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1  #include "pch.h"
2  #include "Bomb.h"
3  #include <iostream>
4  using namespace std;
5
6  int bomb_x, bomb_y;
7  int score = 0;
8  int activeenemies = 4;
9  bool playerhit = false;
10
11 int** enemyHitArray = new int*[4];
12
13
14 Bomb::Bomb()
15 {
16     for (int row = 0; row < 4; row++)
17     {
18         enemyHitArray[row] = new int[2];
19     }
20 }
21
22 void setBomb_Coord(int x, int y) {
23     bomb_x = x;
24     bomb_y = y;
25 }
26
27
28 int** Bomb::dropBomb(int** g, int x, int y) {
29     setBomb_Coord(x, y);
30     g[bomb_x][bomb_y] = 6;
31     return g;
32 }
33
34 void enemyHit(int x, int y, int row) {
35     enemyHitArray[row][0] = x;
36     enemyHitArray[row][1] = y;
37 }
38
39 int** Bomb::explode(int** g) {
40     int a = 0;
41     if (g[bomb_x][bomb_y] == 6)
42     {
43         playerhit = true;
44     }
45
46     g[bomb_x][bomb_y] = 5;
47
48     //explosion up
49     for (int j = 1; j < 4; j++)
50     {
51         if (g[bomb_x - j][bomb_y] == 0) {
52             g[bomb_x - j][bomb_y] = 5;
53         }
```

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54
55     if (g[bomb_x - j][bomb_y] == 2) {
56         enemyHit(bomb_x - j, bomb_y, a);
57         a++;
58         score++;
59         g[bomb_x - j][bomb_y] = 5;
60     }
61
62     if (g[bomb_x - j][bomb_y] == 1)
63     {
64         playerhit = true;
65         g[bomb_x - j][bomb_y] = 5;
66     }
67
68     if(g[bomb_x - j][bomb_y] == 3){
69         j = 4;
70     }
71 }
72
73 //explosion right
74 for (int j = 1; j < 4; j++)
75 {
76     if (g[bomb_x][bomb_y + j] == 0) {
77         g[bomb_x][bomb_y + j] = 5;
78     }
79
80     if (g[bomb_x][bomb_y + j] == 2) {
81         enemyHit(bomb_x, bomb_y + j, a);
82         a++;
83         score++;
84         g[bomb_x][bomb_y + j] = 5;
85     }
86
87     if (g[bomb_x][bomb_y + j] == 1)
88     {
89         playerhit = true;
90         g[bomb_x][bomb_y + j] = 5;
91     }
92
93     if (g[bomb_x][bomb_y + j] == 3)
94     {
95         j = 4;
96     }
97 }
98
99 //explosion down
100 for (int j = 1; j < 4; j++)
101 {
102     if (g[bomb_x + j][bomb_y] == 0) {
103         g[bomb_x + j][bomb_y] = 5;
104     }
105
106     if (g[bomb_x + j][bomb_y] == 2) {
```

```
107         enemyHit(bomb_x + j, bomb_y, a);
108         a++;
109         score++;
110         g[bomb_x + j][bomb_y] = 5;
111     }
112
113     if (g[bomb_x + j][bomb_y] == 1)
114     {
115         playerhit = true;
116         g[bomb_x + j][bomb_y] = 5;
117     }
118
119     if(g[bomb_x + j][bomb_y] == 3) {
120         j = 4;
121     }
122 }
123
124 //explosion left
125 for (int j = 1; j < 4; j++)
126 {
127     if (g[bomb_x][bomb_y - j] == 0) {
128         g[bomb_x][bomb_y - j] = 5;
129     }
130
131     if (g[bomb_x][bomb_y - j] == 2) {
132         enemyHit(bomb_x, bomb_y - j, a);
133         a++;
134         score++;
135         g[bomb_x][bomb_y - j] = 5;
136     }
137
138     if (g[bomb_x][bomb_y - j] == 1)
139     {
140         playerhit = true;
141         g[bomb_x][bomb_y - j] = 5;
142     }
143
144     if(g[bomb_x][bomb_y - j] == 3) {
145         j = 4;
146     }
147 }
148
149 //explosion up-right
150 for (int j = 1; j < 4; j++)
151 {
152     if (g[bomb_x - j][bomb_y + j] == 0) {
153         g[bomb_x - j][bomb_y + j] = 5;
154     }
155
156     if (g[bomb_x - j][bomb_y + j] == 2) {
157         cout << "Enemy Hit!" << endl;
158         enemyHit(bomb_x - j, bomb_y + j, a);
159         a++;
```

```
160         score++;
161         g[bomb_x - j][bomb_y + j] = 5;
162     }
163
164     if (g[bomb_x - j][bomb_y + j] == 1)
165     {
166         playerhit = true;
167         g[bomb_x - j][bomb_y + j] = 5;
168     }
169
170     if(g[bomb_x - j][bomb_y + j] == 3){
171         j = 4;
172     }
173 }
174
175 //explosion down-right
176 for (int j = 1; j < 4; j++)
177 {
178     if (g[bomb_x + j][bomb_y + j] == 0) {
179         g[bomb_x + j][bomb_y + j] = 5;
180     }
181
182     if (g[bomb_x + j][bomb_y + j] == 2) {
183         enemyHit(bomb_x + j, bomb_y + j, a);
184         a++;
185         score++;
186         g[bomb_x + j][bomb_y + j] = 5;
187     }
188
189     if (g[bomb_x + j][bomb_y + j] == 1)
190     {
191         playerhit = true;
192         g[bomb_x + j][bomb_y + j] = 5;
193     }
194
195     if(g[bomb_x + j][bomb_y + j] == 3) {
196         j = 4;
197     }
198 }
199
200 //explosion down-left
201 for (int j = 1; j < 4; j++)
202 {
203     if (g[bomb_x + j][bomb_y - j] == 0) {
204         g[bomb_x + j][bomb_y - j] = 5;
205     }
206
207     if (g[bomb_x + j][bomb_y - j] == 2) {
208         enemyHit(bomb_x + j, bomb_y - j, a);
209         a++;
210         score++;
211         g[bomb_x + j][bomb_y - j] = 5;
212     }
213 }
```

```
213
214     if (g[bomb_x + j][bomb_y - j] == 1)
215     {
216         playerhit = true;
217         g[bomb_x + j][bomb_y - j] = 5;
218     }
219
220     if(g[bomb_x + j][bomb_y - j] == 3){
221         j = 4;
222     }
223 }
224
225 //explosion up-left
226 for (int j = 1; j < 4; j++)
227 {
228     if (g[bomb_x - j][bomb_y - j] == 0) {
229         g[bomb_x - j][bomb_y - j] = 5;
230     }
231
232     if (g[bomb_x - j][bomb_y - j] == 2) {
233         enemyHit(bomb_x - j, bomb_y - j, a);
234         a++;
235         score++;
236         g[bomb_x - j][bomb_y - j] = 5;
237     }
238
239     if (g[bomb_x - j][bomb_y - j] == 1)
240     {
241         playerhit = true;
242         g[bomb_x - j][bomb_y - j] = 5;
243     }
244
245     if(g[bomb_x - j][bomb_y - j] == 3){
246         j = 4;
247     }
248 }
249
250 return g;
251 }
252
253 void Bomb::setHitPlayer(bool x) {
254     playerhit = x;
255 }
256
257 bool Bomb::getHitPlayer() {
258     return playerhit;
259 }
260
261 bool Bomb::checkHit(int x, int y) {
262     for (int i = 0; i < 4; i++)
263     {
264         if (enemyHitArray[i][0] == x and enemyHitArray[i][1] == y)
265         {
```

```
266         activeenemies--;
267         return true;
268     }
269 }
270 return false;
271 }
272
273 void Bomb::resetHitArray() {
274     for (int i = 0; i < 4; i++)
275     {
276         enemyHitArray[i][0] = NULL;
277         enemyHitArray[i][1] = NULL;
278     }
279 }
280
281 int Bomb::getScore() {
282     return score;
283 }
284
285 void Bomb::setScore(int x) {
286     score = x;
287 }
288
289 int Bomb::getActiveEnemies() {
290     return activeenemies;
291 }
292
293 void Bomb::setActiveEnemies(int count) {
294     activeenemies = count;
295 }
296
297 Bomb::~Bomb()
298 {
299 }
300
```