

CSE 202 LAB 3

TOPIC: Classes

In this lab we are going to see how classes can be used to simplify the programming process and create better software. In the last lab, we employed procedural programming to simulate a falling object. Now we are going to change the approach using Object-Oriented design. We are going to create a class called *Chutist* which will be used by the main program from Lab 2.

1. First, you need to design your chutist. It should at least contain a circle for the body and a triangle for the parachute.
2. Copy the following class interface to file the file from Lab 2..

```
// Project: lab3

class Chutist
{
public:

    Chutist(); // Default constructor

    Chutist(Point loc); // constructor where chutist always points up

    void display(int i) const; // accessor function, displays chutist

    void move(int dx, int dy); // mutator function, moves chutist

private:

    Point location; // location of chutist

};

// default;

Chutist::Chutist()
{
    location = Point(0,0);
}

// constructor of Chutist object at Point loc;

Chutist::Chutist(Point loc)
{
    // code here
}

// accessor function: displays the chutist at location to the cwin

void Chutist::display(int i) const
{
    //displays the chutist at the Point location.If i is negative the chute is closed. If i is positive, it is open.
}
```

3. Now modify the main program from Lab 2 so that instead of displaying a circle, the program displays the chutist you just designed.