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.

Course Outline

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?

Syllabus

Go over Syllabus.

Additional Information

Attendance

- I am required to take attendance.