```
1 <script setup>
   import { ref, computed, watch, onMounted, onUnmounted } from 'vue';
   import { useMapRouting } from '../composables/useMapRouting';
    const props = defineProps({
     wavpoints: {
 6
       type: Array,
       default: () => []
 8
 9
     },
     locations: {
10
11
      type: Array,
12
       default: () => []
13
     },
14
     currentFloor: {
15
     type: String,
16
      required: true
17
     },
18
     userPosition: {
19
      type: Object,
       default: null
20
21
     },
22
     selectedLocation: {
23
      type: Object,
24
       default: null
25
     },
26
     mapScale: {
27
      type: Number,
       default: 1
28
29
     },
30
     loading: {
31
      type: Boolean,
32
       default: false
33
34
   });
35
36 const emit = defineEmits([
```

```
37
      'map-click',
38
      'marker-click',
39
      'marker-mouseenter',
      'marker-mouseleave',
40
41
      'update:mapDimensions'
42
   ]);
43
   const mapRef = ref(null);
44
   const mapImageRef = ref(null);
45
   const mapDimensions = ref({ width: 0, height: 0 });
47
   // Filtra locais do andar atual
   const currentFloorLocations = computed(() => {
50
      return props.locations.filter(loc => loc.andar === props.currentFloor);
   });
51
52
   // Configuração do sistema de rotas
    const waypointsRef = ref(props.waypoints); // Ref para os waypoints
55
   const { routeSegments, debugWaypoints } = useMapRouting(
56
      ref(props.userPosition),
57
     ref(props.selectedLocation),
58
     ref(props.currentFloor),
59
     ref(props.mapScale),
60
     mapDimensions,
61
     waypointsRef
62 );
63
   // Atualiza os waypoints quando mudam
   watch(() => props.waypoints, (newWaypoints) => {
     waypointsRef.value = newWaypoints;
66
   }, { deep: true });
67
68
69 // Estilo do mapa
   const mapStyle = computed(() => ({
     transform: `scale(${props.mapScale})`
71
72
   }));
73
```

```
74 // Handlers de eventos
    const handleMapClick = (event) => {
      if (!mapRef.value) return;
 76
 77
 78
       const rect = mapRef.value.getBoundingClientRect();
 79
      const x = ((event.clientX - rect.left) / rect.width) * 100;
 80
       const y = ((event.clientY - rect.top) / rect.height) * 100;
 81
 82
      emit('map-click', { x, y });
 83
    };
 84
    const handleLocationClick = (location) => {
 86
      emit('marker-click', location);
 87
    };
 88
    const handleLocationHover = (location) => {
      emit('marker-mouseenter', location);
 90
 91
    };
 92
    const handleLocationLeave = () => {
      emit('marker-mouseleave');
 94
 95
    };
 96
    // Atualização das dimensões do mapa
    const updateMapDimensions = () => {
 99
      if (!mapRef.value) return;
100
       const rect = mapRef.value.getBoundingClientRect();
101
      mapDimensions.value = {
102
        width: rect.width,
103
        height: rect.height
104
105
      emit('update:mapDimensions', mapDimensions.value);
106
107
    };
108
109
    // Lifecycle hooks
110 onMounted(() => {
```

```
111
       updateMapDimensions();
112
       window.addEventListener('resize', updateMapDimensions);
113
114
      // Configurar ResizeObserver para mapImageRef se necessário
115
      if (mapImageRef.value) {
        const resizeObserver = new ResizeObserver(() => {
116
117
          updateMapDimensions();
118
        });
        resizeObserver.observe(mapImageRef.value);
119
120
      }
121
    });
122
    onUnmounted(() => {
123
124
      window.removeEventListener('resize', updateMapDimensions);
125
      // Limpar ResizeObserver se foi configurado
126
127
      if (mapImageRef.value && resizeObserver) {
128
         resizeObserver.disconnect();
129
      }
130
    });
    </script>
131
132
133
    <template>
134
      <div
135
         ref="mapRef"
136
        class="map-container"
137
        @click="handleMapClick"
138
139
         <imq
140
           ref="mapImageRef"
          src="../assets/campusRussas.jpg"
141
142
          alt="Mapa do Campus UFC Russas"
143
          class="map-image"
144
           :style="mapStyle"
145
         />
146
147
         <!-- Marcadores de locais -->
```

```
148
         <div
149
           v-for="location in currentFloorLocations"
           :key="location.id"
150
           class="location-marker"
151
           :class="{ 'selected': location === props.selectedLocation }"
152
153
           :style="{
            left: `${location.x}%`,
154
155
            top: `${location.y}%`
          }"
156
          @click.stop="handleLocationClick(location)"
157
          @mouseenter="handleLocationHover(location)"
158
          @mouseleave="handleLocationLeave"
159
160
           <span class="marker-label">{{ location.nome }}</span>
161
162
         </div>
163
         <!-- Waypoints de debug (se necessário) -->
164
165
         <div
166
          v-for="waypoint in debugWaypoints"
167
           :key="waypoint.id"
168
           class="waypoint-marker"
           :style="{
169
            left: `${waypoint.x}%`,
170
171
            top: `${waypoint.y}%`
172
          }"
173
         />
174
175
         <!-- Segmentos da rota -->
176
         <div
177
          v-for="(segment, index) in routeSegments"
178
           :key="index"
179
           class="route-segment"
180
           :style="{
181
            left: `${segment.x}%`,
182
            top: `${segment.y}%`,
            width: `${segment.length}%`,
183
184
             transform: `rotate(${segment.angle}deg)`
```

```
}"
185
186
         />
187
         <!-- Marcador de posição do usuário -->
188
189
         <div
190
          v-if="userPosition"
           class="user-marker"
191
192
           :style="{
193
            left: `${userPosition.x}%`,
194
             top: `${userPosition.y}%`
           }"
195
196
         />
197
198
         <!-- Indicador de carregamento -->
199
         <div v-if="loading" class="loading-overlay">
           <div class="loading-spinner"></div>
200
        </div>
201
202
       </div>
203
    </template>
204
205
     <style scoped>
     .map-container {
206
207
      position: relative;
208
      width: 100%;
209
      height: 100%;
210
      overflow: hidden;
211 }
212
213
     .map-image {
214
      width: 100%;
215
      height: 100%;
216
      object-fit: contain;
217
      transform-origin: center center;
218 }
219
220
     .location-marker {
221
       position: absolute;
```

```
222
      width: 20px;
223
      height: 20px;
224
      background-color: #2196F3;
225
      border-radius: 50%;
226
      transform: translate(-50%, -50%);
227
      cursor: pointer;
228
      z-index: 2;
229 }
230
231
     .location-marker.selected {
232
      background-color: #4CAF50;
233
      box-shadow: 0 0 0 4px rgba(76, 175, 80, 0.3);
234 }
235
236
     .marker-label {
237
      position: absolute;
238
      bottom: 100%;
239
      left: 50%;
      transform: translateX(-50%);
240
241
      white-space: nowrap;
      background-color: rgba(0, 0, 0, 0.7);
242
      color: white;
243
244
      padding: 2px 6px;
245
      border-radius: 4px;
246
      font-size: 12px;
247
248
249
     .waypoint-marker {
      position: absolute;
250
251
      width: 8px;
252
      height: 8px;
253
      background-color: rgba(255, 0, 0, 0.5);
254
      border-radius: 50%;
255
      transform: translate(-50%, -50%);
256
      z-index: 1;
257 }
258
```

```
.route-segment {
259
260
      position: absolute;
261
      height: 4px;
      background-color: #4CAF50;
262
263
      transform-origin: left center;
264
      z-index: 1;
265 }
266
267
     .user-marker {
268
      position: absolute;
269
      width: 16px;
      height: 16px;
270
      background-color: #FF5722;
271
272
      border-radius: 50%;
273
      border: 2px solid white;
274
      transform: translate(-50%, -50%);
275
      z-index: 3;
276
      box-shadow: 0 0 4px rgba(0, 0, 0, 0.3);
277 }
278
279
     .loading-overlay {
      position: absolute;
280
281
      top: 0;
282
      left: 0;
283
      right: 0;
284
      bottom: 0;
      background-color: rgba(255, 255, 255, 0.7);
285
      display: flex;
286
287
      justify-content: center;
      align-items: center;
288
      z-index: 4;
289
290 }
291
292
     .loading-spinner {
293
      width: 40px;
294
      height: 40px;
295
      border: 4px solid #f3f3f3;
```

```
border-top: 4px solid #3498db;
border-radius: 50%;

animation: spin 1s linear infinite;

animation: spin 1s linear in
```