*Nova Southeastern University*

*College of Engineering and Computing*

*Fall 2019 - Master Level Course*

*CISC 680 - Software Engineering - CRN – 21741*

*Term Code: Fall 2019 (202020) Course*

*Dates: 08/19/2019 - 12/08/2019 – On Line*

Assignment 1 (Question set 1)

See Syllabus for assignment % and Calendar for Due date

Your document for this assignment will be submitted to Canvas (Assignment 1) in one of the following file formats: ASCII, MS Word, or PDF

**You must give detailed answers to receive full credit, usually ½ - 1 page per question**

Answer all of the following questions

1. How does software differ from the artifacts produced by other engineering disciplines? Give examples.

Software offers a dual role of being a product and the vehicle for delivering a product. As a product, it provides computing potential and is an information transformer. Transforming data that could be binary or multimedia in nature. As a vehicle it acts as a control, creation, and communication of a computer. The artifact produced different from other engineering principals is the most important product of our time, information.

1. Explain what is wrong with the notion that computer software does not need to evolve over time?

In software engineering change is natural so we should not try to fight it. Not only should software evolve to meet the needs of new computing environments, but should also be enhanced to implement new business requirements. It is said that the goal of modern software engineering is to devise methodologies that are founded on the notion of evolution.

1. Why has the Personal Software Process not been widely adopted by industry?

The personal software process has not been widely adopted by the industry because the process for one project might be significantly different than a process adopted for another project. This could be such topics as the overall flow of activities, actions, and tasks. Manner in which project tracking and control activities are applied. As well as the degree in which quality assurance activities are applied.19

4. Why are evolutionary models considered by many to be the best approach to software development in a modern context? 45

5. What are the benefits of using analysis patterns during the analysis modeling process? 117,157

6. Describe the contents of the WebApp content, functional, interaction, and configuration models? 9,273

7. Explain how a process specification (PSPEC) differs from a control specification

(CSPEC)? gucci

8. How does the object-oriented view of component-level design differ from the traditional view? gucci

9. List four interface design issues present in the development of most user interfaces, explain how and when they are used?

10. Describe practices that enable designers to think about using patterns?

11. What are three dimensions of software quality, how and when are they used?

12. Why is regression testing an important part of any integration testing procedure?

13. Describe object-oriented unit testing, why and when is it used and give an example?

14. List four types of systems tests, the purpose of each and how they can be applied to real world software development process?

15. What are the key differences between validation testing goals and acceptance testing goals, give an example of when one would be used over the other?