

Engineering Complex Data Analytics Services

The goal of this mini project is to perform some engineering tasks for complex data analytics services. You are asked to design and engineer a simple complex service for data analytics and discuss your design and implementation

- 1) Take a sample of open government data OR take a small set of open sensor data.
- 2) Provision the selected data under a DaaS, e.g., by using WSO2 Data Service or using COSM. The data provisioned must be associated with some data concerns
- 3) Build a simple *data analytics Web service* that accesses the data from the DaaS and perform simple analytics (e.g., counting some events or merging some data types).
- 4) Your data analytics Web service will store analysis results together with data concerns in a public DaaS (e.g., COSM, MongoLab, Amazon, Infochimps)
- 5) When there is a new result, your data analytics Web service will send a notification to a public queuing and messaging service (e.g., StormMQ)
- 6) Build another simple data analytics Web service that receives notifications from the public queuing and messaging service and then obtains the corresponding analytics result based on data contracts/concerns for further analytics

You are expected to design and implement a prototype. You must discuss your choices of technologies. You must analyze some concerns (e.g., cost, quality) for the whole simple complex service.

The deliverable for this mini project should be in a presentation and a prototype and be given on **Wednesday 5.12.2012** to truong@dsg.tuwien.ac.at.