

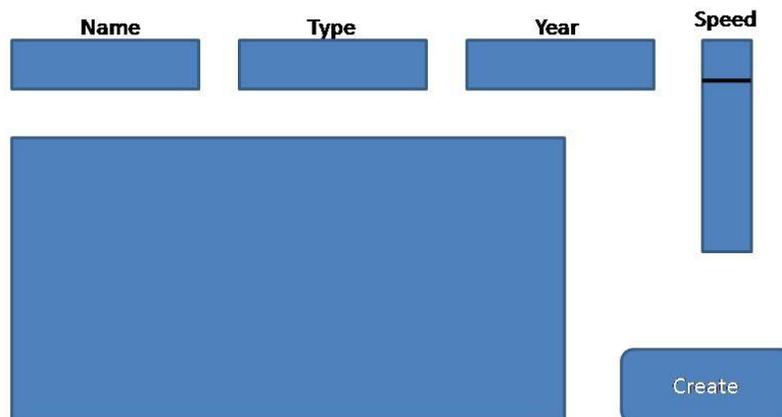
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**Southern Polytechnic State University**  
**ECET 3810: Object-Oriented Programming**  
**Laboratory Exercises 8 & 9**

**Objective:** To enable the student to design and implement a basic GUI (lab 8) and associated model (lab 9) to hold the object's data. The GUI controls will be used to get and set properties within the model.

**Procedure(s):**

- i) Create a GUI the class name of which is CarGUI (lab 8), which satisfies the following graphical requirements (see figure):



- ii) The top three elements (Name, Type, and Year) are of type JTextField; Speed is a JScrollBar, Create a JButton, and the blue area is a JTextArea object.
- iii) Create a separate class named Car, which contains a constructor, name, type, and year global variables, and the following methods:

- setName, getName, setType, getType, setYear, getYear, setSpeed, getSpeed
- iv) Connect the two classes (CarGUI and Car) by instantiating a Car object from within the *main* method of CarGUI.
  - v) Operation: when one fills out the Name, Type, and Year fields and sets the speed the following message should appear in the text area when the Create button is clicked:

My car is named W. It is of type X and year Y. The current speed is Z.

Note: W, X, Y, and Z represent the data retrieved from the Car object; the data is stored in the Car object when the Create button is clicked.

Note 2: you are to design and code this 2-part lab from scratch; you may consult with your colleagues, but your lab must be unique.

Note 3: use another GUI example we reviewed as a basis to get started.

Note 4: add one new feature at a time.

**Turn in:** a cover sheet, screen captures showing your functioning GUI, and associated source code for CarGUI and Car. Lab(s) must be properly annotated. Lab pages must be stapled prior to submission.