The University of Sydney

School of Information Technologies
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COMP5348 – Enterprise-Scale Software Development **Semester 1, 2009**

Assignment 3

Group Assignment (10%) 07.05.2009

Introduction

This is the second programming assignment. The purpose of this exercise is to implement messaging and web services using Java JEE 5. We have prepared an example scenario of a mail system based on automated packet delivery machines. You find the example and its documentation as attachments to this assignment. The tutorial handout of week 9 did give a step-to-step deployment description.

Question 1: Messaging using JMS [5 points]

Extend the `MessageBox` application so that it accepts machine and box events through a JMS interface. We have provided an example machine simulator that sends JMS events to the 'jms/MessageBoxQueue' queue on the JEE server. You have to implement a corresponding functionality in the server that reacts on those external events and processes them correspondingly.

Question 2: Messaging using JMS [5 points]

Design and implement a web service front-end for the `MessageBox` application that allows an web-service client to connect to your management service and request the current status of a specific machine, respectively of its boxes etc. You are free to choose either SOAP or REST services (JEE supports best WS_* style services).
Part of that task is to design the actual web service interface with meaningful functions for a web service (3 of 5 marks on the overall service design)).

Your solution will be assessed not only whether you program compiles and can be demonstrated, but in particular on the quality of your software for introducing this message-driven back-end and for the design of the web service interface.

Submission Details

This is a group assignment that should be done in groups of 3; please use the online group signup sheet on WebCT. Your group must demonstrate your Messagebox in the tutorial in **Week 11**. Please submit the altered portions of the MessageBox code via WebCT! Note that there should be only one submission per group!

The mark awarded for your assignment is conditional on you being able to explain any of your answers to your tutor or the subject coordinator if asked. Students must retain electronic copies of their submitted assignment files and databases, as the unit coordinator may request to inspect these files before marking of an assignment is completed. If these assignment files are not made available to the unit coordinator when requested, the marking of this assignment may not proceed.

Good success!