

ACS 567 - Software Project Management

Spring 2009 - Kalyan Govindu

SWEBOK Knowledge Area : Software Construction

Focus:

This knowledge area refers to the creation of meaningful software, through a combination of coding, verification, unit testing, integration testing and debugging. Per SWEBOK, this stage of software development produces the highest amount of configuration items that need to be managed in any given project. This is a big bucket that touches or effects in some fashion all of the other stages of a software development.

Major Steps:

The requirements that were gathered earlier are analyzed here. The software specification is a step of precisely describing the software to be written, possibly in a rigorous way. Some say that a any successful specification step is meant to fine-tune applications that were already well developed.

Implementation and testing are possibly the logical next steps, where in the developer or software engineer actually write code to satisfy the requirements. Testing has become a very integral part of the process in recent years. The main reason being that this is the only step that can ensure that bugs are identified early on in the process of development.

Now a days we iterative development being in focus, deployment has become a part of the development or construction phases. After each short successful iteration the product is deployed to the environment other than the development one. This facilitates that the stakeholders get an early view of what is going on in the development.

Experience:

In my experience, if all the phases that come previous to construction are completed fully, this phase development is very straight forward. In more cases than not, this phase will come its own caveats and problems so, it is best to avoid problems from other phases sneaking into this.