CSIS 658
Software Testing and Maintenance

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Course Description

Catalog Description

An introduction to the concepts and methods associated with software testing and maintenance. Testing topics to include: testing as part of the requirements for engineering and software design, test plan writing and static and dynamic testing. Maintenance topics to include: an overview of corrective, adaptive, perfective and preventive maintenance activities as well as organizational managerial issues.
Note that the book learning (theoretical) will not always match up with the assignments (practice).

**Major Theoretical Sections of this Course**

- Testing Characteristics: Sensitivity, Redundancy, etc...
- Techniques: loops, models, flow, etc..
- Types of test: Unit, functional, integration, system, etc...
- Process: automation, regression, etc..
Course Outline

Practice

- Git
- Maven
- Cobertura
- JUnit
- Sonar
- Jenkins
- How to take the data and generate a meaningful report!
- Test Driven Development
About the Professor

- Full-time Professor CofC
- Part-time at SPAWAR LANT (USNavy/USMC Civilian)
- Acquired PhD from FSU August 2010 in Computer Architecture
- Recently offered job from Google
- Originally from San Antonio, Texas.
- Most of my interests are in Computer Architecture, Compilers, and Multiprocessing.
Class Introductions

Quick Introductions

- Name
- Have you programmed in Industry/Government?
- What test tools did you use?
Go over Syllabus.
Attendance

- I am required to take attendance.