

CSC 615 WEEK 1

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1. MONDAY

Introduction to Web Services. Evolution of web services from RPC systems to RMI systems; approaches to distributed object computing such as CORBA and DCOM; implementation of RPC system via client and server side proxies; the need for marshalling and unmarshalling of parameters, service description languages, and the use of application layer protocols for transport.

Introduction to SOAP based web services and RESTful web services.

2. WEDNESDAY

Pros and Cons of Binary and Text-based Serialization.

Binary Serialization in Java using `DataInput`, `DataOutput`, and `ObjectInputStream`, `ObjectOutputStream`, and the `Serialization` interface.

Text-based Serialization using XML and JSON. Use of the Java classes `XMLEncoder` and `XMLDecoder`, Java beans, and serialization / Deserialization using JAXB (Java API for XML Binding); the `JAXBContext` class and some of its methods.

The role of *reflection* in Serialization and Deserialization.