5. List and describe briefly three different source control software which are commonly used in the software development industry.  
  
\* Git – Open source written in a collection of Perl, C and various shell scripts. It is designed by Linus Torvalds based on the needs od the Linux Kernel project. It was first released in 2005 It uses the distributed model (each developer works directly with his or her own local repository, and changes are shared between repositories as a separate step. ) Git is decentralized and aims to be fast, flexible and robust.

\* Veracity – Open source, distributed version control software which was first released in 2010. As well as having most of the same functionality has Git it has also a bug tracking system built into it.   
  
\* Subversion – Open source and written in ANSI C and uses APR library. It is used by many known projects or websites such as SourceForge, Apache, Python, Ruby and Google Code. Subverison uses a centralized version control. (meaning only one master copy of the software is used). It can easily track changes and revert back to previous versions of code.

6. State which source-control system you will use for the Start\_Finance project and justify why you choose this system to use.

Our source control software is Git we will be having our main repository online hosted by GitHub. On our local computers we’ll be using TortoiseGit to maintain our local repository. We are using this software because it is open source, popular, cost effective and can handle our workflow.

Some benefits using Git is that because it is decentralized the project can branch off into different versions and have multiple developers working on different parts of the project at the same time which can be merged with the master version later. All changes are trackable and its easy to go back to a previous version of the code. Websites and services such as Github and software such as TortoiseGit makes the workflow very easy to use.

10. The product owner has specified that the source codes will be source controlled using Git so that the future release and maintenance can be tracked. He aims to use the Git local repository distributed for individual development and use the GitHub repository to centralise the version control of the source code. All individual development must be on the feature branches. The program codes on the feature branch must be reviewed by another developer before merging back to the master branch.

Write the workflow of the source-control procedures to complete the Start\_Finance project.

Start\_Finance is uploaded and created on Github as a Master Branch   
  
Developers who want to add features create a FEATURE BRANCH which is based from the master. They download the Git onto their local repository and create their new branch.  
  
Once a Developer has finished a feature on its branch they will commit and log the updates onto their local repository and then push it to the Github server.   
  
Another developer will review the code of the new feature and if it is acceptable merge it back into the master branch and update the master branch