

Builder Pattern

Follow all of A1 instructions to set up a new project. Remember the plugins and all settings. You will not need Maven or Mockito for the rest of the course.

Use the Builder design pattern to create 2 classes: AggressiveWarrior and DefensiveWarrior. Warriors have 3 attributes, all integers (int): level, attack, and defense. Level is required, while attack and defense are optional.

Aggressive warriors have a default attack of 3 and a default defense of 2.

Defensive warriors have a default attack of 2 and a default defense of 3.

Warriors must be immutable.

The order of things matters in your class:

- Fields
- Constructor
- Methods
- Builder
 - Builder fields
 - Builder Constructor
 - Builder methods
 - Builder build()

Using default visibility is fine where private does not seem to fit. Always try private first, then increase visibility as needed.

Validation: negative values for level, attack, and defense are all invalid. There are tests for this.

Fair warning:

So far, the assignments in this course have been “easy” in the sense that if you followed directions, made sure tests pass, and made sure the code worked you were fine.

The second half of this course (including this assignment) has some tricky design and clean code elements that you should be mindful of if you want to achieve 100%. Resubmissions will also be restricted now based on misses of fundamental understanding this far into the course. You will receive a “final grade” in your feedback to indicate such a situation.

Submission

Same as A1.