

Problem Set:

How much time do you spend every day on social media sites like Instagram, Vine, or Facebook? Probably more than you think! One of the requirements of this course is for you to spend a little of your social media time enhancing your career by keeping up on new technologies and trends.

Once each month (a total of six times across the semester), you must identify and share an article on something relevant to the course; e.g., Agile Methods, Scrum, Extreme Programming, Continuous Integration, or DevOps. You may choose any relevant article from any relevant site, including:

- <http://dzone.com> (Links to an external site.) (Links to an external site.)
- <https://www.oreilly.com/topics/software-engineering> (Links to an external site.) (Links to an external site.)
- <http://www.martinfowler.com/> (Links to an external site.) (Links to an external site.)
- <http://scrum.org> (Links to an external site.) (Links to an external site.)
- <https://devops.com/> (Links to an external site.) (Links to an external site.)
- <https://www.scrum.org/resources/blog/> (Links to an external site.) (Links to an external site.)

Include the following in the document of your submission:

1. URL: The URL of the article
2. Description: A one-paragraph synopsis of the article, including conclusions. You must describe the article in your own words. Don't cut and paste from the article.
3. Recommendation: Do you recommend this article? Why?

Solution:

URL - <https://www.guru99.com/test-driven-development>

Description – TDD is a software development methodology in which test cases are created to define and validate what the code will accomplish. To put it another way, test cases for each capability are generated and tested first, and if the test fails, new code is produced to pass the test, resulting in code that is simple and bug-free. Designing and writing tests for each minor functionality of an application is the first step in Test-Driven Development. Only write new code if an automated test fails, according to the TDD methodology. This prevents code duplication. TDD stands for Test-Driven Development. Test-driven development is the process of creating and executing automated tests prior to the application's real development. As a result, TDD is also known as Test First Development.

This example is very simple, to test `hello_world()` works properly using python.

```
import unittest

class MyFirstTests(unittest.TestCase):
    def test_hello(self):
        self.assertEqual(hello_world(), 'hello world')

    def hello_world():
        Pass
```

Recommendation – Despite its simplicity, the example teaches us the fundamentals of TDD. I believe it is beneficial to our understanding of TDD.