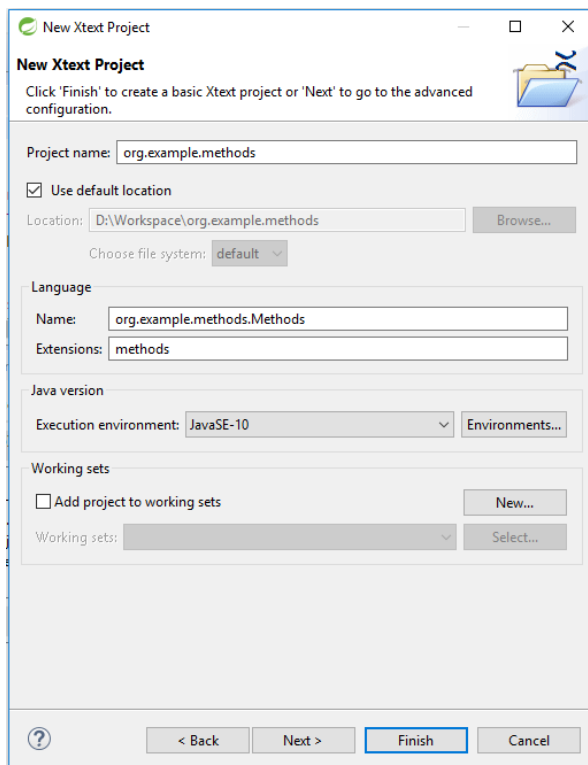




With this tutorial you can learn to create Xtext projects and write a DSL to develop your own languages.

1. Create the Project

First you have to create the project. To do this, use the information in the exercise definition. Also you can look at the picture below.



2. Write the grammar

To be able to write the grammar we look at the image in the task to find out what should be possible with it. We can see that the key words „public“, „String“, „int“, „void“ are used. They are followed by a method name which is a String and brackets. These brackets are optionally filled with a datatype and a name.

The first design can look like this:

```
'public' type=Type name=ID'('(parameter=Parameter)?')' '{'
    attributes+=Attribute*
    '}' ;
```

3. Work out

We know that we have four different datatypes: int, String, boolean and void, therefore we need also rules.

Type:

```
IntType | StringType | VoidType | BooleanType  
;
```

The next step will be the rule for the parameter. A parameter consists of type and name.

Parameter:

```
parameterType=Type parameterName=ID  
;
```

After that we need the rule vor the attributes.

Attribute:

```
attrType=Type attribute=ID ( '=' value=Value )? ';' ;
```

The entire grammar is structured according to this principle. You can view the complete solution in the file *Methods.xtext*.