# CS 249: Core Assignment Rules

#### **Programming Assignments**

- ALL code files should be in the package **edu.***yourname*.**assignXX**, where:
  - o yourname is replaced with your SITNet ID in lowercase letters
  - O XX is replaced with the zero-padded assignment number (01, 02, etc.)
- Prompts and printouts match **EXACTLY** to the specification
  - o This includes capitalization, punctuation, spaces, and newlines!
- Your java files/class names/ method names MUST match the spelling/capitalization **EXACTLY!**
- ALL data in your class should be PRIVATE or at least PROTECTED!
- Unless otherwise stated, NONE of the class data in the assignments should be static! All class data is **INSTANCE** data!
- Except for replacing my SITNET ID with your own, **do NOT modify:** 
  - The test programs
  - o Any complete programs I provide

## Starting a New Assignment

For each new assignment, you must do the following procedures:

- Switch to the "main" branch
  - o "Git" → "Branches" → click on "main" → "Checkout"
- Fetch any changes from remotes
  - o "Git" → "Fetch"
- Make sure any local changes are committed and pushed
- Merge changes from "upstream/main" (i.e., the main branch on my repository)
  - o "Git" → "Merge" → select "upstream/main"
- Create a new branch for this assignment
  - o "Git" → "Branches" → "New Branch..."
  - Use name "assignXX", where XX is the zero-padded assignment number (01, 02, etc.)
  - Make sure "Checkout branch" is selected
- Publish your new branch
  - o "Git" → "Push"
- Under the appropriate subproject "assignXX":
  - Create package folders for main code
    - Right-click on assignXX/src/main/java folder → "New" → "Package"
    - Name should be: edu.yourname.assignXX

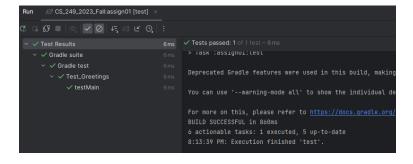
- O Create necessary Java files in this package folder
  - Right-click on package folder → "New" → "Java Class"
- Modify assignXX/src/main/java/module-info.java file
  - Replace all references to "realemj" with yourname
- Modify the test code in src/test/java
  - Change the "realemj" part of package folder to yourname
    - Right-click on package folder → "Refactor" → "Rename..."
    - This should also change the package line in the testing files themselves
  - Do NOT change:
    - import edu.realemj.testing.\*;
    - import edu.realem.testing.GeneralTesting;
- In build.gradle, change value of mainClass variable to refer to yourname instead of "realemi"
- Reload all Gradle projects
- o Right-click on the verification:test task for the new assignment in the Gradle menu
  - Select "Modify Run Configuration..."
  - Under "Modify Options", make sure "Run as test" is checked
  - Hit "Apply" and "OK"
- Complete assignment code and make commits to this new branch
  - "Git" → "Commit"
  - Feel free to push commits up to the repository as well: "Git" → "Push"

### **Testing Screenshot**

In addition to the code submission, you MUST submit a screenshot of the test results.

- You MUST run the test files and send a screenshot of the test results!
  - Even if your program(s) do not pass all the tests, you MUST send this screenshot!
- This screenshot should show clearly what tests have passed (or not).
- WARNING: If any code does not compile, tests will NOT run!
- Include the screenshot inside the subproject for the assignment!

Here is an example of an acceptable test screenshot:



#### **UML Diagrams**

- For the UML diagrams, use UMLet: https://www.umletino.com/
- You MUST submit the diagram as a .png image file!
  - o Do not ONLY submit a UMLet .uxf file (although if that is included, that's fine)
- Make sure your methods have the EXACT names and parameters as described!
- You must use the UML syntax defined in the slides!
- Unless otherwise stated, submit everything as ONE diagram.
- Unless a method is overridden, you do NOT need to repeat a parent's method in a child class' diagram.
- Include the UML diagram image inside the subproject for the assignment!

### Completing and Submitting an Assignment

Once you have finished development on your branch, do the following:

- Commit and push any changes to your branch
  - o "Git" → "Commit"
  - o "Git" → "Push"
- Checkout the "main" branch
  - o "Git" → "Branches" → click on "main" → "Checkout"
- Merge your branch into the "main" branch
  - "Git" → "Merge" → select your branch for the assignment
- Commit as necessary and push changes to remote repository
  - o "Git" → "Push"

Be sure to do these steps BEFORE the assignment deadline!

#### Grading

Apart from the specific grading breakdown, I reserve the right to take points off for not meeting the specifications in the assignment description.

Every assignment will have a different grading breakdown. Do NOT assume it is always the same!

For the PROGRAMMING part, these penalties will be in place unless otherwise specified:

Issue	Penalty (in %)
Code that does not compile	60
Using static class data where instance data is required	20
Non-private/non-protected class data	10
Printout/prompt format incorrect (including spaces and capitalization)	5
Files not in correct package	5
Submission code not merged with main branch (but exists in repository)	5
New branch not created or not used for assignment code development	5
Code files/classes/methods named incorrectly	10
Other stuff submitted (class files, etc.) BUT NO CODE SUBMITTED	100
Nothing submitted at all	100

In general, these are things that will be penalized:

- Code that does not compile
- Poor abstraction and/or encapsulation
- Sloppy or poor coding style
- Bad coding design principles
- Code that crashes, does not run, or takes a VERY long time to complete
- Using code from ANY source other than the course materials
- Collaboration on code of ANY kind; this is an INDIVIDUAL PROJECT
- Sharing code with other people in this class or using code from this or any other related class
- Output that is incorrect
- Algorithms/implementations that are incorrect
- Submitting improper files
- Failing to submit ALL required files