Constructing domain-specific design tools with a visual language meta-tool

Nianping Zhu, John Grundy, and John Hosking

University of Auckland

Pounamu: Maori word for greenstone jade, used by Maori to produce tools, and objects of beauty, such as jewellery.
Introduction

- Pounamu Overview
- Pounamu In Action
- Pounamu As Groupware
- Examples
- Future Work
Pounamu Overview

Specification tools
- Icon Designer
- Handler Designer
- Meta Model Designer
- View Type Designer

Using Pounamu produced tools
- Modelling views
- Model entity instances

Pounamu Produced Tool

Pounamu Tools (XML)

Pounamu Models (XML)

Pounamu Plugins

Web Services
Pounamu In Action

- Meta Model Designer

Thank you for using Pounamu
Pounamu In Action

- Visual Notation Designer – For Shapes & Connectors
Pounamu In Action

- View Type Designer
Pounamu In Action

- Using a Pounamu defined tool
Pounamu Extension

• Pounamu handler designer & plug-in interface
Pounamu As Groupware

- Peer-to-peer collaborative editing
- Web-based thin-client editing
- Editing by mobile PDA and phone
Examples

Circuit design

Web services design

Process modelling
Future Work

• The incorporation of generic sketch and voice interfaces.

• The development of a tool to visually specify event handlers.

• CSCW capability.

• Turn Pounamu into a plug-in for e.g. MSOffice or Eclipse.
References