CS 590/492: Software Testing

Homework/Assignment-1

Answer the following Questions for each testing technique [10*10=100 Points]

- 1. Define/Describe [2 points]
- 2. Explain the testing method with the help of an example code/case study [2 Points]
- 3. Pros/Cons (advantage/disadvantages) [4 points]
- 4. Which applications use the testing technique [kind of applications, web/ embedded. etc.] and why[justify]? [2 Points]
 - 1. Automation Testing
 - 2. Data flow Testing
 - 3. Model Based Testing
 - 4. Mutation Testing
 - 5. User Interface(UI)Testing
 - 6. Integration Testing
 - 7. Grammar-based testing
 - 8. Regression Testing
 - 9. Stress Testing
 - 10. Performance Testing

Submission: Blackboard (online)

Assignment/Homework Type: Individual (not group/team work) and Open book

Submission Type: PDF document (all questions in one file)

Due Date: 10:00 PM, 2/17/2022

Note:

- 1. You can use any material [google/books/paper/journals]
- 2. However, you can't copy\paste [plagiarism] from any source directly. The reference Materials need to be rewritten or paraphrased based on your understanding and context: Including code examples/case study
- 3. Code Examples can be written in any programming language of your choice.

[Extra credit/ Bonus] [20 Points]

Explain below components in a research/term paper [with any examples from your understanding after reading model papers from google scholar/any source]

- Title
- Abstract (problem vs solution)
- Introduction
- Related work/History
- Proposed Problem vs solution
- Results
- Future Work
- References