THE UNIVERSITY OF AUCKLAND
Department of Computer Science 2005

COMPSCI 732 Software Tools

ASSIGNMENT 2

Process Specification Tool

WORTH: **16.6% of final mark**
Assignment due: **5pm, 9 May 2005 (via dropbox)**
Assignment to be done individually.

1. Introduction

The aim of this assignment is to give you experience in developing a small visual modelling tool using a meta modelling approach. You will use the Pounamu meta modelling tool to develop your tool. The tool will be based on the Serendipity process modelling languages EVPL (Extended Visual Planning Language) and VEPL (Visual Event Programming Language) as described in [1].

2. Minimal requirements

The modelling tool you develop must meet the following **minimal** requirements:

- It must provide at least one view type supporting the basic modelling capabilities of EVPL. This must support all of the shape and connector types described in Fig 3 of [1].

- It must provide at least one view type supporting the basic modelling capabilities of VEPL. This must support all of the shape and connector types described in Fig 7 of [1].

- Each view type and the tool meta model must implement 2 handlers providing additional behaviour. What these handlers do is up to you, but it should be something useful in the context of EVPL of VEPL.

- The tool must be accompanied by a model demonstrating the use of the tool

I stress that these are minimal requirements only. The marks you obtain will depend heavily on how much you extend beyond these minimal requirements. Extensions could include, for example, the extra modelling features of Figs 5 and 9 of [1], or implementation of process model enactment (section 5.2).

3. Report

In addition to the tool and models, you must write a report submitted in PDF or Word format. This report must include the following:

- Your name, email address, and student id
- A brief description of what you have implemented in your tool. This should include descriptions of how much of the minimal requirements you have implemented, the handlers you have implemented, and what additional features you have implemented over and above the minimal requirements.
- A discussion of problems that you had in implementing the tool and (resulting from this) 5 suggestions for improvements to Pounamu.

If you copy what someone else has written, quote it and provide a reference and page number. If you paraphrase or summarise what some else has written, then just reference it. Plagiarism is unacceptable. Note that it is very easy for me to use a web search engine to find documents that contain key phrases.

4. Hand in

You must hand in a zip file containing:

- The tool
- The example model
- The report

6. Assessment

Assessment will be based on the quality and sophistication of the tool and models developed, and the clarity and quality of the report. All minimal requirements must be met in order to achieve a pass mark.

7. Pounamu

The 732 website (on the assignment page) provides details of how to download Pounamu. Please note the instructions about editing the run.bat file to suit your local environment.

[1] Grundy J.C. and Hosking J.G., 1998, Serendipity: Integrated Environment Support for Process Modelling, Enactment and Work Coordination, *Automated Software Engineering*, **5(1)**, pp 27 - 60