**Assignment: Data Lake Architecture**

In the first weeks, we have discussed Inmon’s design for data warehousing. The best practice for architecture design on data systems it to separate the integration of data from the analytical enrichment and consumption of the data. That is where the Hadoop architecture becomes a valuable environment.

This week will be an intensive study of the basic architecture of data lakes and Hadoop systems. We will explore the individual components that make up a typical data lake and discuss how they would integrate within data warehousing.

Students will prepare a two to five-page paper having two parts. First, describe the major components found within data lake and Hadoop systems and their role within the architecture. Secondly, propose a high-level design for integrating a data lake into an organization environment. What components would you find useful, and which may be optional?