ACS 567 - Software Project Management

Spring 2009 - Kalyan Govindu

SWEBOK Knowledge Area : Software Engineering Tools and Methods

Focus:

SWEBOK defines this knowledge area as tools that automate repetitive tasks. I believe this should apply to anything that one would do on a computer, I mean is that not the purpose of a computer? In this case of the tools that we are referring help automate common tasks that all developers have to do and regular basis. This will free up some time for the developer to concentrate on other tasks at hand.

Major Steps:

There are no major steps here, besides the identification of the right tools for the project team and building a process to ensure the proper and consistent usage.

According to SWEBOK, Software engineering tools can be classified in to Software requirements tools (requirement modeling and requirements traceability tools), Software design tools, Software Construction Tools (Program editors, compilers, code generator, interpreter, debugger tools), Software testing tools (Test generators, Test execution frameworks, Test evaluation, Test management, Performance analysis tools), Software maintenance tools (comprehension and reengineering tools), Software configuration management tools (problems tracking tools, etc), Software Engineering management tools (Risk planning tools, etc), Software engineering process tools, Software quality tools and other miscellaneous tools.

Experience:

In my experience, the definition of such tools extends a little beyond automating repetitive tasks to tools that increase the efficiency of daily tasks. I use ANT build

scripts to do several things for me from backups to regular disk-cleanup runs. Some common example in software development could be the process to commit changed code and tagging it. Having this automated, would ensure that code is checked in properly and consistently.