**Evaluation Criteria For Jenkins – Eoin Wickens**

Ease of Installation:

* How easy is it to install each CI
  + *Jenkins is available as a download for many operating systems. It is installed locally with its own web interface running on localhost. This means that local CI servers can be ran, as opposed to Travis’s online only approach. Travis has a huge variety of configuration options which could stun a user who isn’t familiar with the setup/configuration. Using what I had learned in setting up Travis, I was able to set up a test environment quickly but deviating from that install configuration would require a lot more investigation. In this initial configuration I had selected the wrong option for build times, where it would build the project after each successful build, which lead to a looping build routine. This was quickly changed to upon git push, which I found to be a much more useful approach.*

How Intuitive is it:

* Is it GUI Based or Terminal based?
  + *Jenkins is GUI based*
* If it’s GUI based:
  + How difficult is it to navigate
    - *Jenkins is not difficult to navigate, but the amount of options can be daunting. It seems to have more of a power user approach to it than Travis which had a simpler more colourful coded based interface. Finding the details of a successful build was not as easy as it should be, and I found that a more prominent colour highlight (e.g. green instead of blue) to tell if the build passed or failed would have been useful.*
    - Does it have a lot of sub-menus?
      * *Jenkins interface is quite simple despite the initial configuration of the environment/project. After investigating the different features of Jenkins, I found that there were very few sub-menus, asides from in the project configuration, which there were many.*
    - If you make a mistake how easy is it to revert?
  + Does it cause visual overload?
    - Quite the contrary, there is a vast amount of open space in this CI which leaves you feeling like there is some sub menu you are not seeing.
  + How is the look and feel?
    - The look is bare but functional, there is no fancy GUI graphics or transitions, but in the configuration window for the project there is a large amount of options, which gives the impression that this is a power users CI.
* If it’s Terminal based
  + Are the commands well documented?
  + Are the commands verbose?
  + Are the parameters clear and understandable?

Is it well documented:

* Do all the functions of the CI have relevant documentation?
  + In the configuration window of the project there is little (?) tooltips on each of the many options. This is extremely helpful to a novice user, providing adequate information for each individual option.
* Is the documentation comprehensive?
  + The documentation is quite comprehensive,
* Is the documentation useful?
* Is each piece of documentation easy to understand?

How quick is it to build and test?

* *Jenkins is quite quick to build and test, with the console logs of each build showing a completion time of around 2 seconds. In the 20 minutes that I had left my computer, with the setting “Trigger build upon build completion” turned on, I had over 340 builds performed.*

Is it open or closed source?

* *Jenkins is Open Source, meaning that its source code can be freely redistributed, modified and is available for anyone to use.*

What are the system requirements:

* Does it require much memory?
  + *Through watching the Task Managers active processes during a Jenkins build, Jenkins does not use that much memory. The most memory that is used at one time is for the Java runtime environment used when testing the build.*
* Does it require much disk space?
  + *The windows version of Jenkins used approximately 117MB while in a Zip container, however, when installed on the operating system Jenkins used approximately 233MB of free space.*
* What operating systems does it support
  + *Jenkins supports a host of operating systems, supporting \*nix systems, Mac OS X, and Windows.*
* Can it be hosted locally?
  + *Yes, Jenkins is available as a download for multiple operating systems, and once set up it runs as a web service accessible*
* Can it be hosted remotely?
  + *Yes, Jenkins can be hosted remotely, as Jenkins is distributed as a server package it can be installed on a local or remote server, with a web based front end for users to access and configure the build environment.*

How well does it scale?

* Does it work well for small scale projects?
  + *Jenkins doesn’t scale incredibly well for small projects, as the setup and configuration required for a project is longer and more arduous than other CI’s.*
* Does it work well for large scale projects?
  + *For more large-scale projects with more runtime environment requirements, Jenkins is perfectly suited due to its incredible customizability.*