

# Assignment T3: First Iteration

✓ Published

 Edit



This is a team assignment. This assignment will be graded as 0 to max points. Scroll down for submission instructions at the end.

Implement and test an MVP (minimum viable product) version of your project.

Part 1:

Submit the link to the team github repository containing your code.

Part 2:

Write down your user stories. This might be copied from your revised proposal, if unchanged, or if you changed something explain what/why.

Write an acceptance testing plan that describes how you will test your *full system*, and then carry out this test plan. Your test plan should include both valid and invalid inputs (or sets of inputs) for each user story. Ideally you would automate the acceptance test suite, but this is not required - it is ok to run system-level tests manually. Describe what happened for each valid and invalid test case during acceptance testing. Discuss any bugs you found and whether or not you were able to fix the bugs.

Part 3:

You are required to use an automated build tool and/or package manager, suitable for your programming language and platform, that invokes an automated unit testing tool that, in turn, invokes your unit test cases. There are no specific requirements imposed on your unit test cases other than you have at least one test case for each method other than constructors, getters/setters, and helpers. Some of the test cases will presumably invoke constructors, getters, setters, and/or helpers as part of their operation. (There will be more specific requirements imposed on unit testing as part of the second iteration assignment, which will also include coverage goals.)

Submit the link to the folder(s) within your github repository containing all the test cases that are automatically invoked by your unit testing tool.

Submit the link to the file(s) in your repository that configure the build tool and/or package manager and the automated unit testing tool.

Part 4:

Course Chat



You are required to use an automated style checker and an automated bug finder (the bug finder might be included in the bug finder, but the bug finder must not be simply violating style rules). Ideally, the build tool or packaging tool should invoke these tools in addition to the unit testing tool, but this is not required. (The second iteration assignment will require continuous integration in these tools.)

Include the link(s) to the folder(s) within your repository containing the style checker and automated bug finder. Note this means you should produce outputs that you can store as files in your repository.

In most cases, there should be at least two reports stored for each iteration: one for errors and at least one that is clean(er). You should fix as many errors as possible in each iteration, which should be reflected in the later and final report(s). Sometimes you might report possible errors that could not really occur, but instead of "fixing" such cases, you should figure out why it was not a problem. The final report should correspond to the current code, not to a previous iteration. It is unlikely, but not impossible, that these tools find no errors, but you should still report this.

You can discuss this assignment in this course's team\_project folder on Piazza, [https://courseworks2.columbia.edu/courses/104335/external\\_tools/1456](https://courseworks2.columbia.edu/courses/104335/external_tools/1456), on relevant community forums, on stackoverflow, etc. However, do not ask for anyone outside your team to participate in developing your project; this is a violation of the university's academic honesty policy.

**Submission instructions:** One member of your team should submit a single file (preferably pdf) with the required information for parts 1-4. Your file must contain your team name and the names/unis of all team members. You may submit repeatedly until the deadline (note that if multiple team members submit, the most recent submission will override all previous submissions by the same or different team members).

choose which version of Java in Eclipse

SC

**Sang Jun Chun** 9/15/20  
10:44 AM  
Eclipse -> preferences -> java -> installed JREs

MG

**Minxuan Gao** 9/15/20  
10:45 AM  
Maven is a build automation tool

😊

Send

**Points** 40

**Submitting** a file upload

**File Types** pdf, doc, docx, and txt

Due	For	Available from	Until
Nov 17, 2020	Everyone	Sep 1, 2020 at 12:01am	Nov 24, 2020 at 11:59pm

**First Iteration Rubric**

You've already rated students with this rubric. Any major changes could affect their assessment results.

Criteria	Ratings		Pts
<p>Part 1. Team github repo</p> <p>Can you (the grader) access the team github repo? If not, give zero credit for this assignment.</p>	0 pts Full Marks	0 pts No Marks	0 pts
<p>Part 3. Automated build and unit testing (10 points max)</p> <p>4 points max for the configuration of the build/package manager. 2 of these points for does it look like it will indeed automate build or packaging of the team's application or service? 2 of these points for does it look like it will indeed invoke automated testing?</p> <p>6 points max for the unit test cases. Does each method, other than constructors, etc., have at least one automated test case? Take off 1 point for each major method that does not have at least one test case, up to 6. For example, if there are 7 methods without test cases, this part is still graded 0, not -1. If the project has less than 6 major methods, ask the instructor to look at it.</p>	10 to >0.0 pts Full Marks	0 pts No Marks	10 pts
<p>Part 4. Style checker and bug finder (10 points max)</p> <p>4 points max for the style checker. Is there at least one clean (no errors) style checking report in the repo that appears to be from the latest version of the code (before the deadline for this assignment)? It seems inconceivable that it would not be possible to fix all style errors, but if this comes up, ask the instructor to look at it.</p> <p>6 points max for the bug finder. Is there at least one clean (no errors) bug finder report in the repo that appears to be from the latest version of the code (before the deadline for this assignment)? Or, if the latest bug finder report still reports errors, is there a plausible written explanation about the difficulty finding/fixing these errors and/or a plausible explanation as to why the reported errors are false positives?</p>	10 to >0.0 pts Full Marks	0 pts No Marks	10 pts
<p>Part 2. User stories and Acceptance testing (20 points max)</p> <p>Give 0 for this part if no user stories are given.</p> <p>12 points max for there should be acceptance tests for each user story (the user stories given in this report, not necessarily the same as the revised proposal). There should be at least one test with valid input and at least one test with invalid input. If a user story could not possibly involve invalid inputs, that should be explained. Take off 2 points for each user story without a valid test case and two points for each user story without an invalid test case or explanation, up to 12 points off (i.e., 0 for this portion of the 20 points total). This is to account for 3 to 5 user stories, e.g., if there are 5 user stories and none of them have any acceptance test cases, this part would be 0 out of 12, not -8 out of 12.</p>	20 to >0.0 pts Full Marks	0 pts No Marks	20 pts

Criteria	Ratings		Pts
8 points max for the discussion of the acceptance testing process and bugs found/fixed. 0 out of 8 if this discussion is missing, prorate partial credit among the user stories covered or not covered by this discussion.			
			Total Points: 40