Survey on Programming Attitudes   **EECS 268 Programming 2**

This survey is designed to evaluate your programming experience and your perceptions and use of testing and design practices.

KUID
What is your KU ID? _____

Approach Used
What approach did you use on the projects completed in class so far?

	Test-First	Test-Last	Neither
Project 1 (array-based DriverTable)	_____	_____	_____
Project 2 (linked-list DriverTable)	_____	_____	_____
Project 3 (grammar)	_____	_____	_____

Confidence of Software Quality
I am confident that the code I wrote for Project 1 and 2 is correct.
__ strongly agree
__ agree
__ somewhat agree
__ neither agree or disagree
__ somewhat disagree
__ disagree

Confidence of Software Changes
I am confident that I could make changes to the code I wrote for Project 1 and 2 without breaking things.
__ strongly agree
__ agree
__ somewhat agree
__ neither agree or disagree
__ somewhat disagree
__ disagree

Confidence of Software Reuse
I am confident that I could reuse the code I wrote for Project 1 and 2 in another future project.
__ strongly agree
__ agree
__ somewhat agree
__ neither agree or disagree
__ somewhat disagree
__ disagree

Attitude Towards Testing
How important is it to test computer programs that you have written?
__ not important, I never make mistakes
__ not important, my projects are only for a grade in the class
__ somewhat important, so I do a little bit of testing
__ important; I try to test my programs if I still have time before the deadline
__ very important; a project is not done until it is thoroughly tested

Test Timing
When do you think is the best time to write tests for your programs?
__ never
__ after I think the entire program is complete
__ after I think an important portion of the program is complete (such as a class)
__ after I think a small portion of the program is complete (such as a single function)
__ before I have written any code
__ before I have written a new important portion of the program (such as a class), but
     after I have tested other code that is finished
__ before I have written a new small portion of the program (such as a single function),
     but after I have tested other code that is finished

Automated Testing Use
Did you write automated tests for the programs in Project 1 and 2?
__ yes, all the time
__ yes, but only some of the time
__ yes, I tried it once
__ no, all my testing was done by hand (run program and look at output or use debugger)

Automated Testing Frameworks
I think it is a good idea to write automated unit tests with assert() statements.
__ strongly agree
__ agree
__ somewhat agree
__ neither agree or disagree
__ somewhat disagree
__ disagree

Attitude Toward Design
How important is it to design computer programs before they are written?
__ not important, it works fine to just start programming and not think about the design
__ not important, it works fine to develop the design as the code is written
__ somewhat important, it is a good idea to do a little bit of design before writing code
__ important; it is good to design most of a program before writing code
__ very important; never start programming until a thorough design is complete

Design Techniques

What do you think is the best approach to design a program?

__ Don't design, just write code
__ Use visual models like the UML or flowcharts
__ Sketch the design in code with class declarations before writing function definitions
__ Write out the design in natural language
__ Use a combination of visual models and natural language
__ Let the design evolve as the code is written; document the design with visual models and/or natural language
__ Let the design evolve as the code is written; the code is the design documentation

Attitude Towards Test-First Programming

Test-first programming is the practice by which an automated test case is written before the code is implemented. The implemented code is written to pass the test case. The design of the system emerges as the programmer repeatedly writes tests, then writes the code to make the test pass, then improves both the code and tests in short rapid iterations.

What is your opinion of test-first programming?

__ I don't think it would ever work
__ I think it might be a good approach on small projects
__ I think it might be a good approach on projects where programmers have a lot of programming experience
__ I think it might be a good approach on projects where programmers understand the domain well
__ I think it might be a good approach on any project

Attitude Towards Test-Last Programming

Test-last programming is the practice by which a test case is written after the code is implemented. The design of the system is usually developed at least partially before any code is written.

What is your opinion of test-last programming?

__ I don't think it would ever work
__ I think it might be a good approach on small projects
__ I think it might be a good approach on projects where programmers have a lot of programming experience
__ I think it might be a good approach on projects where programmers understand the domain well
__ I think it might be a good approach on any project

Perception of Test-First and Test-Last Programming

Regardless of the approach you used, which approach do you think produces code with fewer defects, test-first or test-last?

__ test-first
__ test-last

Perception of Test-First and Test-Last Programming
Regardless of the approach you used, which approach do you think produces code that is simpler, more reusable, and more maintainable, test-first or test-last?
__ test-first
__ test-last

Perception of Test-First and Test-Last Programming
Regardless of the approach you used, which approach do you think produces a correct solution in less time, test-first or test-last?
__ test-first
__ test-last

Perception of Test-First and Test-Last Programming
Regardless of the approach you used, do you think you are more likely to thoroughly test a program with the test-first or the test-last approach?
__ test-first
__ test-last

Perception of Test-First and Test-Last Programming
Regardless of the approach you used, for the course project you just completed, which do you think was the best approach, test-first or test-last?
__ test-first
__ test-last

Why?

Choosing Between Test-First and Test-Last Programming
If you had a choice of writing code with a test-first or test-last approach, which would you choose?
__ test-first
__ test-last

Why?

Additional Comments
Is there anything else related to this study that you would like to comment on that we have missed or that you would like to add?