SWEN 301 Structured Methods

Assignment 1
Software Development Life Cycles: History and Future

due: midnight on Friday, 8 April 2016

This assessment will test your understanding of common process models used in software development projects, and your ability to coherently present your knowledge. The assignment is worth 30% of your overall grade for the course.

Content

Since the *Software Crisis* in the late 1960s, software engineers have created a variety of process models to structure the software development life cycle. Popular examples are the the *waterfall model* (Royce, 1970) and the *spiral model* (Boehm, 1985). Process models aim to describe the interrelationships between software development phases.

The history of process models in software engineering has been dominated by a few central themes that were considered important by researchers and practitioners for advancing software development practice. It is widely believed that these central themes will also guide the future evolution of process models.

In the assignment we ask you to

- describe the importance of using process models to guide software development,
- provide a systemic review of process models that have been proposed so far,
- compare and contrast five selected distinct process models for software development,
- identify central themes that have been considered important for evolving process models, and
- try to forecast how current process models may evolve in future.

Format

Students must use the CRPIT template provided, and essays must be 6 to 8 pages long. Essays that are submitted but that do not meet these formatting requirements may be penalised at the course coordinator's discretion.

Submission

Students must submit their completed essay by midnight on Friday, 8 April 2016. All essays must be submitted through the School's online submission system, and must be submitted as a **PDF** file. The name of the PDF file must be in the following format: *swen301_a1_200012345.pdf*, where the example student id is actually your own. Failure to follow this submission protocol will be penalised. Late submissions will also be penalised as specified in the course requirements.

Text Editors

Kile is a good LaTeX editor for *BSD/Linux and is available on our lab machines, and *OpenOffice* is also available for those who prefer a What You See Is What You Get (WYSIWYG) editor.