

Semantic Web Services - PS 703655

Assignment 4 Web Services

Deadline: 19.04.2016 14:00

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Self grading assignment: Please upload your solution to the U2L¹ as XML file(s) in a ZIP or RAR archive and grade yourself.

1 Create a SOAP Web Service (20 points)

Use your favourite programming language and tools to create a SOAP web service based on the interface in Listing 1.

Product is a complex type that is shown in Listing 2.

To complete the assignment, please submit the following:

- WSDL document (7 points)²
- One SOAP request and one SOAP response for each operation (6 points).
- One SOAP fault: Define one exceptional situation for one operation (e.g. product not found exception for getProduct operation) and generate a SOAP fault. (7 points)

¹<http://u2l-informatik.uibk.ac.at/>

²Please submit one single WSDL document. Some tools create several partial documents and import them into a master WSDL file.)

```
public interface IProductService
{
    //returns the list of all products
    List<Product> getProductList();

    //returns the product object whose id is given
    Product getProduct(int productID);

    //returns true if the order is successful, otherwise returns false
    bool order(int productID, int quantity);
}
```

Listing 1: Interface for the web service

```
public class Product
{
    int productID ;
    string name;
    double price;
}
```

Listing 2: Product type