

The University of W.A.

The Software Process - CITS 5502

Terry Woodings & Du Huynh Second Semester, 2013

Assignment One – Characteristics of a Software Process

This assignment is worth ten marks (10% of the final mark for this unit).

The assignment report is due on Monday 19th August (office closes 4.30pm).

At this time, you should already have considered:

- A well-defined notation for describing software processes.
- A well-defined software process for your own small projects - which has been tried out.
- A draft of a taxonomy (classification) of software development processes which covers a range of methods currently available to industry and emphasises the differences between them. That is to say, it provides sufficient detail to distinguish between the various process models.

You will also need to write a short program in order to determine how well your personal process works (or where you diverge from your own process when necessary). Include (in an appendix):

- A listing of a short program developed through your personal software process.
- Some typical output from the program.
- A set of timings for producing each stage of the project (as defined in your process and accurate to the nearest minute).

For this assignment:

- Define a notation covering tasks (stages or phases), events, verification of the task, and decision points.
- Describe ten commonly used process models using your notation – include SDLC, prototyping (Spiral model), at least two Agile methods, the incremental (maintenance) model
- Also include your own process using the same notation.
- Produce a taxonomy of software development models and including your own personal software process in a hierarchical diagram or table – as discussed in workshops.
- Produce a short essay (around two pages) summarising the work and discussing what you have learnt from defining the process and taxonomy.
- What are your conclusions?