Distributed Systems: Google App Engine session 2

Wouter Vandenputte & Jorden Belis

**GAE Exercise 3.2**

**-At which step of the workflow for booking a car reservation (create quote, collect quotes, confirm) would the indirect communication between objects or components kick in?**

At the point where the client creates a quote, a task will be started in the backend to create a quote, this task will be put into the queue and execute when possible.

**-Which kind of data is passed between both sides? Does it make sense to persist data and only pass references to that data?**

Yes, the data that is passed to the client only contains information about his reservations and whether they are succesfull or not, the data is persisted in the backend and not passed back directly to the client.

**Deployment diagram**

**Sequence diagram**

**GAE Exercise 3.3**

**-Is there a scenario in which the code to confirm the quotes is executed multiple times in parallel, resulting in a positive confirmation to both clients’ quotes?**

**-If so, can you name and illustrate one (or more) possibilities to prevent this bogus behaviour?**

**-In case your solution to the previous question limits parallelism, would a different design of the indirect communication channels help to increase parallelism? For this question, you may assume that a client will have quotes belonging to one car rental company only.**