#### EECS 293 Software Craftsmanship 2019 Fall Semester

# Programming Assignment 12

Due at the beginning of your discussion session on April 16-19, 2019

No late assignment will be accepted after April 30, 2019

### Reading

- Section 6.2, "Present a consistent level of abstraction in the class interface" in Code Complete
- Section 6.3 in Code Complete
- Items 1, 2, 10, 18, 19, 20 in Effective Java
- Section 19.6 in Code Complete
- Module "Routine Names" on canvas

#### **Grading Guidelines**

Points will be deducted if code and branch coverage is incomplete. You can omit coverage of methods that are automatically generated and of assertions. An automatic C (or less) is triggered by:



- Any routine with complexity greater than 4,
- Any substantially repeated piece of code, or by
- Improperly named routines.

#### **Programming**

Make any changes to the design as required after the review and this week's lecture. Implement your design:

- Interfaces and classes
- Methods (according to your pseudo-code, if any)
- Error-handling

Test cases are required to validate and improve your design. No test cases are required for automatically generated methods. Focus on unit tests, plus a single stress test.

## **General Considerations**

After Programming Assignment 8, your code should have an extensive unit test suite. Your code should have a reasonable number of comments, but documentation is going to be the topic of the next assignment. As a general guideline, comments should be similar to those accepted in EECS 132.

#### **Submission**

Create a repository called typecheck.git. Make small regular commits. Push your design document, revised code, and test cases on the git repository.