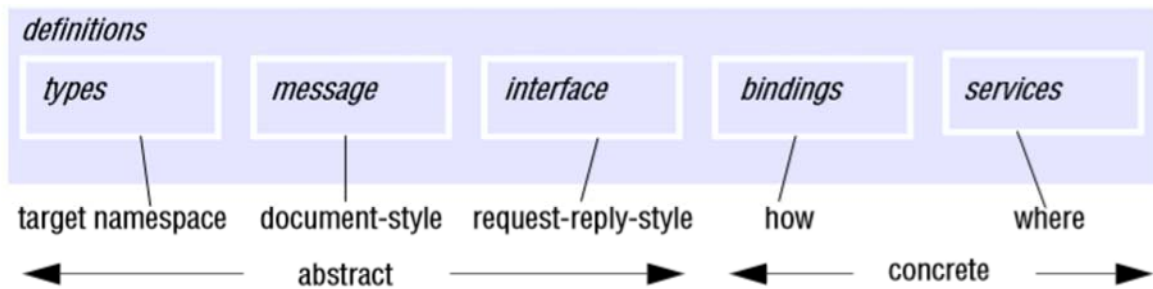# 5 Specifications of Web Services

Saturday, January 12, 2019   2:04 PM

- Service description = basis of an agreement between client and server
    - Used to generate client stubs and implement the correct behavior automatically

    - WSDL: WS Description Lang [example]
    - Separates elements into:

The main elements in a WSDL description

definitions				
types	message	interface	bindings	services
target namespace	document-style	request-reply-style	how	where

←——— abstract ———→   ←——— concrete ———→

- Definitions: root element; defines name of web service, declares the namespaces used
- Types: data types used in the message in the form of xml schemas
    - What are variables? Int, string, float etc. What are they named?
- Message: messages exchanged between the client and service, with argument mappings
- Interface: a collection of operations belonging to the web service (also called portType), with input/output message formats assigned to them

Name	Messages sent by		Delivery	Fault message
	Client	Server		
In-Out	Request	Reply		May replace Reply
In-Only	Request			No fault message
Robust In-Only	Request		Guaranteed	May be sent
Out-In	Reply	Request		May replace Reply
Out-Only		Request		No fault message
Robust Out-Only		Request	Guaranteed	May send fault

- Binding: which message formats and form of external data representations are to be used
    - SOAP, CORBA or MIME
- Services: on what URL will the service be available