A Survey of the Various Software Development Life Cycles

David Banh, Chris Bengtson, Bryan Flemming, Kurt Gallagher, Curtis Kobelski and Sarah Wise
2004-2005

One of the purposes of our project is to study the various theories on software development.

Waterfall Model

The Waterfall Model is one of the most popular models to use for aspiring or new managers. One of its distinctive traits is requiring that each step of the process be finished before moving on to the next step. This allows for strict deadlines to be set. However, this model prevents deep introspective or review of the final product.

Iterative Model

The Iterative Model allows for the programmers to focus attention on each individual sub-element of the project. Programmers can develop, improve and test these elements separately. However, project managers and lead programmers must carefully watch the entire project to maintain compatibility between the various elements. One major advantage of this model is how much testing and improvement is possible in a small amount of time.



Chaos Model

The Chaos Model is a combination of all the above models and is often built upon one of the previously described models. However, as the name suggests, it contains structure and is better suited to a situation where the demands are constantly changing and not well defined on the outset. The Chaos Model involves specifically dealing with each component as projects crop up through a miniature version of one of another model. The most preferred model to be used in conjunction with the Chaos Model is the waterfall Model.

Spiral Model

The Spiral Model is most adapted towards large and complicated projects. It works best when the requirements are well-defined at the onset. Another advantage of the Spiral Model is that it allows prototypes to be developed quickly and the entire project be aborted if deemed too risky or unfeasible.