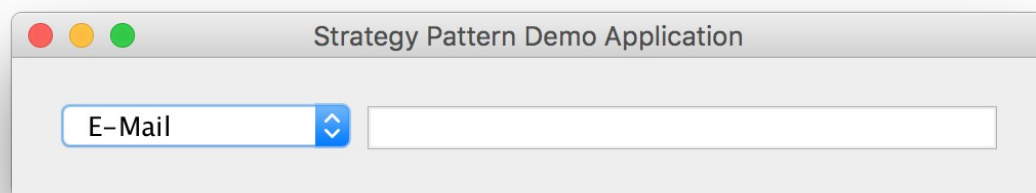# Exercise on Strategy

Introduction

Interactive GUI-based applications usually provide forms to users to enter data. Forms in turn consists of different entry fields of certain types. Typical examples are text fields where users can enter text such as names of persons, file names, numbers, dates, or e-mail addresses. Note that many of these fields accept stings complying to a certain format only. For example, names should start with an upper-case letter, or e-mail addresses should match the form, for example, `firstname.name@somthing.ch`.
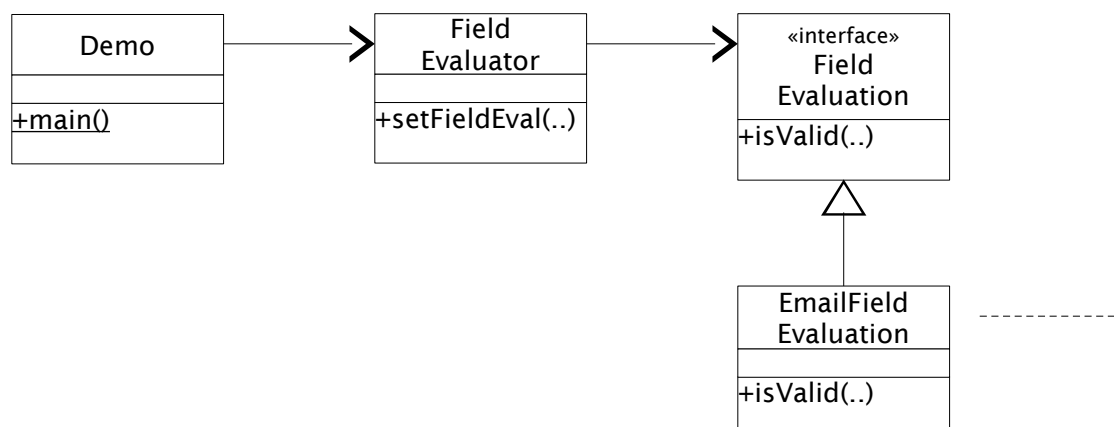

Note: As long as the character sequence entered into a field does not match the field evaluation algorithm then the field's background highlighted with the color red (after having hit the <RETURN> key).

Sketch of Classes of an Application

An application (`Demo`) has a text field whose format can be chosen by the user (for demonstration purposes). Associated to the text field is a field evaluation which in turn is configured with the appropriate field evaluation algorithm. If the user decides that the fields meaning is the one of an e-mail address then an instance of `EmailFieldEvaluation` is used to determine the validity of the text entered into the field.

The application's classes are:

Task

Complete the field evaluation classes you'll find in the source code. Watch the TODO markers. To test your implementation, run the JUnit tests.

Hint: If you want to use Java Regex, see for example:
http://www.vogella.com/tutorials/JavaRegularExpressions/article.html

Notice: The type of this project is Maven, i.e., this is a Maven project. Thus, import it as a Maven project into your IDE (Eclipse, IntelJ, …).

Biel, December 6, 2015