Exercises

Design Patterns: Composite

Java SE and Java EE patterns and best practices

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0 Prerequisites, assumptions and notes

- Have Maven 2 installed in your computer

- Have Eclipse installed in your computer (Recommended: Indigo Version)

- I'm assuming you're running the exercises in Ubuntu

- It's recommended that you place all Design Pattern exercises under a common directory. For example:
  `${user.home}/javatraining/designpatterns`

  During the exercises I will refer this directory as
  `${designpatterns.exercises.folder}`

- In every exercise I will refer the directory where you are working as
  `${project.dir}`.

1 Quick Start Exercise

You will put your hands on a small program and apply the Composite Design Pattern.

1.1 Checkout code and create eclipse project

In this step you will checkout the code to `${project.dir}`.

Complete the following tasks.↓

1. Go to the `${project.dir}` directory

```
cd ${project.dir}
```

2. Checkout the code from code.google.com

```
svn checkout
http://javatrainings.googlecode.com/svn/designpat
terns/trunk/composite
```

3. Enter the created directory and run the tests to check that everything is ok.

```
mvn test
```

4. Enter the created folder and generate the eclipse project

```
mvn eclipse:eclipse
```

5. Import project into eclipse

✓ *you're done! You have now the project ready to refactor.*

1.2 Implement the Composite Pattern

Complete the following tasks.↓

1. Open the test `ShapeTest`, analyze it and discuss it.
2. Analyze the classes under package
   `eu.jpereira.trainings.designpatterns.structural.c omposite.model`
3. Run the tests in `ShapeTest`
4. Change the classes in package
   `eu.jpereira.trainings.designpatterns.structural.c omposite.model` so that all tests in `ShapeTest` are green

✓*You're done.*