

23/11/2023

#### Lab Exercises

CSE110(3) Object Oriented Programming. DSU

Fall 2023.

Each exercise is worth 2 points. Extra 2 points reserved for participation. Total 10 points

\* Methods that do not have explicitly declared operation may display a simple message.

1. Build a Java interface "Batter" with methods hits() and runs(). Write a subclass "Opener" who is a "Batter" with additional attributes such as *int score*, *String hand*, setscore() and sethand() methods, and a display() method that displays all information. Provide appropriate body for the hits() and runs() methods in the "Opener" Class. Create 2 different objects, one with right **hand** and another with left **hand** and demonstrate use of all methods in a Test Class.
2. Build an interface "Bowler" with methods bowls(). Write a subclass "FastBowler" that inherits from "Bowler" and has attributes *double maxSpeed*, *String hand*. Another class "FastMedium" inherits from "FastBowler". Include display methods for all classes. Demonstrate all methods in a Test class.
3. Build interfaces "Batter" and "Bowler". Create a class "AllRounder" who is a Batter as well as a Bowler. Include appropriate attributes display methods. Demonstrate use of all methods in a Test Class.
4. Build a class "Spinner" that inherits from the "Bowler" class and has its own attributes and a method googly(). Write another class, "AllRounder" that inherits from Previously built "Batter" and the "spinner" class. Create an Object "Sakep" and demonstrate use of all attributes in a Test Class.