Lab 1

Henry Hsu

February 5, 2012

1   Specification

Draw a house using the author provided graphics package.

2   Analysis/Design

- Draw a house using the author provided graphics package.

3   Implementation

"lab1.cpp" 3≡

⟨ *include files* 4 ⟩

```
int ccc_win_main()
{
    int x = 0 ;
    int y = 0 ;

    // Below are plot points for the house

    Point house_ul(x-5, y+3) ;
    Point house_ur(x+5, y+3) ;
    Point house_ll(x-5, y-3) ;
    Point house_lr(x+5, y-3) ;

    Point roof_l(x-3, y+5) ;
    Point roof_r(x+3, y+5) ;

    // Point window(x+3, y+1.5) ;
    Point window_l(x + 2.25, y + 1.25) ;
    Point window_r(x + 3.75, y + 1.25) ;
    Point window_t(x + 3, y + 2.25) ;

    Point door_handle(-0.5, y - 1.25) ;

    Point door_ul(x-2.5, y+1) ;
    Point door_ur(x, y+1) ;
    Point door_ll(x-2.5, y-3) ;


    // Below are the lines for the house

    Line house_top(house_ul, house_ur) ;
    Line house_left(house_ul, house_ll) ;
    Line house_right(house_ur, house_lr) ;
    Line house_bottom(house_ll, house_lr) ;

    Line roof_top(roof_l, roof_r) ;
    Line roof_left(roof_l, house_ul) ;
    Line roof_right(roof_r, house_ur) ;

    Line door_top(door_ul, door_ur) ;
    Line door_side(door_ul, door_ll) ;

    Line window_left(window_l, window_t) ;
    Line window_right(window_r, window_t) ;


    // Displays the house        3
    cwin << house_top << house_left << house_right << house_bottom ;
    cwin << roof_top << roof_left << roof_right ;
    cwin << Circle(door_handle, 0.25) ;
    cwin << door_top << door_side ;
    cwin << window_left << window_right ;

    door_side.move(2.5, 0) ;
    window_left.move(0.75, -1) ;
```

⟨ *include files* 4 ⟩ ≡

```
#include "ccc_win.h"
```
◇

Fragment referenced in 3.