TECHNISCHE UNIVERSITÄT MÜNCHEN
FAKULTÄT FÜR INFORMATIK
Lehrstuhl für Angewandte Informatik und Kooperative Systeme
SS 2013
Distributed applications **Practice sheet 5**
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Due date: 06.06.13

Exercise 5.1 Call semantics in distributed applications

a) Enumerate call semantics.

b) Find examples for the usage of different call semantics.

Exercise 5.2 Asynchronity in distributed applications

a) Find examples for the usage of asynchronity in distributed applications.

b) How to implement asynchronity?

Exercise 5.3 Communication in an asynchronous case - usage of callbacks

a) Your programm starts an asynchronous call to method search() of class GoogleSearchEngine in its method work() of class MainClass.

b) The results of search() ought to be passed back to your class MainClass.

c) Use a callback pattern.

d) Visualize the execution threads in your code.

Assignment 5.4 [5 Points] (H) Building a webservice mashup

In the WWW there are already a lot of webservices offered - even with no cost in non comercial use. This webservices offer valueable services in specialized domains. In joining and arrangeing them, you can built a new service. This is called to build a mashup.

Build a mashup with the following functionality: The customer enters two locations by address. The service returns the difference in elevation between the two locations.

Use Google Webservices (https://developers.google.com/maps/documentation/webservices/). (Info: As these Webservices are RESTful webservices, the requests are encoded in the url. Therefore you may use plain java with no special webservice functionality)

a) Hand in a chart, which describes your copeling of the used services and your application (UML or freehand).

b) Code your application.

c) Ensure that your mashup service answers within 5 seconds or otherwise hands back an error message.