



BUBBLE SHOOTER

(CONSOLE GAME)

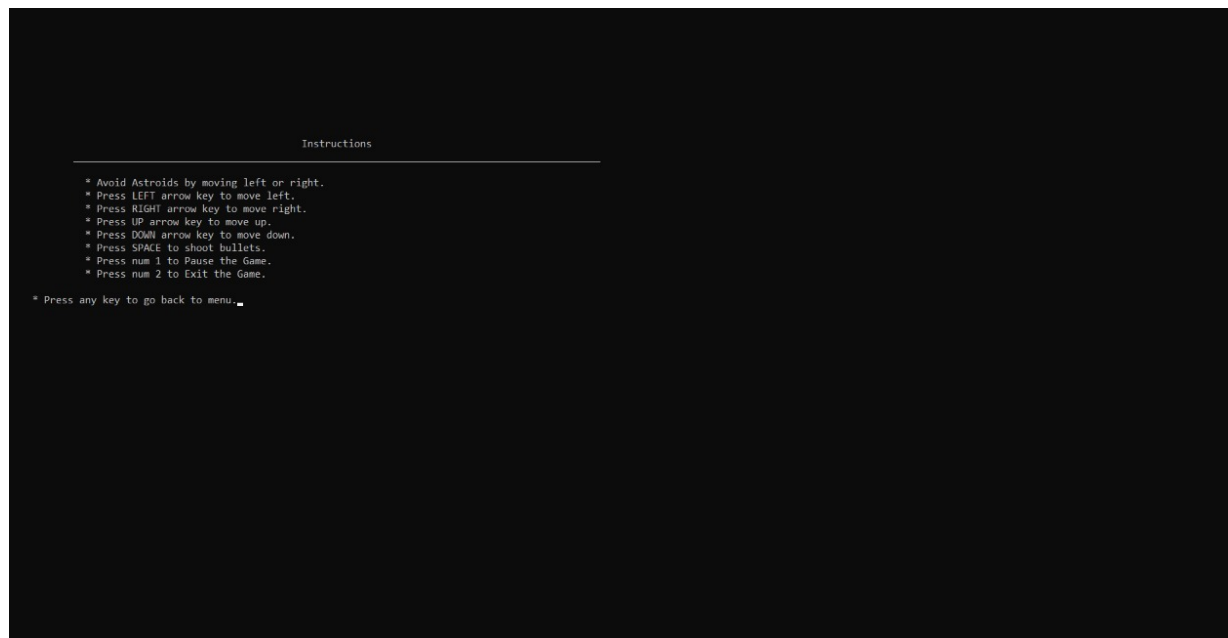
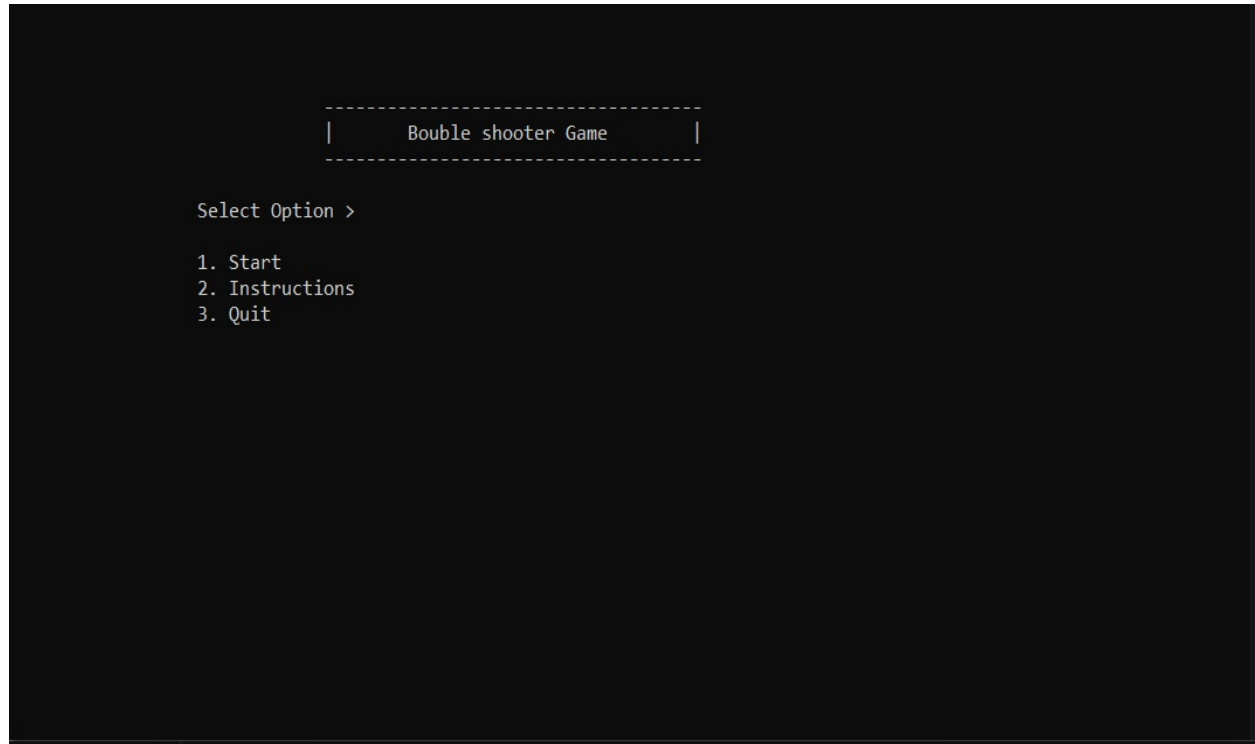
C++ PROGRAM

Team CodE4

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- 2.Instruction on how to play Bubble Shooter**
- 3.Problems had with the report/ challenges**
- 4.What we have done different**
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1. Basic Documentation

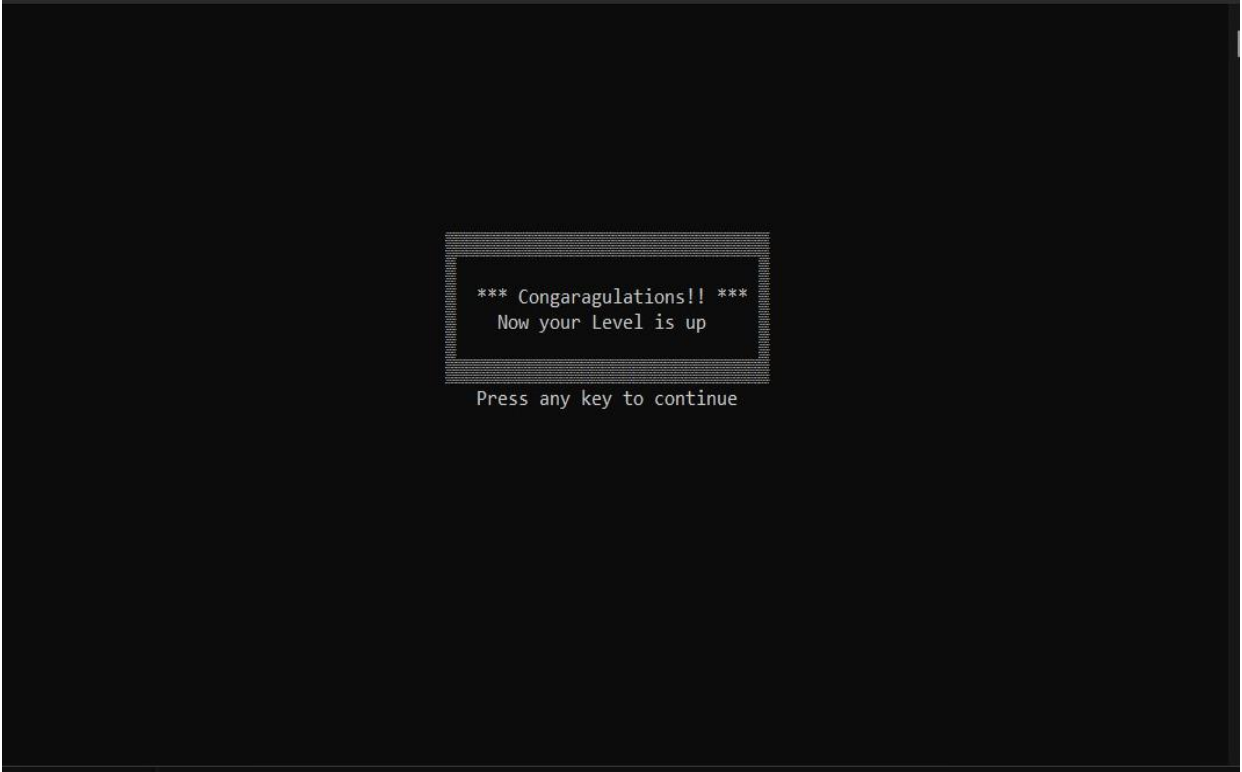








Get ready..after 3 secs game will start.



*** Congaragulations!! ***
Now your Level is up

Press any key to continue

2. Instruction on how to play Bubble Shooter

This is a single player game which has 2 levels. Bubbles keep falling randomly, and you need to shoot the bubbles to score. For each bubble attack, you get 10 marks. After you score 100 marks, the 1st level is completed. Then you can move to level 2 as your preference. In the 2nd level, there is no time limit, so you can score marks until you lose all your lives. At the beginning of level 1, you are given 3 lives (represented as hearts ♥) and in level 2, 4 lives. For each life, you get 5 energy levels. When bubbles fall on to the shooter, you lose energy levels one by one. When all three lives are over, you lose the game.

In the first interface of the game, the player will be guided to press 1 to start the game, 2 to get instructions, and 3 to quit.

Instructions to play game -

Avoid Asteroids by moving left or right.

Press LEFT arrow key to move left.

Press RIGHT arrow key to move right

Press UP arrow key to move up.

Press DOWN arrow key to move down.

Press SPACE to shoot bullets.

Press num 1 to Pause the Game.

Press num 2 to Exit the Game.

3.Problems had with the report/ challenges

We had to face a lot of problems and challenges while building the code for the game.

One of them was that it was difficult to find the required inbuilt function. Another problem we faced was that we could not print some of the emojis and symbols we wanted using the functions of the c++ language, so we used the printf function of the c language for that. And this work was done online. So, there were some difficulties to work together as a team and it took a long time.

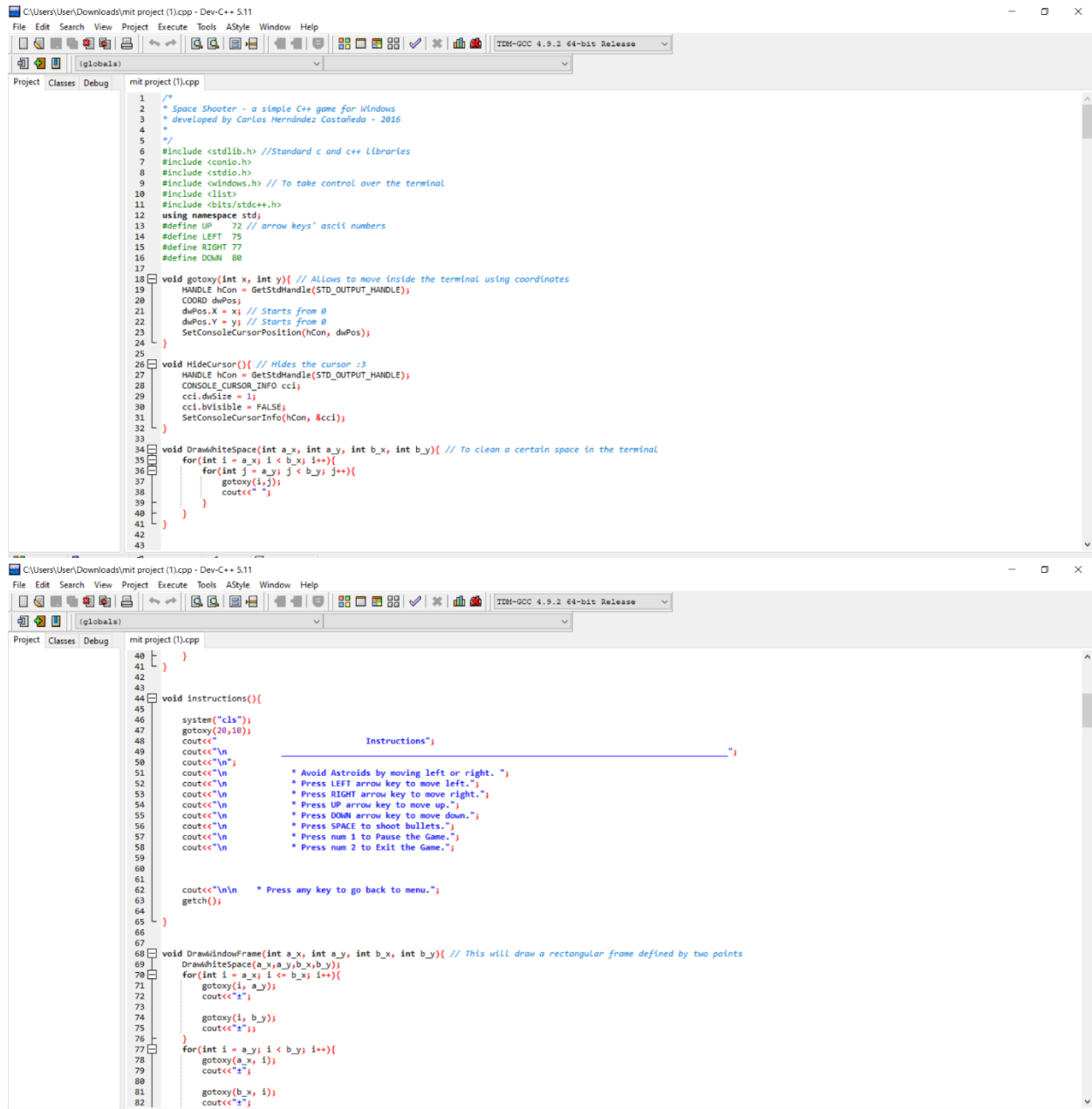
4.What we have done different

- We can add graphic effects.
- Add sound effects to the game.

Those things increase the attractiveness of the game

- We can add more levels and make the game more fun by giving things like gifts (or rewards) at those levels.

5. Code



The image displays two screenshots of a C++ code editor, likely Visual Studio Code, showing the source code for a game titled "Space Shooter". The code is written in C++ and is organized into several functions.

The first screenshot shows the initial part of the code, including the main function and the initialization of the game environment. It includes comments and preprocessor directives for standard C++ libraries and Windows-specific headers. The code defines constants for window size and key codes, and initializes the console window and cursor.

```
1  /*
2  * Space Shooter - a simple C++ game for Windows
3  * developed by Carlos Hernández Castañeda - 2016
4  */
5
6  #include <stdlib.h> //Standard c and c++ libraries
7  #include <conio.h>
8  #include <stdio.h>
9  #include <windows.h> // To take control over the terminal
10 #include <iostream>
11 #include <bits/stdc++.h>
12 using namespace std;
13 #define UP 72 // arrow keys' ascii numbers
14 #define LEFT 75
15 #define RIGHT 77
16 #define DOWN 80
17
18 void gotoxy(int x, int y) { // Allows to move inside the terminal using coordinates
19     HANDLE hCon = GetStdHandle(STD_OUTPUT_HANDLE);
20     COORD dwPos;
21     dwPos.X = x; // Starts from 0
22     dwPos.Y = y; // Starts from 0
23     SetConsoleCursorPosition(hCon, dwPos);
24 }
25
26 void HideCursor() { // Hides the cursor :3
27     HANDLE hCon = GetStdHandle(STD_OUTPUT_HANDLE);
28     CONSOLE_CURSOR_INFO cci;
29     cci.dwSize = 1;
30     cci.bVisible = FALSE;
31     SetConsoleCursorInfo(hCon, &cci);
32 }
33
34 void DrawWhiteSpace(int a_x, int a_y, int b_x, int b_y) { // To clean a certain space in the terminal
35     for(int i = a_x; i < b_x; i++){
36         for(int j = a_y; j < b_y; j++){
37             gotoxy(i,j);
38             cout<<" ";
39         }
40     }
41 }
42
43
```

The second screenshot shows the continuation of the code, including the instructions function and the DrawWindowFrame function. The instructions function displays a list of controls for the game, and the DrawWindowFrame function draws a rectangular frame defined by two points.

```
40 }
41 }
42
43 void instructions(){
44     system("cls");
45     gotoxy(20,10);
46     cout<<"
47     cout<<"
48     cout<<"
49     cout<<"
50     cout<<"
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66     cout<<"
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68 void DrawWindowFrame(int a_x, int a_y, int b_x, int b_y) { // This will draw a rectangular frame defined by two points
69     DrawWhiteSpace(a_x,a_y,b_x,b_y);
70     for(int i = a_x; i <= b_x; i++){
71         gotoxy(i, a_y);
72         cout<<"a";
73     }
74     gotoxy(a_x, b_y);
75     cout<<"a";
76 }
77 for(int i = a_y; i <= b_y; i++){
78     gotoxy(a_x, i);
79     cout<<"a";
80 }
81 gotoxy(b_x, i);
82 cout<<"a";
83 }
84 }
85 }
86 }
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89 }
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91 }
92 }
93 }
94 }
95 }
96 }
97 }
98 }
99 }
100 }
```

```
C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
mit project (1).cpp
79 cout<<"a";
80
81 gotoxy(b_x, 1);
82 cout<<"a";
83 }
84
85 void DrawGameLimits(){ // Draws the game Limits, and information that doesn't have to be printed repeatedly.
86 DrawWindowFrame(0,1,70,23); // The default size of the windows terminal is 25 rows x 80 columns
87 gotoxy( 3,1); cout << "HP:";
88 gotoxy(16,1); cout << "ENERGY:";
89 gotoxy(50,1); cout << "SCORE:";
90 gotoxy(82,15); cout<< "Controls ";
91 gotoxy(82,16); cout<< "-----";
92 gotoxy(82,18); cout<<" 1) Press 1 to pause ";
93 gotoxy(82,19); cout<<" 2) Press 2 to exit ";
94 }
95
96 void WelcomeMessage(){ // The main title, I tried to center it as best as I could
97 int x = 13;
98 int y = 6;
99 gotoxy(x, y ); cout <<
100 gotoxy(x, y+1); cout <<
101 gotoxy(x, y+2); cout <<
102 gotoxy(x, y+3); cout <<
103 gotoxy(x, y+4); cout <<
104
105 gotoxy(x, y+6); cout <<
106 gotoxy(x, y+7); cout <<
107 }
108 void GameOverDefeatMessage(){ // when you Lose the game you see this in screen
109 int a_x = 45;
110 int a_y = 9;
111 int b_x = a_x + 30;
112 int b_y = a_y + 5;
113 DrawWindowFrame(a_x,a_y,b_x,b_y);
114 gotoxy(a_x+1,a_y+2); cout << " YOU LOSE !!!";
115 }
116 void GameOverVictoryMessage(){ // when you win the game you see this in screen
117 int a_x = 45;
118 int a_y = 9;
119 int b_x = a_x + 30;
120 int b_y = a_y + 5;
121 DrawWindowFrame(a_x,a_y,b_x,b_y);
122
123
124 int a_y = 9;
125 int b_x = a_x + 30;
126 int b_y = a_y + 5;
127 DrawWindowFrame(a_x,a_y,b_x,b_y);
128 gotoxy(a_x+1,a_y+2); cout << " YOU WIN.";
129 }
130 void LevelUpMessage(){ // when you win the game you see this in screen
131 int a_x = 45; //30
132 int a_y = 9; //11
133 int b_x = a_x + 30; //23
134 int b_y = a_y + 5; //4
135 DrawWindowFrame(a_x,a_y,b_x,b_y);
136 gotoxy(a_x+1,a_y+2); cout << " *** Congaragulations!! *** ";
137 gotoxy(a_x+1,a_y+3); cout << " Now your Level is up";
138 gotoxy(a_x+1,a_y+4);cout<<"\n\n
139 }
140 void SpecialMessage(){ // A special message for your special needs
141 DrawWhiteSpace(1,1,80,24);
142 gotoxy(30,11);cout<< "
143 gotoxy(30,12);cout<< "
144 gotoxy(30,13);cout<< "
145 gotoxy(30,14);cout<< "
146 //gotoxy(30,11); printf("Thanks for playing!! ");
147 }
148 void GameClosedMessage(){
149 int a_x = 45;
150 int a_y = 9;
151 int b_x = a_x + 30;
152 int b_y = a_y + 5;
153 DrawWindowFrame(a_x,a_y,b_x,b_y);
154 gotoxy(a_x+1,a_y+2); cout<<" Game closed!! ";
155 Sleep(5000);
156 SpecialMessage();
157 }
158
159 class SpaceShip{
160 private:
161 int x; // x coordinate
162 int y; // y coordinate
163 int hp; // heart points
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```
C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
mit project (1).cpp
154
155
156 class Spaceship{
157     private:
158         int x; // x coordinate
159         int y; // y coordinate
160         int hp; // heart points
161         int energy; // energy points
162         bool isDead; // is the ship dead?
163     public:
164         int X(){
165             return x;
166         }
167         int Y(){
168             return y;
169         }
170         int HP(){
171             return hp;
172         }
173         bool isDead(){
174             DrawSpaceshipInfo(); // It's annoying to die and still see a heart on the screen
175             return isDead;
176         }
177     }
178
179     Spaceship(int _x, int _y){
180         x = _x;
181         y = _y;
182         hp = 3; // I designed the game to have 3 lifes
183         energy = 5; // And 5 energy points every life
184         isDead = false; // By default you are not dead
185     }
186
187     void DrawSpaceshipInfo(){ // Displays HP and energy points, I aligned them with the labels printed in DrawGameInfos
188         gotoxy(5, 1); printf(" ");
189         for(int i = 0; i < hp; i++){
190             gotoxy(5 + i, 1); printf("%c", 3);
191         }
192         gotoxy(23, 1); printf(" ");
193         for(int i = 0; i < energy; i++){
194             gotoxy(23 + i, 1); printf("%c", 222);
195         }
196     }
197
198     void Draw(){ // This is our spaceship
199         gotoxy(x, y); printf("  %c  ", 30);
200         gotoxy(x, y + 1); printf("  %c  ", 4);
201         gotoxy(x, y + 2); printf("%c%c%c%c%c", 17, 30, 223, 30, 16);
202     }
203
204     void Erase(){ // This was or spaceship
205         gotoxy(x, y); cout<<" ";
206         gotoxy(x, y + 1); printf(" ");
207         gotoxy(x, y + 2); printf(" ");
208     }
209
210     void Damage(){ // Triggered by the bubbles that hit the spaceship
211         energy--;
212         if(energy == 0){
213             Explosion();
214         }
215         else{
216             Erase(); // You can omit this part, is meant to visually tell you that you were hit
217             gotoxy(x, y + 1); cout<<" ";
218             gotoxy(x, y + 2); cout<<"*****";
219             Sleep(100);
220         }
221     }
222
223     void Explosion(){ // when you lose a heart :c
224         hp--;
225         Erase();
226         gotoxy(x, y); cout<<" ";
227         gotoxy(x, y + 1); cout<<" ";
228         gotoxy(x, y + 2); cout<<"*****";
229         Sleep(100);
230         Erase();
231         gotoxy(x, y); cout<<" ";
232         gotoxy(x, y + 1); cout<<" ";
233         gotoxy(x, y + 2); cout<<"*****";
234         Sleep(100);
235     }
236 }
```

```
C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug mit project (1).cpp
223 gotoxy(x,y + 1); cout<<" * ";
224 gotoxy(x,y + 2); cout<<"*****";
225 Sleep(100);
226 Erase();
227 gotoxy(x,y); cout<<" * ";
228 gotoxy(x,y + 1); cout<<" * * ";
229 gotoxy(x,y + 2); cout<<" * * ";
230 Sleep(100);
231 Erase();
232 gotoxy(x,y); cout<<" * ";
233 gotoxy(x,y + 1); cout<<" * * ";
234 gotoxy(x,y + 2); cout<<" * * ";
235 Sleep(100);
236 if(hp > 0){ // If you still have a heart or more
237     energy = 5;
238 }
239 else{ // If you don't
240     inDead = true;
241 }
242
243 void Move(){ // The main function of the spaceship
244     if(kbhit()){ // If you move the spaceship
245         Erase(); // Look I'm invisible
246         char key = getch(); // What did you type?
247         switch(key){ // Checks if the spaceship won't leave the game boundaries
248             case LEFT: if(x > 1) x -= 1; break;
249             case RIGHT: if(x + 4 < 77) x += 1; break;
250             case UP: if(y > 3) y -= 1; break;
251             case DOWN: if(y + 2 < 22) y += 1; break;
252         }
253     }
254     Draw(); // The spaceship is drawn regardless if you moved it or not, if you did then it will appear in it's new position.
255 }
256
257 }
258 }
259
260 class Bubble{
261 private:
262     int x;
263     int y;
264 public:
265     int X() { return x; }
266     int Y() { return y; }
267
268     Bubble(int _x, int _y){
269         x = _x;
270         y = _y;
271     }
272
273 void Draw(){
274     gotoxy(x,y); cout<<"O"; // Fear the Bubbles!!
275 }
276
277 void Collision(SpaceShip ss){ // The Bubble finds the spaceship
278     if(((x >= ss.X()) && (x <= ss.X() + 5)) && ((y >= ss.Y()) && (y <= ss.Y() + 2))){ // Depending on the shape of the spaceship you have to tinker when the Bubble really hits you
279         ss.Damage(); // The Bubble hurts
280         gotoxy(x,y);
281         cout<<" "; // And the Bubble is "destroyed"
282         x = rand()%74 + 3; // The truth is it just teleports to the top of the map
283         y = 4;
284     }
285     else{
286         gotoxy(x,y); cout<<" ";
287         y++;
288         if(y > 22){ // If the Bubble goes too down in the map
289             x = rand()%74 + 3; // It will be teleported to the top
290             y = 4;
291         }
292         Draw();
293     }
294 }
295
296 class Bullet{
297 private:
298     int x;
299     int y;
300 public:
301     int X() { return x; }
302     int Y() { return y; }
```

```

C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
((globals))
Project Classes Debug mit project (1).cpp
292 }
293 };
294 class Bullet{
295 private:
296 int x;
297 int y;
298 public:
299 int X() { return x; }
300 int Y() { return y; }
301 Bullet(int _x, int _y){
302 x = _x;
303 y = _y;
304 }
305 bool isOut(){
306 if(y <= 3){ // If the bullet reaches the top of the map
307 gotoxy(x,y); cout<<" // It disappears
308 return true; // And informs the one that it should no longer exist :c
309 }
310 else{
311 return false;
312 }
313 }
314 void Move(){
315 gotoxy(x,y);
316 cout<<"x";
317 y--;
318 gotoxy(x,y);
319 cout<<" // The shape of the bullet
320 }
321 }
322 };
323 int main(){
324 int score;
325 HideCursor();
326 srand((unsigned)time(NULL));
327 do{
328 system("cls");
329 gotoxy(15,5); cout<<"
330 gotoxy(15,6); cout<<" | Boule shooter Game | "
331 gotoxy(15,7); cout<<"
332 gotoxy(15,8); cout<<" Select Option >";
333 gotoxy(15,9); cout<<" 1. Start";
334 }

```

```

C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
((globals))
Project Classes Debug mit project (1).cpp
328 do{
329 system("cls");
330 gotoxy(15,5); cout<<"
331 gotoxy(15,6); cout<<" | Boule shooter Game | "
332 gotoxy(15,7); cout<<"
333 gotoxy(15,8); cout<<" Select Option >";
334 gotoxy(15,9); cout<<" 1. Start";
335 gotoxy(15,10); cout<<" 2. Instructions";
336 gotoxy(15,11); cout<<" 3. Quit ";
337 char op = getch();
338 if(op=='1'){
339 HideCursor();
340 system("cls");
341 WelcomeMessage();
342 getch();
343 list<Bullet*> Bullets; // We will use a dynamic list for the bullets in the game
344 list<Bullet*>::iterator bullet; // And an iterator for the list
345 list<Bubble*> Bubbles; // The same goes for the Bubbles
346 list<Bubble*>::iterator bubble;
347 score = 0; // Your score :3
348 // Here our adventure begins
349 SpaceShip ss = SpaceShip(40,20);
350 if(score==0){
351 DrawGameLimits();
352 for(int i = 0; i < 10; i++){ // Pick as many Bubbles as you want
353 // They are randomly placed in the map but not too low
354 Bubbles.push_back(new Bubble(rand()%100 * 1, rand()%90 * 3));
355 }
356 while(!ss.isDead() && score != 10){ // If you die or reach 100 points the game ends
357 if(kbhit()){
358 char key = getch();
359 if(key == ' '){ // If you press the space bar you add a bullet to the bullet list
360 }
361 }
362 }
363 }
364 }
365 }
366 }
367 }
368 }
369 }
370 }

```

The screenshot displays two instances of a C++ IDE, likely Visual Studio Code, showing different parts of a game program.

Top View:

- File Path:** C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
- Code Snippets:**

```
if(kbhit()){
    char key = getch();
    if(key == ' ') { // If you press the space bar you add a bullet to the bullet list
        Bullets.push_back(new Bullet(ss.X() + 2, ss.Y() - 1));
    }
    if(key==49){
        gotoxy(20,25); system("pause");
    }
    if(key== 50){
        system("cls");
        GameClosedMassege();
        exit(0);
    }
}

//void Bullet::Move();
for(bullet = Bullets.begin(); bullet != Bullets.end(); bullet++){ // For every bullet that is in space
    (*bullet)->Move();
    if((*bullet)->isOut())
        // If the bullet reached the end of the map
        delete(*bullet); // It gets deleted
        bullet = Bullets.erase(bullet);
}

for(bubble = Bubbles.begin(); bubble != Bubbles.end(); bubble++){ // Every bubble checks if the spaceship shares it's coordinates :3
    (*bubble)->collision(ss);
}

for(bubble = Bubbles.begin(); bubble != Bubbles.end(); bubble++) {
    for(bullet = Bullets.begin(); bullet != Bullets.end(); bullet++) {
        // Bubble-Bullet collision
        int astX = (*bubble)->X(); //Coordinates of the bubble
        int astY = (*bubble)->Y();
        int bulx = (*bullet)->X(); // Coordinates of the bullet
        int buly = (*bullet)->Y();
        if((astX == bulx) && ((astY == buly) || (astY + 1 == buly)))
            //Chances are that in the Y axis they never reach the same value, that case must be considered
            gotoxy(bulx,buly);
            printf(" ");
            // Makes the bullet invisible
            gotoxy(astX,astY);
            printf("X");
            printf(" "); // I still have my doubts in this part, but it tries to signal a collision, sometimes the X remains there...
    }
}
```

Bottom View:

- File Path:** C:\Users\User\Downloads\mit project (1).cpp - Dev-C++ 5.11
- Code Snippets:**

```
gotoxy(astX,astY);
printf("X");
printf(" "); // I still have my doubts in this part, but it tries to signal a collision, sometimes the X remains there...

delete(*bullet); // You delete the bullet
bullet = Bullets.erase(bullet);
delete(*bubble); // And the Bubble
bubble = Bubbles.erase(bubble);
Bubbles.push_back(new Bubble(rand()%78 + 1, rand()%4 + 3)); // In order to not reduce the number of Bubbles I add one everytime one is destroyed
score += 10; // And you get 10 points for a job well done :)
}
}

ss.Move();
gotoxy(50,1);
printf("%d", score);
Sleep(30); // This is essential, otherwise the game would be unplayable
}

Sleep(1000);
if(score==10){
    HideCursor();
    system("cls");
    LevelUpMessage();

    getch();
    system("cls");
    cout << "\n\n\n\n\n\n\n\n\n\n\n\n";
    cout << "Select option _____";
    cout << "\n\n\n\n\n\n\n\n\n\n\n\n";
    char option = getch();
    if(option=='0'){
        system("cls");
        GameClosedMassege();
        exit(0);
    }
    system("cls");
    cout<<"\n\n\n\n\n\n\n\n\n\n\n\n";
}
```

```

445         exit(0);
446     }
447     system("cls");
448     cout<<"\n\n\n\n\n";
449     gotoxy(10,5);cout<<"
450     gotoxy(10,5);cout<<"
451     gotoxy(10,7);cout<<"
452     gotoxy(10,8);cout<<"
453     Sleep(3000);
454
455     SpaceShip ss = SpaceShip(40,20);
456
457     system("cls");
458     HideCursor();
459     DrawGameLimits();
460
461     for(int i = 0; i < 12; i++){ // Pick as many Bubbles as you want
462         // They are randomly placed in the map but not too low
463         Bubbles.push_back(new Bubble(rand()%100 + 1, rand()%50 + 3));
464     }
465
466     while(!ss.isDead()) { // If you die or reach 100 points the game ends
467
468         if(kbhit()){
469             char key = getch();
470             if(key == '.'){ // If you press the space bar you add a bullet to the bullet list
471                 Bullets.push_back(new Bullet(ss.X() + 2, ss.Y() - 1));
472             }
473             if(key == '0'){
474                 gotoxy(20,25); system("pause");
475             }
476             if(key == 'S'){
477                 system("cls");
478                 GameOverDefeatMessage();
479                 exit(0);
480             }
481         }
482         //void Bullet::Move();
483         for(bullet = Bullets.begin(); bullet != Bullets.end(); bullet++){ // For every bullet that is in space
484             (*bullet)->Move();
485             if((*bullet)->isOut()){
486                 // If the bullet reached the end of the map
487                 delete(*bullet); // It gets deleted
488             }
489             delete(*bullet); // It gets deleted
490             bullet = Bullets.erase(bullet);
491         }
492         for(bubble = Bubbles.begin(); bubble != Bubbles.end(); bubble++){ // Every bubble checks if the spaceship shares it's coordinates :3
493             (*bubble)->Collision(ss);
494         }
495         for(bubble = Bubbles.begin(); bubble != Bubbles.end(); bubble++){
496             for(bullet = Bullets.begin(); bullet != Bullets.end(); bullet++){
497                 // bubble-bullet collision
498                 int astX = (*bubble)->X(); //Coordinates of the bubble
499                 int astY = (*bubble)->Y();
500                 int bulX = (*bullet)->X(); // Coordinates of the bullet
501                 int bulY = (*bullet)->Y();
502                 if((astX == bulX) && ((astY == bulY) || (astY + 1 == bulY)))
503                 { //Chances are that in the Y axis they never reach the same value, that case must be considered
504                     gotoxy(bulX,bulY);
505                     printf("X");
506                     // Makes the bullet invisible
507                     gotoxy(astX,astY);
508                     printf("X");
509                     printf(" "); // I still have my doubts in this part, but it tries to signal a collision, sometimes the X remains there...
510                     delete(*bullet); // You delete the bullet
511                     bullet = Bullets.erase(bullet);
512                     delete(*bubble); // And the Bubble
513                     bubble = Bubbles.erase(bubble);
514                     Bubbles.push_back(new Bubble(rand()%78 + 1, rand()%4 + 3)); // In order to not reduce the number of Bubbles I add one everytime one is destroyed
515                     score += 10; // And you get 10 points for a job well done :3
516                 }
517             }
518             ss.Move();
519             gotoxy(ss.X(),ss.Y());
520             printf("%d", score);
521             Sleep(30); // This is essential, otherwise the game would be unplayable
522         }
523     }
524
525     if(ss.isDead()) { // If you won
526         system("cls");
527         GameOverDefeatMessage();
528     }
529

```



```
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500 int bulY = (*bullet)->Y();
501 if((astX == bulX) && ((astY == bulY) || (astY + 1 == bulY)))
502 { //Chances are that in the Y axis they never reach the same value, that case must be considered
503 gotoxy(bulX,bulY);
504 printf("- ");
505 // Makes the bullet invisible
506 gotoxy(astX,astY);
507 printf("X");
508 printf("- "); // I still have my doubts in this part, but it tries to signal a collision, sometimes the X remains there...
509
510 delete(bullet); // You delete the bullet
511 bullet = Bullets.erase(bullet);
512 delete(bubble); // And the Bubble
513 bubble = Bubbles.erase(bubble);
514 Bubbles.push_back(new Bubble(rand()%78 + 1, rand()%34 + 3)); // In order to not reduce the number of Bubbles I add one everytime one is destroyed
515 score += 10; // And you get 10 points for a job well done :3
516 }
517
518 }
519 ss.Move();
520 gotoxy(56,1);
521 printf("%d", score);
522 Sleep(30); // This is essential, otherwise the game would be unplayable
523
524 }
525
526 if(ss.isDead()) { // If you won
527 system("cls");
528
529 GameOverDefeatMessage();
530
531 Sleep(3000);
532 system("cls");
533 SpecialMessage(); // Surprise!
534 gotoxy(0,20);
535 cout<<"\n"<<"Your Score is : "<<score;
536 Sleep(3000);
537 }
538 else if( op=='2') instructions();
539 else if( op=='3') exit(0);
540 }while(1);
541 return 0;
542 }
```

Thank You