

Tutorial 4a

OMG

Objective

Get familiar with what the Object Modelling Group is and what they do.

Tasks

1. What is the official website for the Object Modeling Group?

<http://www.omg.org/>

2. What topics are addressed on this website?

All OMG documentation and specification, meetings and events calendar, OMG certifications and everything we need to know about Object Modeling Group.

3. Download the IDL to Java Mapping Specification.

Ok

4. Briefly describe the objective of the downloaded document

Describes the complete mapping of IDL into the Java language. Explains the syntax and semantics of using the construct from IDL to Java.

5. Describe with an example what the idl type **Module** is mapped to in Java

An IDL module is mapped to a Java package with the same name.

```
// IDL  
module Example {...}
```

```
// generated Java  
package Example;  
...
```

6. Identify the corresponding Java types for the following IDL basic types:

- boolean ⇒ boolean
- char ⇒ char
- string ⇒ java.lang.String
- short ⇒ short
- long ⇒ int
- enum ⇒ class
- operation ⇒ method

7. What is the IDL type for a Java int.

long

8. Describe with an example what the idl type **interface** is mapped to in Java

```
// IDL
module Example {
    interface Face {
        const long aLongerOne = -321;
    };
};

// generated Java
package Example;
public interface FaceOperations {
    int aLongerOne = (int) (-321L)
}
public interface Face extends FaceOperations,
    org.omg.CORBA.Object,
    org.omg.CORBA.portable.IDLEntity { }
```

9. Create an idl file that contains an example of

- Module
- Interface
- An operation which takes a parameter of type string and returns a value of type long.

10. Compile the above idl file using the idlj compiler (Note use the command: idlj -fall -oldImplBase)