Lab 1: Understanding Data

Goals

- Learn to work with ProfessorJ

- Learn to define a simple class

- Define a class that contains member data that is an instance of another class (containment)

- Define a class hierarchy that represents union of several classes of data

Details

- First start DrScheme and select the language level ProfessorJ Beginner. Hit Execute right away.

- Define a simple class from the given class diagram

- Use the *Interactions Window* to show examples - either just using `new ClassName(data1, data2, ...)` - no semicolon at the end; or using `ClassName someName = new ClassName(data1, data2, ...);` and in the next line type `someName`.

- Use *Java Interactions Box* - this is the way to save the data examples and have them available for later.

- Write class definition for a class with containment; make examples: - repeat the above - for example employee is a person, with job title and hourly pay as well.

- Write class definition for a union of classes; make examples: - repeat the above - for example vehicle being a car, truck or a bicycle - number of wheels, max speed, name; truck has max load, car has number of passengers, bicycle has no other info.

- Find a partner, sign up for the homework submission web-site: go to the Assignments page of the web site - click on the link, ... you know the rest.

- Fill out the initial questionnaire

- If time left, define class hierarchy that represents a list, and make examples - for example list of persons - because you already have the class `Person` and the examples.