CS585 Software Verification and Validation
Research Assignment - xUnit

Due Date
Monday, February 2, 2015

Score
20

Directions

In this assignment, you will be doing some research on an existing programming language (not Java), and learn the key features of the language, particularly the test or unit test related features, tools, and practices.

You will be giving a 10-15 mins presentation to demonstrate what you found.

You will work in teams (2 students per team). Please form the team as soon as possible, and make your language selection at: http://goo.gl/LqzuWJ . Feel free to choose other languages you are interested in. Here is a list of languages for your reference:
http://en.wikipedia.org/wiki/List_of_unit_testing_frameworks

The requirements of this research assignment are:

1. The presentation should mainly contain coding demos, rather than textual slides. Of course, it would be good to have a few slides to summarize the key points.
2. You should talk about the key features of this language, or anything interesting and special about this language. For instance, Python uses indentation to determine the blocks; R is heavily applied in statistics. Basically, just tell us anything you feel new about this language.
3. You should have the associated IDE installed and be able to run the programs and demonstrate these features. For instance, you will definitely need Microsoft Visual Studio to run C# code.
4. You do not need to write your own programs. You can simply copy and paste some sample code to illustrate and explain these features.
5. In order to make it practical, you should also talk about the key applications/areas/companies that apply this language heavily.
6. For testing, you should research and learn what kind of testing approaches, tools, practices are available for that language. Then, demonstrate the tests with concrete running code. Again, we would like to see live coding and running stuff, rather than boring bullets and texts.
7. We do not have explicit requirements on the content. Basically anything related with testing about that language is acceptable.

8. Make your presentation and demo fun and interesting.
9. The presentation should be 10-15 mins, and both members should join and do it together.

We probably cannot finish all the presentations within one day. In order to be fair, I will not let you know the order of the presentation, which means that every team should be ready on Monday.