

## Exercise Set 2: Model-View-Controller

**Exercise 2.1** Create a class `Person`: with last name, first name, and age. Use the sample code for implementing `InputChannelInterface` and input iterator as a model for this set of tasks:

- Design the class `PersonView` which allows the user to view and input the information about one `Person` object.
- Define the `ChPersonInput` modelled after `ChBalloonInput` interface, and implement the `ChGUIReadPerson` and `CHConsoleReadPerson` classes. Make sure the age is within the 0-150 range.
- Implement the `InGUIRange` and `InConsoleRange` classes for the `Person` class input. Again, make sure the age is within the 0-150 range.

**Exercise 2.2** Following the same strategy as in exercise 2.1 design a GUI to represent and allow for user input of a series of two integer coordinates that represent one `Point` in the range from 0 to 400. Implement also the iterator for reading the data from the console. Use it to read in the values of the coordinates of a `Polygon`. Read the *Graphic in Java* mini-tutorial and look up the JavaDocs for `Polygon` - to actually paint a polygon of the color of your choice in the graphics window, at the completion of the input.

**Exercise 2.3** Read the *MiniPaint* tutorial to figure out how to implement `InMouseRange` class, which will allow the user to input the `Polygon` data via mouse clicks.