**SSW 555 Agile Methods for Software Development**

**Quiz 5: Pair Programming**

**Name: Mrunal Phadke**

**-------------------------------------------------------------------------------------------------------------**

**1. Describe 2 of the myths of pair programming and explain why each is not true.**

**Answer:**

* It will take twice as long.

No, it may actually reduce the time. Two programmers are working on developing the code, thus it may lead to a better quality code as one can code and one can keep a watch whether the other is doing it correctly. This, in turn may reduce the amount of time of testing the code as it would have fewer bugs and less refactoring.

* I’ll never get to work alone.

It’s not like you will spend 100% of your time doing pair programming. Simple programming tasks can be done alone by individuals and they can decide to work on complex coding modules in pairs. Also, by simply observing how senior people code, you will get to learn a lot more that learning yourself.

* It is only good for training.

Pair programming is a great way of knowledge transfer. Even after your learning phase is complete, there are many different factors you can learn, such as thinking in a structured way, designing optimal design patterns, coding styles, efficiency, finesse in implementing the designs. Also you are much more accountable when you work in pairs.

**2. What is pair pressure? Why does it help?**

**Answer:**

* When you are working in pairs, both programmers have a pressure in mind of completing some modules.
* Simply the presence of another can draw us out of our tired or disgruntled mood and cause us to get to work. We just don’t want to let the person next to us down.
* Two people working together in a pair treat their shared time as more valuable. They tend to cut phone calls short; they don't check e-mail messages or favorite Web pages; they don't waste each other’s time.
* As two heads are engaged in a more complex task, the time they spent working is more valuable and they are focused on getting things done as both are utilizing each other’s time. Thus, they are more accountable to each other.

**3. What is pair courage? Why does it help?**

* Pair Courage is courage that one gains because of having someone by side to seek help and affirmations or feedbacks from.
* Courage because of simply another’s presence is applicable to any situations but it proves as a morale builder when you are involved in solving complex tasks.
* Having a partner is a tremendous courage builder. You can say to each other, “Does this look right to you?” Getting affirmation from our partner gives us the confidence to do things we might be afraid to do alone or that we might simply avoid and never do.
* It helps to builds morale and use time effectively. It may also result in better quality codes.
* Also it may help to admit when we don’t know something. When two people don't know something, there is a joint realization that it is time to seek help.

**4. What is pair debugging? Why does it help?**

**Answer:**

* Debugging is twice as hard as writing the code in the first place. Therefore, if you write the code as cleverly as possible, you are, by definition, not smart enough to debug it." — Brian Kernighan (co-inventor of the C programming language).
* Sometimes when you are presented a problem, you immediately start working on it and then realize that you were thinking in the wrong direction or your understanding of the problem was totally wrong.
* On the other hand, when you describe a problem to someone you get it cleared in your mind and the brain starts working in the right direction for the solution.
* Sometimes just explaining the problem to your partner may shed a light on what's going on. The combined efforts of the pair to find the root cause after a single programmer was stuck for a long time banging his head against the metaphorical wall, are far better.
* A person will ask questions and will likely cause you to frequently explain your reasoning. The questions and answers can lead to great revelations.