;
70                     }
71                 }
72             }else{
73                 console.log("enl0");
74             }
75         }
76         var tiempo = cities[index2].ult_fech_Tmp;
77         var temaux = tiempo.substr(11,12).substr(0,2);
78         //console.log(tiempo);
79         if(temaux >= 19 && temaux < 24){
80             //console.log("Noche " +cities[index2].ult_fech_Tmp);
81             pulso3 = cities[index2].bpm;
82             pulsosLinea.innerHTML = `
83             <p class="text-xl-start text-center fw-normal">${cities[index2].bpm} pulsos
84             por minuto</p>`;
85         }
86         cities.splice(index2,1);
87
88         for (let i = 0; i < cities.length; i++) {
89             if(hoy >= cities[i].ult_fech_Tmp){
90                 hoy = cities[i].ult_fech_Tmp;
91                 for (let j = 0; j < cities.length; j++) {
92                     if(hoy <= cities[j].ult_fech_Tmp){
93                         hoy = cities[j].ult_fech_Tmp;
94                         index2 = j;
95                     }
96                 }
97             }else{
98                 console.log("enl1");
99             }
100         }
101         var tiempo = cities[index2].ult_fech_Tmp;
102         var temaux = tiempo.substr(11,12).substr(0,2);
103         //console.log(tiempo);
104         if(temaux >= 12 && temaux <= 19){
105             //console.log("Tarde " +cities[index2].ult_fech_Tmp);
106             pulso2 = cities[index2].bpm;
107             pulsosLinea.innerHTML = `
108             <p class="text-xl-start text-center fw-normal">${cities[index2].bpm}
109             pulsos por minuto</p>`;
110         }
111     }

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109
110
111     cities.splice(index2,1);
112     for (let i = 0; i < cities.length; i++) {
113         if(hoy >= cities[i].ult_fech_Tmp){
114             hoy = cities[i].ult_fech_Tmp;
115             for (let j = 0; j < cities.length; j++) {
116                 if(hoy <= cities[j].ult_fech_Tmp){
117                     hoy = cities[j].ult_fech_Tmp;
118                     index2 = j;
119                 }
120             }
121         }else{
122             console.log("en12");
123         }
124     }
125
126     var tiempo = cities[index2].ult_fech_Tmp;
127     var temaux = tiempo.substr(11,12).substr(0,2);
128     //console.log(tiempo);
129     if(temaux >= 6 && temaux <= 12){
130         //console.log("Mañana " +cities[index2].ult_fech_Tmp);
131         pulso1 = cities[index2].bpm;
132         pulsosLinea.innerHTML = `
133         <p class="text-xl-start text-center fw-normal">${cities[index2].bpm}
pulsos por minuto</p>`;
134     }
135     graficaLinea();
136 });
137
138 }
139
140 function graficaLinea(){
141     var myChart = new Chart(ctxx3, {
142         type: 'line',
143         options: {
144             scales: {
145                 xAxes: [{
146                     display: true,
147                     gridLines: {
148                         display: false
149                     }
150                 }],
151                 yAxes: [{
152                     ticks: {
153                         max: 40,
154                         min: 0,
155                         stepSize: 0.5
156                     },
157                     display: false,
158                     gridLines: {
159                         display: false
160                     }
161                 }],
162             },
163             legend: {
164                 display: false
165             }
166         },
167         data: {
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168     labels: ["Mañana", "Tarde", "Noche"],
169     datasets: [
170         {
171             label: "Pulsos",
172             fill: true,
173             lineTension: 0,
174             backgroundColor: "transparent",
175             borderColor: '#6ccef0',
176             pointBorderColor: '#59c2e6',
177             pointHoverBackgroundColor: '#59c2e6',
178             borderCapStyle: 'butt',
179             borderDash: [],
180             borderDashOffset: 0.0,
181             borderJoinStyle: 'miter',
182             borderWidth: 3,
183             pointBackgroundColor: "#59c2e6",
184             pointBorderWidth: 0,
185             pointHoverRadius: 4,
186             pointHoverBorderColor: "#fff",
187             pointHoverBorderWidth: 0,
188             pointRadius: 4,
189             pointHitRadius: 0,
190             data: [pulso1, pulso2, pulso3],
191             spanGaps: false
192         }
193     ]
194 }
195 });
196 }
197
198 //-----
199 // Configuraciones de Grafica de Donas
200 //-----
201
202 function obtTemp(){
203     var index;
204     const q = query(collection(db, "temperatura"));
205     const unsubscribe = onSnapshot(q, (querySnapshot) => {
206         const cities = [];
207         querySnapshot.forEach((doc) => {
208             cities.push(doc.data());
209         });
210         for (let i = 0; i < cities.length; i++) {
211             if(hoy <= cities[i].ult_fech_Tmp){
212                 hoy = cities[i].ult_fech_Tmp;
213                 for (let j = 0; j < cities.length; j++) {
214                     if(hoy >= cities[j].ult_fech_Tmp){
215                         hoy = cities[j].ult_fech_Tmp;
216                         index = j;
217                     }
218                 }
219             }else{
220                 //console.log("enl");
221             }
222         }
223
224         if(cities[index].temperatura < 37.5){
225             tem1 = cities[index].temperatura;
226             tem2 = 0;

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226         tem3 = 0;
227         //console.log("> 37.5");
228     }else if(cities[index].temperatura < 40.0){
229         tem2 = cities[index].temperatura;
230         tem1 = 0;
231         tem3 = 0;
232         //Enviar mensaje de texto de albertencia
233         //createSMS();
234         //console.log("> 41");
235     }else if (cities[index].temperatura > 40.0){
236         tem3 = cities[index].temperatura;
237         tem1 = 0;
238         tem2 = 0;
239         //Enviar mensaje de texto de urgencia
240         //console.log(">");
241     }
242     gradosDonus.innerHTML = `
243     <strong class="d-block lh-1 text-lg">${cities[index].temperatura}</strong>`;
244     grficaDoughut();
245     });
246 }
247
248 function grficaDoughut(){
249     var myChart = new Chart(ctxx4, {
250         type: 'doughnut',
251         options: {
252             cutoutPercentage: 80,
253             legend: {
254                 display: false
255             }
256         },
257         data: {
258             labels: [
259                 "Normal",
260                 "Fiebre",
261                 "Fiebre Alta"
262             ],
263             datasets: [
264                 {
265                     data: [tem1, tem2, tem3],
266                     borderWidth: [0, 0, 0],
267                     backgroundColor: [
268                         "#28B463",
269                         "#D68910",
270                         "#CB4335"
271                     ],
272                     hoverBackgroundColor: [
273                         "#28B463",
274                         "#D68910",
275                         "#CB4335"
276                     ]
277                 }
278             ]
279         });
280 }
281
282 //-----
283 -//
284 //-----
285 -//

```

284
285
286