

# Assignment 4 - Course 5621

Monday 22<sup>nd</sup> January, 2018

**Question 3** *Briefly compare and contrast the Git revision control system to another of your choice. Discuss features such as repository model (distributed or centralised), concurrency model, license, cost, operating system support, graphical/web interfaces, and any other major differences.*

To answer this question, I will be comparing the Git revision control system, maintained by Junio Hamano, with ClearCase, maintained by IBM Rational. ClearCase uses centralised computing meaning that it has a centralised repository model (client server model). This type of model allows users to directly interact with the server rather than cloning software for use on individual machines. In contrast, Git operates a distributed repository model.

Clear Case operates a merge or lock concurrency model while git operates a merge model. Concurrency models describe how changes to the working copy of some software are managed to prevent simultaneous edits from causing problems with data in the repository. The ClearCase license is proprietary while the Git licence is open source GNU GPL software. In terms of cost, CleaCase is Non-free as the cost of a floating license is \$4600. In contrast, Git is completely free.

ClearCase is supported on a wide range of operating systems which include Linux, Windows, AIX, Solaris, HP UX, i5/OS, OS/390, and z/OS. Git is supported on POSIX, Windows, and OS X. Both systems have stand-alone graphical user interfaces.