|  |  |
| --- | --- |
| // This is the C++ Snakes Game |  |
|  |  |
|  | **#include <SFML/Graphics.hpp>** |
|  | **#include <time.h>** |
|  | **using namespace sf;** |
|  |  |
|  | **int N=30,M=20;** |
|  | **int size=16;** |
|  | **int w = size\*N;** |
|  | **int h = size\*M;** |
|  |  |
|  | **int dir,num=4;** |
|  |  |
|  | **struct Snake** |
|  | **{ int x,y;} s[100];** |
|  |  |
|  | **struct Fruct** |
|  | **{ int x,y;} f;** |
|  |  |
|  | **void Tick()** |
|  | **{** |
|  | **for (int i=num;i>0;--i)** |
|  | **{s[i].x=s[i-1].x;** |
|  | **s[i].y=s[i-1].y;}** |
|  |  |
|  | **if (dir==0) s[0].y+=1;** |
|  | **if (dir==1) s[0].x-=1;** |
|  | **if (dir==2) s[0].x+=1;** |
|  | **if (dir==3) s[0].y-=1;** |
|  |  |
|  | **if ((s[0].x==f.x) && (s[0].y==f.y))** |
|  | **{ num++;** |
|  | **f.x=rand() % N;** |
|  | **f.y=rand() % M; }** |
|  |  |
|  | **if (s[0].x>N) s[0].x=0; if (s[0].x<0) s[0].x=N;** |
|  | **if (s[0].y>M) s[0].y=0; if (s[0].y<0) s[0].y=M;** |
|  |  |
|  | **for (int i=1;i<num;i++)** |
|  | **if (s[0].x==s[i].x && s[0].y==s[i].y) num=i;** |
|  | **}** |
|  |  |
|  | **int main()** |
|  | **{** |
|  | **srand(time(0));** |
|  |  |
|  | **RenderWindow window(VideoMode(w, h), "Snake Game!");** |
|  |  |
|  | **Texture t1,t2;** |
|  | **t1.loadFromFile("images/white.png");** |
|  | **t2.loadFromFile("images/red.png");** |
|  |  |
|  | **Sprite sprite1(t1);** |
|  | **Sprite sprite2(t2);** |
|  |  |
|  | **Clock clock;** |
|  | **float timer=0, delay=0.1;** |
|  |  |
|  | **f.x=10;** |
|  | **f.y=10;** |
|  |  |
|  | **while (window.isOpen())** |
|  | **{** |
|  | **float time = clock.getElapsedTime().asSeconds();** |
|  | **clock.restart();** |
|  | **timer+=time;** |
|  |  |
|  | **Event e;** |
|  | **while (window.pollEvent(e))** |
|  | **{** |
|  | **if (e.type == Event::Closed)** |
|  | **window.close();** |
|  | **}** |
|  |  |
|  | **if (Keyboard::isKeyPressed(Keyboard::Left)) dir=1;** |
|  | **if (Keyboard::isKeyPressed(Keyboard::Right)) dir=2;** |
|  | **if (Keyboard::isKeyPressed(Keyboard::Up)) dir=3;** |
|  | **if (Keyboard::isKeyPressed(Keyboard::Down)) dir=0;** |
|  |  |
|  | **if (timer>delay) {timer=0; Tick();}** |
|  |  |
|  | **////// draw ///////** |
|  | **window.clear();** |
|  |  |
|  | **for (int i=0; i<N; i++)** |
|  | **for (int j=0; j<M; j++)** |
|  | **{ sprite1.setPosition(i\*size,j\*size); window.draw(sprite1); }** |
|  |  |
|  | **for (int i=0;i<num;i++)** |
|  | **{ sprite2.setPosition(s[i].x\*size, s[i].y\*size); window.draw(sprite2); }** |
|  |  |
|  | **sprite2.setPosition(f.x\*size, f.y\*size); window.draw(sprite2);** |
|  |  |
|  | **window.display();** |
|  | **}** |
|  |  |
|  | **return 0;** |
|  | **}** |