

General Sir John Kotelawala Defence University Department of Computer Science Object Oriented Programming I Lab Sheet 3 Classes and Objects

- 1. Create a class called Time that includes three instance variables: hour (int), minute (int) and second (int). Provide following constructors to initializes the three instance variables.
 - No-argument constructor: Initializes each instance variable to zero.
 - Constructor: hour supplied, minute and second defaulted to 0.
 - Constructor: hour and minute supplied, second defaulted to 0.
 - Constructor: hour, minute and second supplied.
 - Constructor: Another Time2 object supplied.
- Create a class called Circle that includes two instance variables: radius (double) and color (String). Your class should have following constructors to initializes the two instance variables.
 - A default constructor with no argument with default value of 1.0 and "red", respectively.
 - A constructor which takes a double argument for radius.
 - A constructor which takes a String argument for color.
- 3. A class called MyPoint, which models a 2D point with x and y coordinates. It contains two instance variables x (int) and y (int).
 - A default constructor that construct a point at the default location of (0, 0).

- A overloaded constructor that constructs a point with the given x and y coordinates.
- A toString () method that display the point in the format (x, y).
- A method called distance (int x, int y) that returns the distance from this point to another point at the given (x, y) coordinates.