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1: // Copyright 2015 <Angel Z'heondre Calcano>
2: // PS2b
3: /*#include <iostream>
4: #include <string>
5: #include "LFSR.hpp"
6: using namespace std ;
7: int main( int argc, char *argv[] ) {
8:
9:     int amount ;
10:    LFSR *test  = new LFSR( "1101", 2 ) ;
11:
12:    //amount = test->step() ;
13:    //cout << *test << endl ;
14:    //cout << amount << endl ;
15:
16:    amount = test->generate(3) ;
17:    cout << amount << endl ;
18:    cout << *test << endl ;
19:    delete test ;
20: } */
21:
22: // pixels.cpp:
23: // using SFML to load a file, manipulate its pixels, write it to disk
24: // Fred Martin, fredm@cs.uml.edu, Sun Mar  2 15:57:08 2014
25:
26: // g++ -o pixels pixels.cpp -lsfml-graphics -lsfml-window
27:
28: #include <SFML/System.hpp>
29: #include <SFML/Window.hpp>
30: #include <SFML/Graphics.hpp>
31: #include "LFSR.hpp"
32: int main(int argc, char *argv[] ) {
33:     int n = atoi(argv[4]) ;
34:     LFSR *pow = new LFSR( argv[3], n ) ;
35:     sf::Image image;
36:     sf::Image image2;
37:     if (!image.loadFromFile(argv[1])) return -1;
38:     if (!image2.loadFromFile(argv[1])) return -1 ;
39:     // p is a pixel
40:     sf::Color p;
41:     sf::Vector2u size = image.getSize();
42:
43:     for (int x=0; (unsigned) x< size.x; x++) {
44:         for (int y= 0;(unsigned) y< size.y; y++) {
45:             p = image.getPixel(x, y);
46:             p.r = p.r ^ pow->generate(8) ;
47:             p.g = p.g ^ pow->generate(8) ;
48:             p.b = p.b ^ pow->generate(8);
49:             image.setPixel(x, y, p);
50:         }
51:     }
52:
53:     sf::RenderWindow window(sf::VideoMode(size.x, size.y), "Angel C. LFSR");
54:     sf::RenderWindow window2(sf::VideoMode(size.x, size.y), "Angel C. LFSR");
55:     sf::Texture texture;
56:     sf::Texture t2;
57:
58:     texture.loadFromImage(image);
59:     t2.loadFromImage(image2) ;
60:
61:     sf::Sprite sprite;
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62:  sf::Sprite s2 ;
63:
64:  sprite.setTexture(texture);
65:  s2.setTexture(t2 ) ;
66:
67:  while (window.isOpen() && window2.isOpen()){
68:      sf::Event event;
69:      while (window.pollEvent(event)) {
70:          if (event.type == sf::Event::Closed)
71:              window.close();
72:      }
73:      while (window2.pollEvent(event)) {
74:          if (event.type == sf::Event::Closed)
75:              window.close();
76:      }
77:      window.clear();
78:      window.draw(sprite);
79:      window.display();
80:      window2.clear();
81:      window2.draw(s2);
82:      window2.display();
83:  }
84:  if (!image.saveToFile(argv[2]))
85:      return -1;
86:  delete pow ;
87:  return 0;
88: }
```