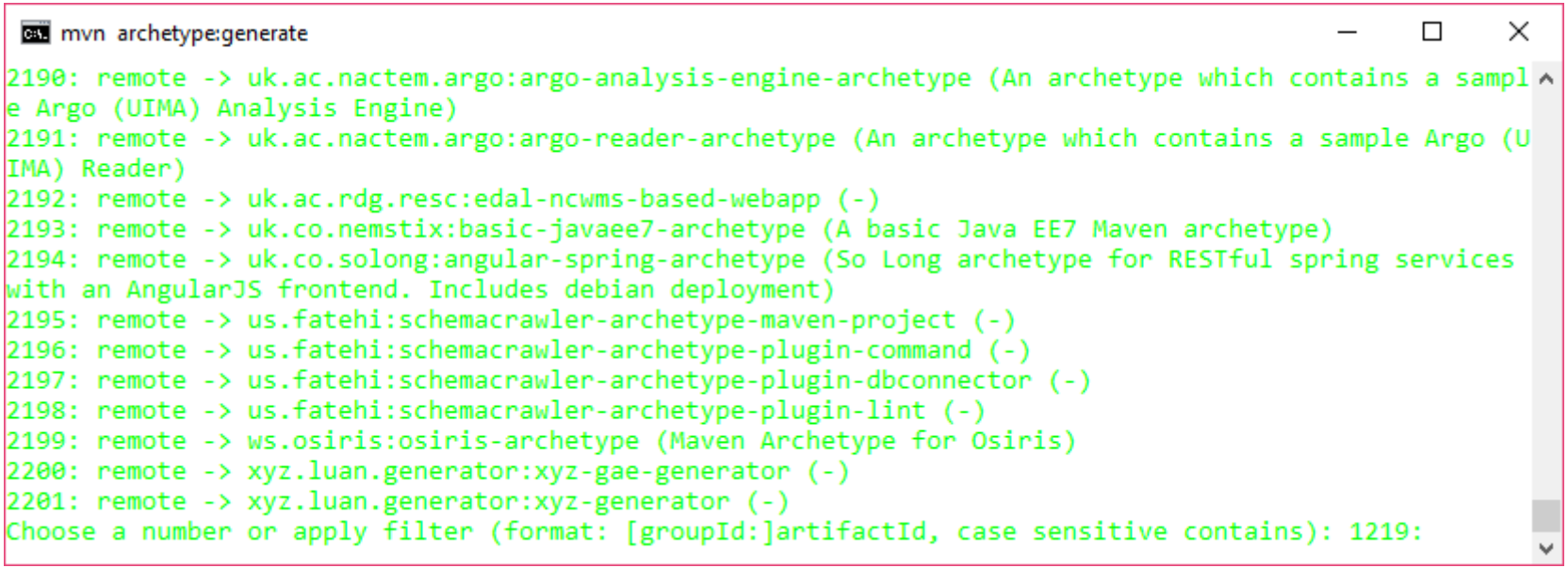
<epam>

Maven

Unit 02

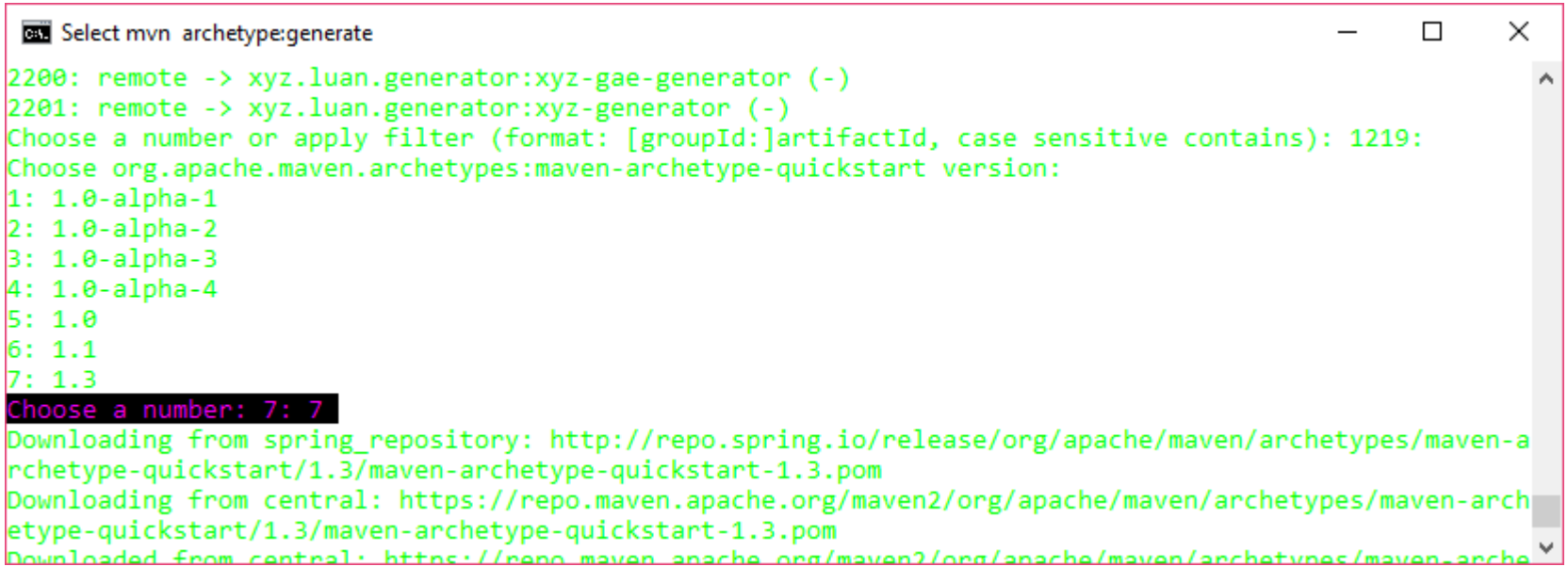
Создание maven-проектов с использованием архетипов

> mvn archetype:generate



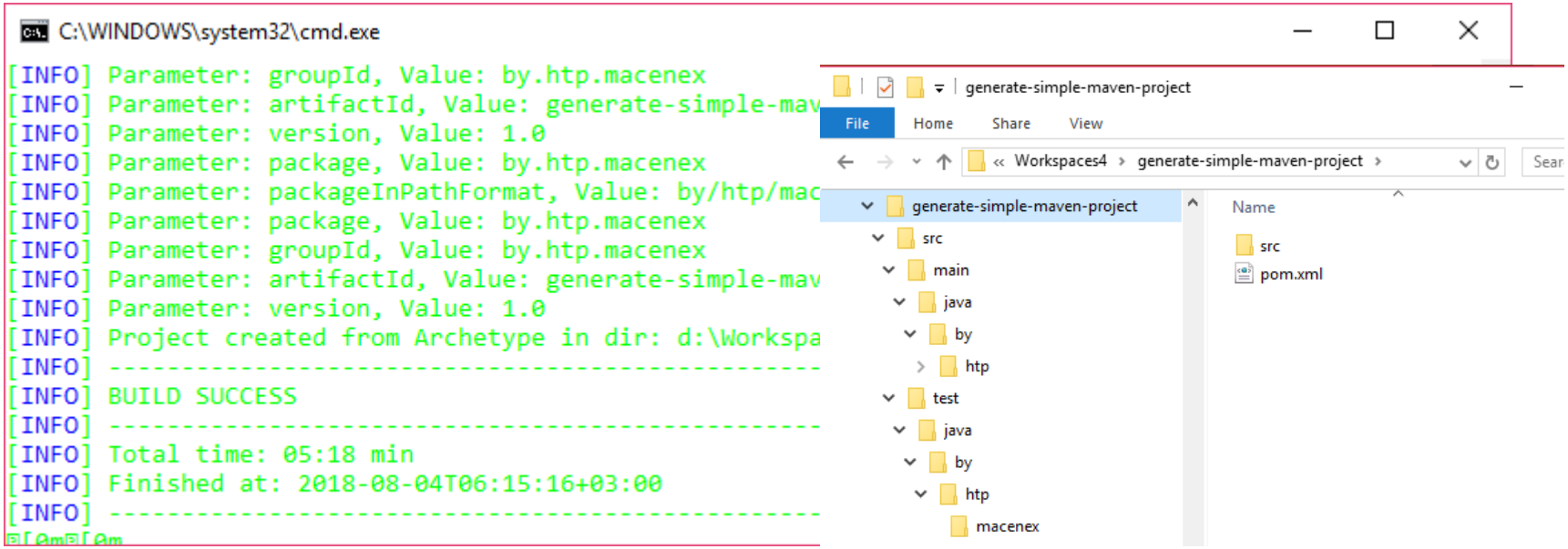
Нажмите клавишу <ввод>

Выберите версию шаблона для создания простого консольного приложения.



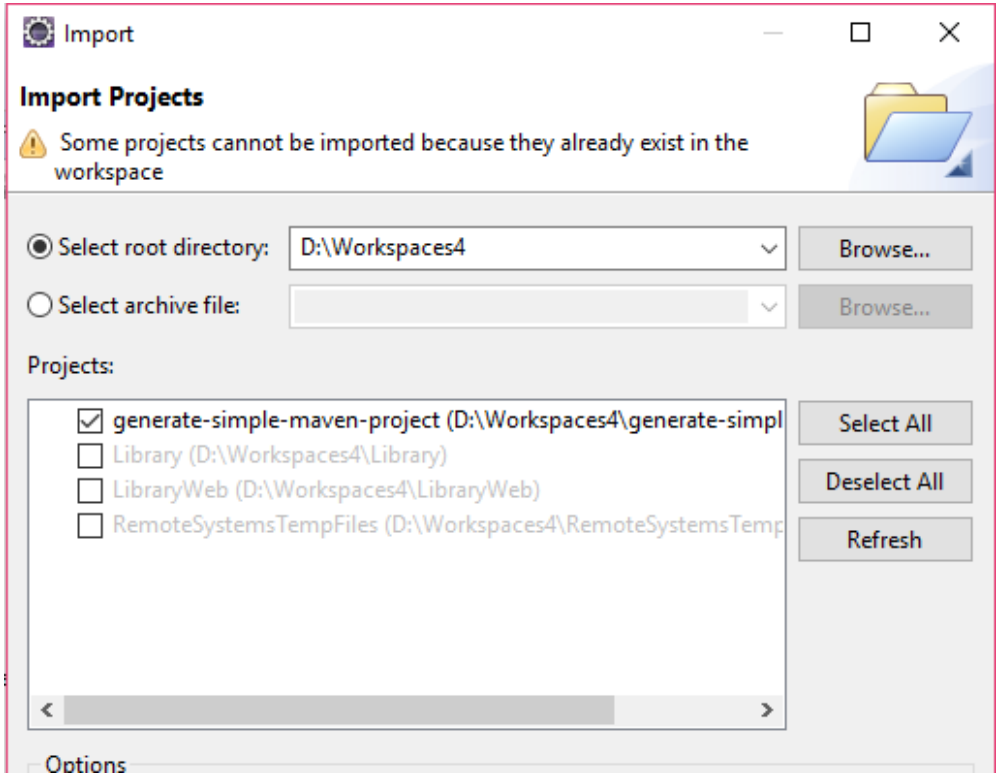
Заполните требуемые артибуты maven-проекта.

Проверьте созданный проект.



Конвертация maven-проекта в eclipse-maven-проект.

>mvn eclipse:eclipse



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Часть автосгенериро-ванного pom.xml

```xml
<?xml version="1.0" encoding="UTF-8"?>

<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>

  <groupId>by.htp.macenex</groupId>
  <artifactId>generate-simple-maven-project</artifactId>
  <version>1.0</version>

  <name>generate-simple-maven-project</name>
  <!-- FIXME change it to the project's website -->
  <url>http://www.example.com</url>

  <properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.7</maven.compiler.source>
    <maven.compiler.target>1.7</maven.compiler.target>
  </properties>

  <dependencies>
    <dependency>
      <groupId>junit</groupId>
      <artifactId>junit</artifactId>
      <version>4.11</version>
      <scope>test</scope>
    </dependency>
  </dependencies>
```

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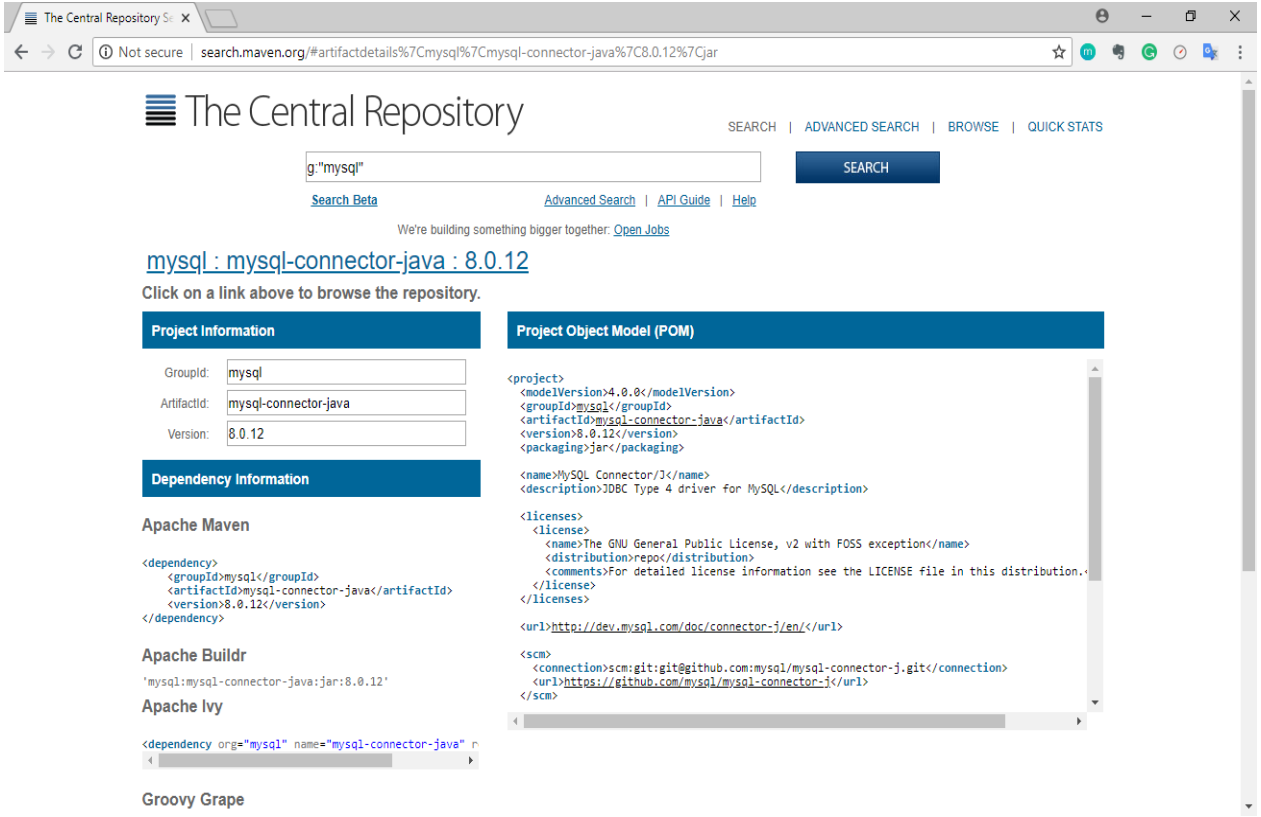
```
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <version>5.1.6</version>
</dependency>
```

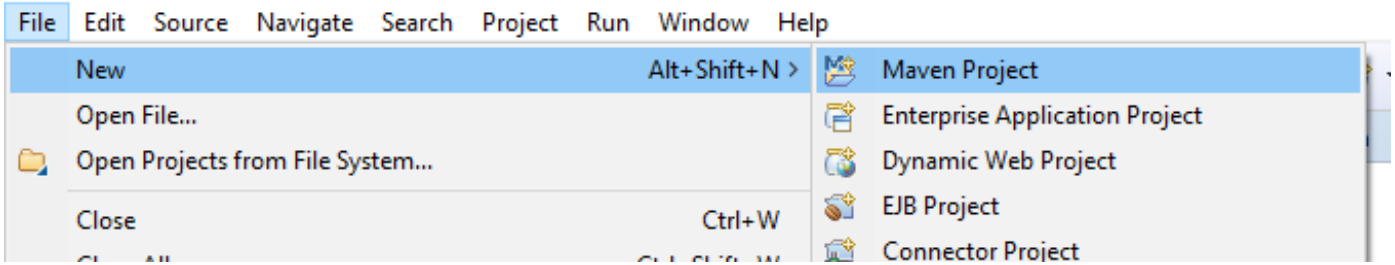
```
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;
```

```
public class App {
public static void main( String[] args ) throws SQLException,
ClassNotFoundException
    {
    Class.forName("com.mysql.jdbc.Driver");
    Connection connection =
DriverManager.getConnection("jdbc:mysql://127.0.0.1/htp",
    "root",
    "123456");
        System.out.println( "Hello World!" );
    }
}
```

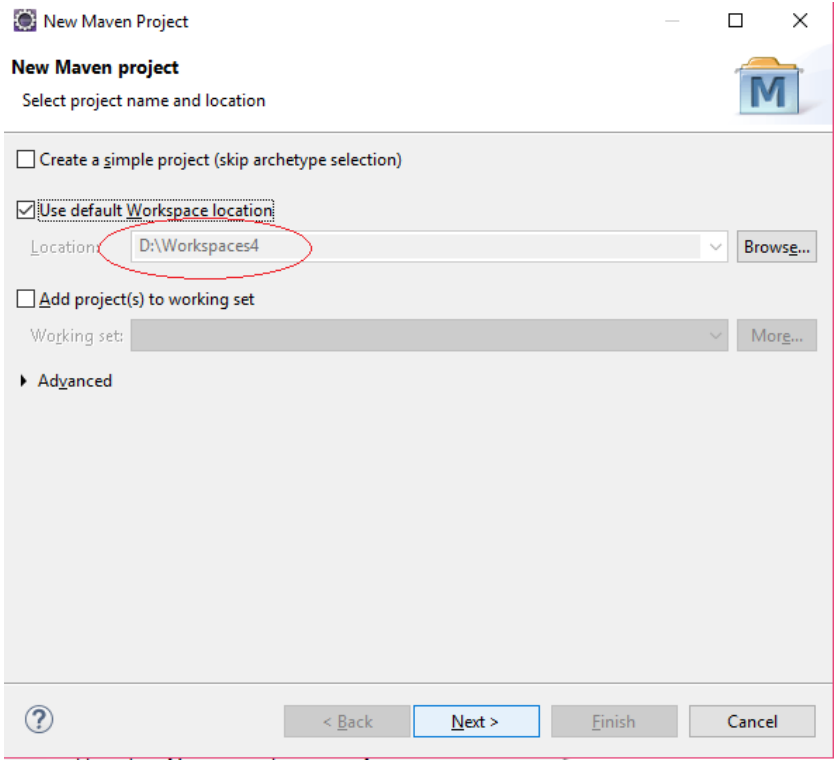
Maven. Unit 02



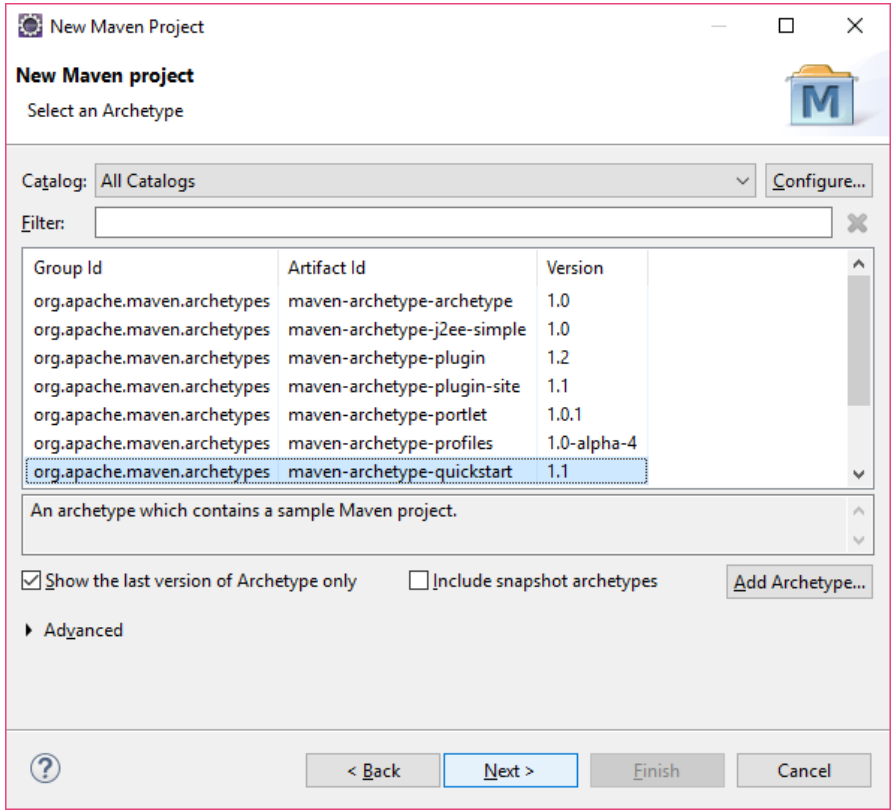
Создание maven-проета в eclipse.



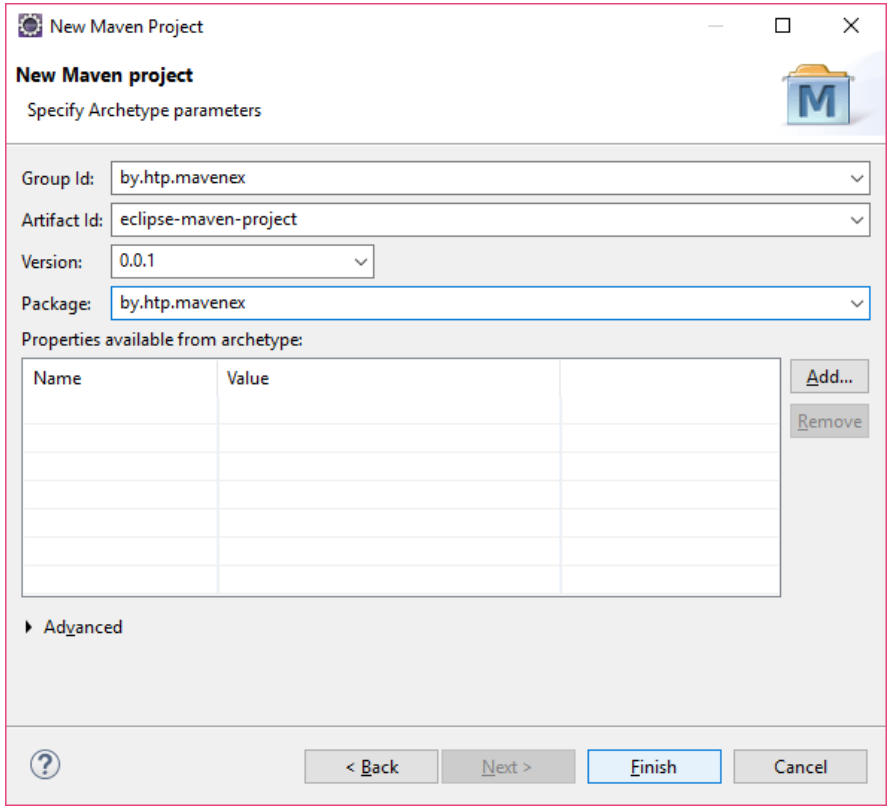
Maven. Unit 02



Maven. Unit 02

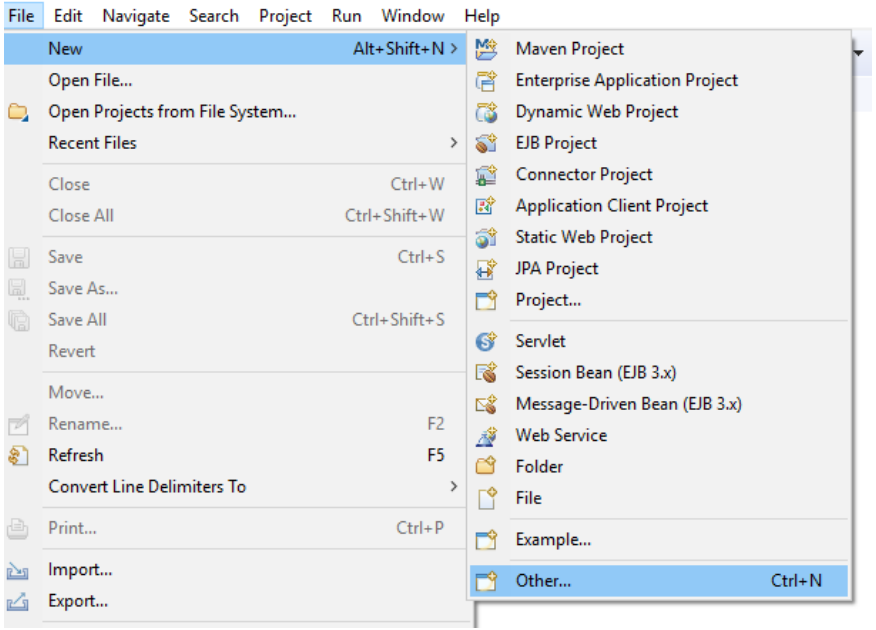


Maven. Unit 02

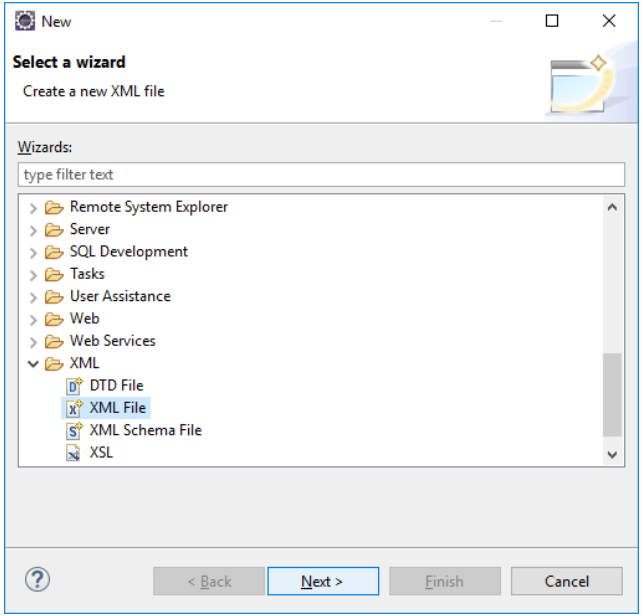


Workspaces4 - eclipse-maven-project/p
File
Edit
Source
Navigate
Search
Project Explorer
eclipse-maven-project
generate-simple-maven-project
Library
LibraryWeb

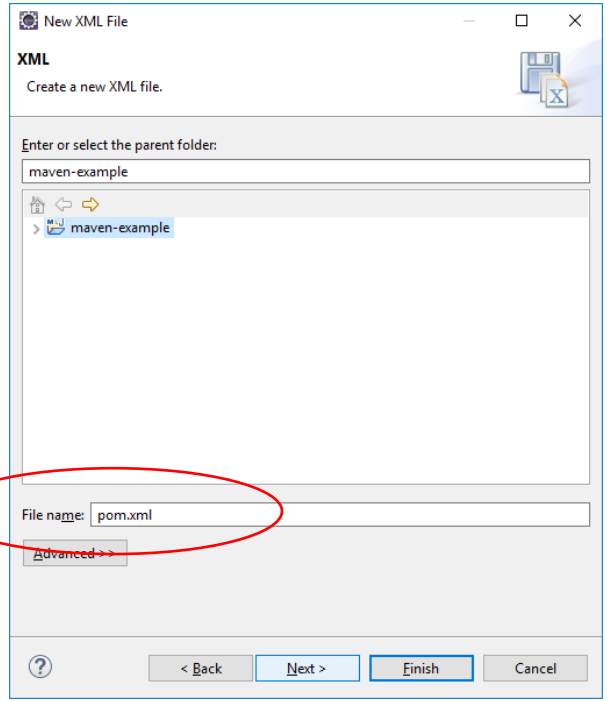
Создание pom.xml с нуля через Eclipse

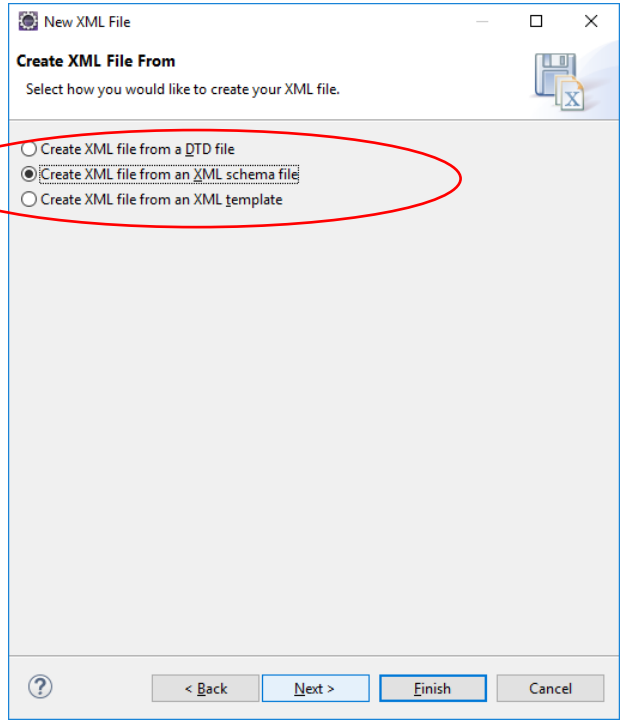


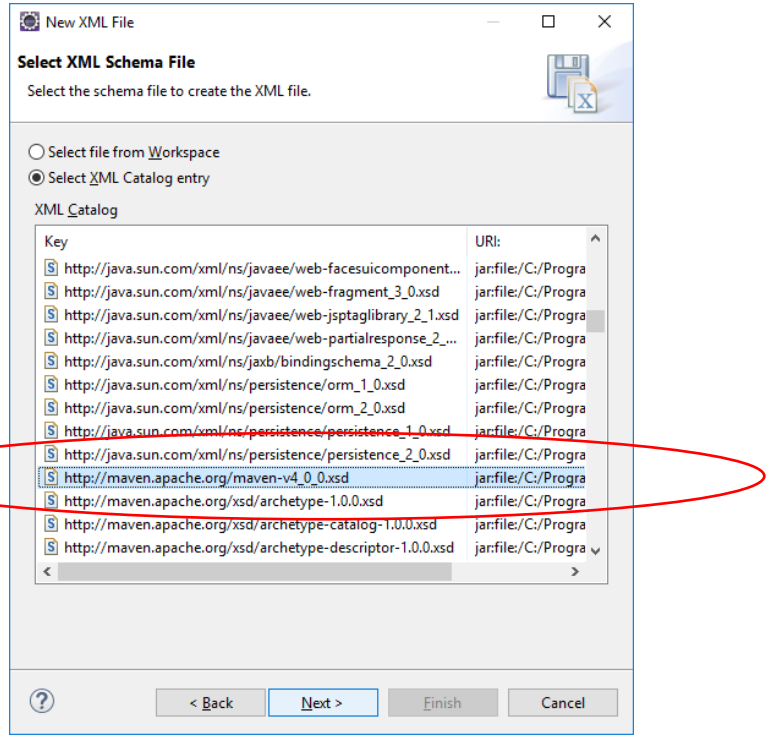
File -> New -> Other

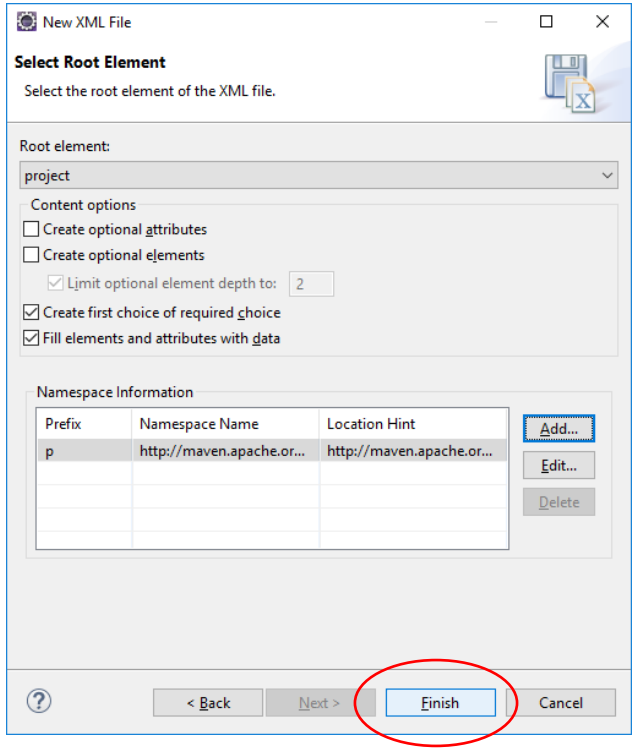


XML -> XML File -> [Next]


New XML File
XML
Create a new XML file.
Enter or select the parent folder:
maven-example
maven-example
File name: pom.xml
Advanced >>
< Back
Next >
Finish
Cancel


New XML File
Create XML File From
Select how you would like to create your XML file.
Create XML file from a DTD file
Create XML file from an XML schema file
Create XML file from an XML template
< Back
Next >
Finish
Cancel


New XML File
Select XML Schema File
Select the schema file to create the XML file.
Select file from Workspace
Select XML Catalog entry
XML Catalog
Key
URI:
http://java.sun.com/xml/ns/javaee/web-facesuicomponent...
jar:file:/C:/Progra
http://java.sun.com/xml/ns/javaee/web-fragment_3_0.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/javaee/web-jsptaglibrary_2_1.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/javaee/web-partialresponse_2_...
jar:file:/C:/Progra
http://java.sun.com/xml/ns/jaxb/bindingschema_2_0.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/persistence/orm_1_0.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/persistence/orm_2_0.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/persistence/persistence_1_0.xsd
jar:file:/C:/Progra
http://java.sun.com/xml/ns/persistence/persistence_2_0.xsd
jar:file:/C:/Progra
http://maven.apache.org/maven-v4_0_0.xsd
jar:file:/C:/Progra
http://maven.apache.org/xsd/archetype-1.0.0.xsd
jar:file:/C:/Progra
http://maven.apache.org/xsd/archetype-catalog-1.0.0.xsd
jar:file:/C:/Progra
http://maven.apache.org/xsd/archetype-descriptor-1.0.0.xsd
jar:file:/C:/Progra
< Back
Next >
Finish
Cancel


New XML File
Select Root Element
Select the root element of the XML file.
Root element:
project
Content options
Create optional attributes
Create optional elements
Limit optional element depth to:
2
Create first choice of required choice
Fill elements and attributes with data
Namespace Information
Prefix
Namespace Name
Location Hint
p
http://maven.apache.or...
http://maven.apache.or...
Add...
Edit...
Delete
< Back
Next >
Finish
Cancel

pom.xml

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <p:project xmlns:p="http://maven.apache.org/POM/4.0.0"
3      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4      xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/maven-v4_0_0.xsd ">
5
6
7
8  </p:project>
9
```

```xml
<?xml version="1.0" encoding="UTF-8"?>
<project xmlns="http://maven.apache.org/POM/4.0.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0
http://maven.apache.org/xsd/maven-4.0.0.xsd">

  <modelVersion>4.0.0</modelVersion>

  <groupId>by.htp.mavenex</groupId>
  <artifactId>maven-example</artifactId>
  <version>1.0</version>

  <name>maven-example</name>

  <url>http://www.example.com</url>
```

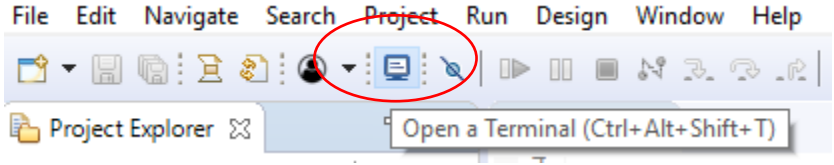
```
<properties>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  <maven.compiler.source>1.9</maven.compiler.source>
  <maven.compiler.target>1.9</maven.compiler.target>
</properties>

<licenses>
  <license>
   <name>Apache License</name>
   <comments>comments</comments>
  </license>
</licenses>

<organization>
  <name>myCompany</name>
  <url>http://mycompany.com</url>
</organization>
```

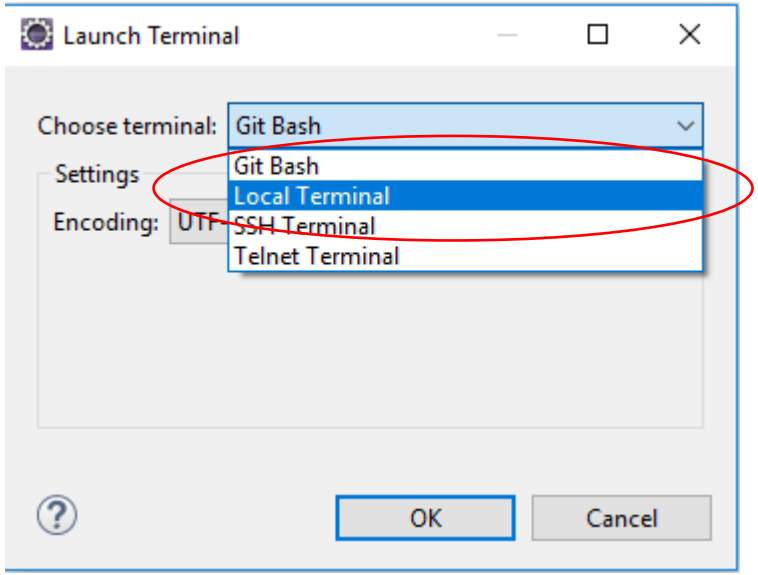
```
<developers>
  <developer>
    <name>Ivan Ivanov</name>
    <email>ivan@gmail.com</email>
   </developer>
</developers>

<dependencies>
  <dependency>
    <groupId>junit</groupId>
    <artifactId>junit</artifactId>
    <version>4.12</version>
    <scope>test</scope>
  </dependency>
</dependencies>
```

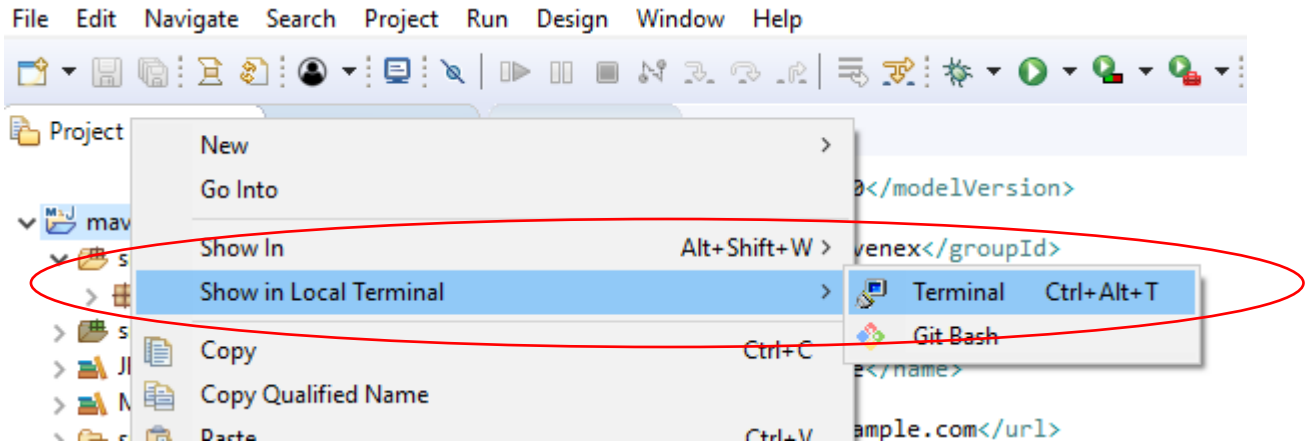
```
 <build>
    <pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to
parent pom) -->
      <plugins>
        <!-- clean lifecycle, see https://maven.apache.org/ref/current/maven-
core/lifecycles.html#clean_Lifecycle -->
        <plugin>
          <artifactId>maven-clean-plugin</artifactId>
          <version>3.1.0</version>
        </plugin>
        <!-- default lifecycle, jar packaging: see https://maven.apache.org/ref/current/maven-
core/default-bindings.html#Plugin_bindings_for_jar_packaging -->
        <plugin>
          <artifactId>maven-resources-plugin</artifactId>
          <version>3.0.2</version>
        </plugin>
        <plugin>
          <artifactId>maven-compiler-plugin</artifactId>
          <version>3.8.0</version>
        </plugin>
```

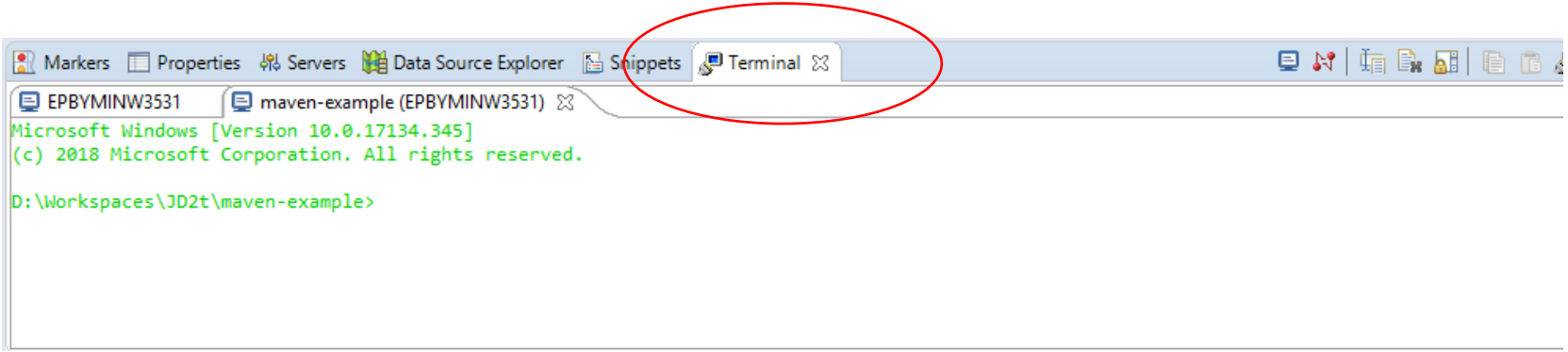
```
<plugin>
  <artifactId>maven-surefire-plugin</artifactId>
  <version>2.22.1</version>
</plugin>
<plugin>
  <artifactId>maven-jar-plugin</artifactId>
  <version>3.0.2</version>
</plugin>
<plugin>
  <artifactId>maven-install-plugin</artifactId>
  <version>2.5.2</version>
</plugin>
<plugin>
  <artifactId>maven-deploy-plugin</artifactId>
  <version>2.8.2</version>
</plugin>
```

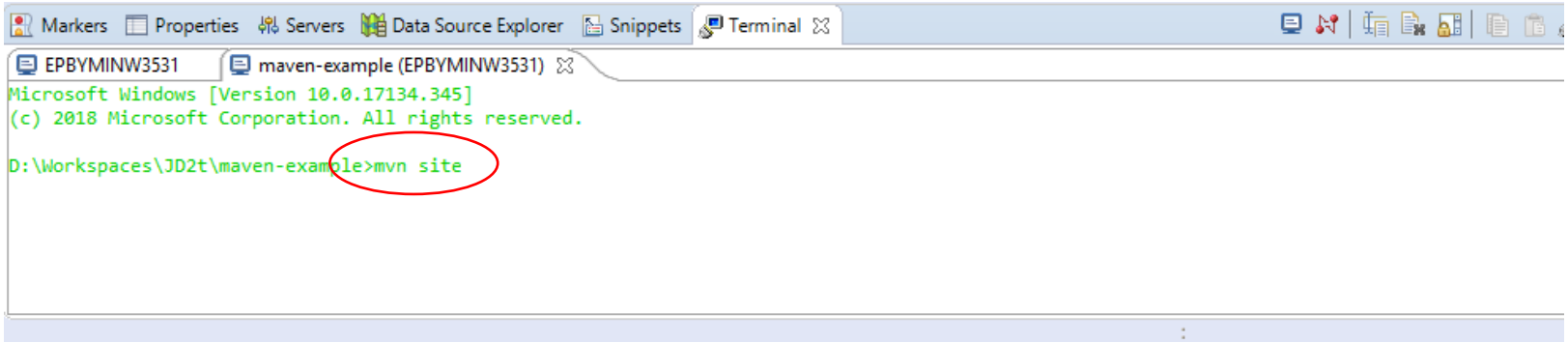
```
<!-- site lifecycle, see https://maven.apache.org/ref/current/maven-core/lifecycles.html#site_Lifecycle -->
        <plugin>
          <artifactId>maven-site-plugin</artifactId>
          <version>3.7.1</version>
        </plugin>
        <plugin>
          <artifactId>maven-project-info-reports-plugin</artifactId>
          <version>3.0.0</version>
        </plugin>
      </plugins>
    </pluginManagement>
  </build>
</project>
```

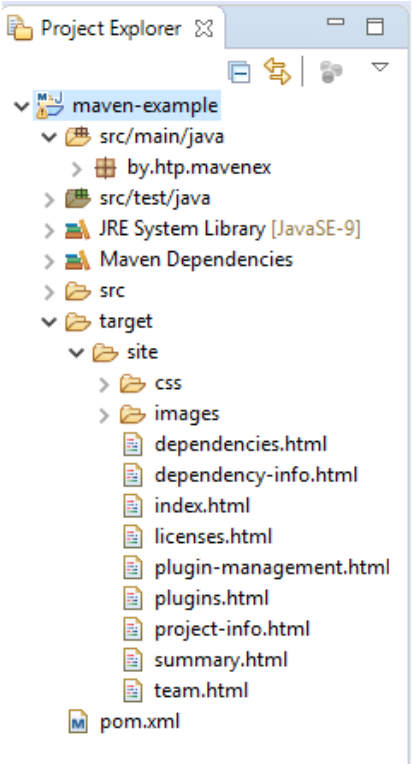

File Edit Navigate Search Project Run Design Window Help
Project Explorer
Open a Terminal (Ctrl+Alt+Shift+T)

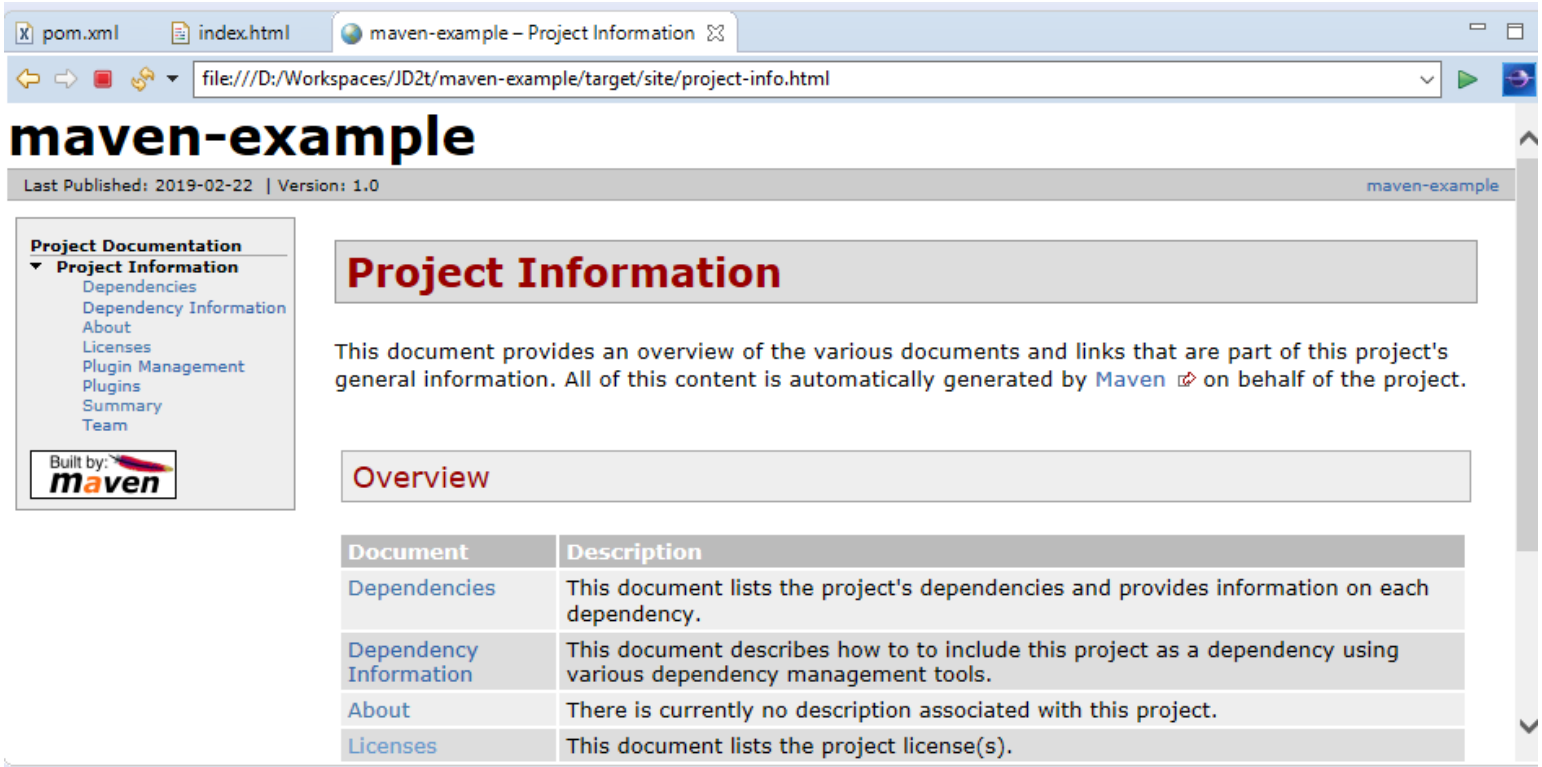

Launch Terminal
Choose terminal:
Git Bash
Settings
Encoding:
UTF-
Git Bash
Local Terminal
SSH Terminal
Telnet Terminal
OK
Cancel


File Edit Navigate Search Project Run Design Window Help
Project
New
Go Into
Show In Alt+Shift+W
Show in Local Terminal
Terminal Ctrl+Alt+T
Git Bash
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
</modelVersion>
venex</groupId>
e</name>
ample.com</url>

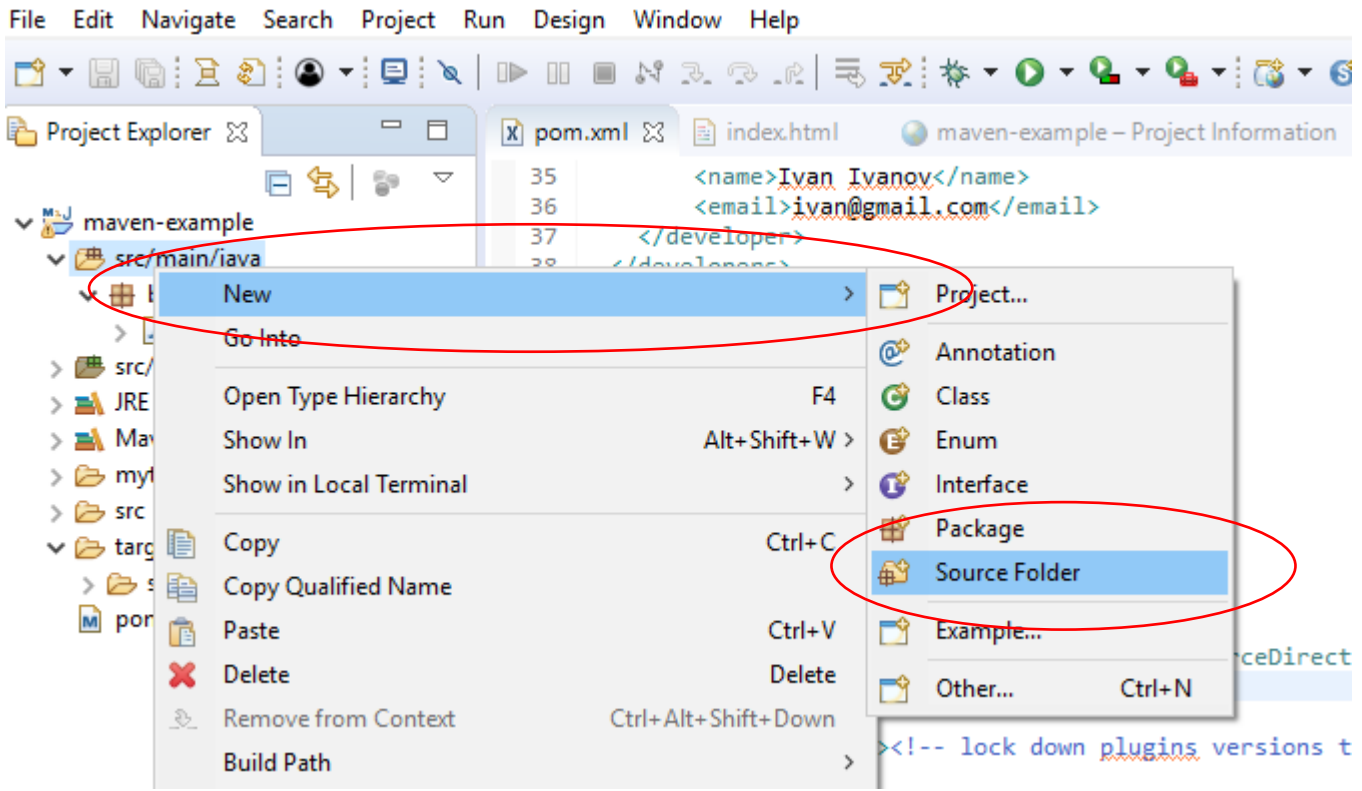

Markers
Properties
Servers
Data Source Explorer
Snippets
Terminal
EPBYMINW3531
maven-example (EPBYMINW3531)
Microsoft Windows [Version 10.0.17134.345]
(c) 2018 Microsoft Corporation. All rights reserved.
D:\Workspaces\JD2t\maven-example>

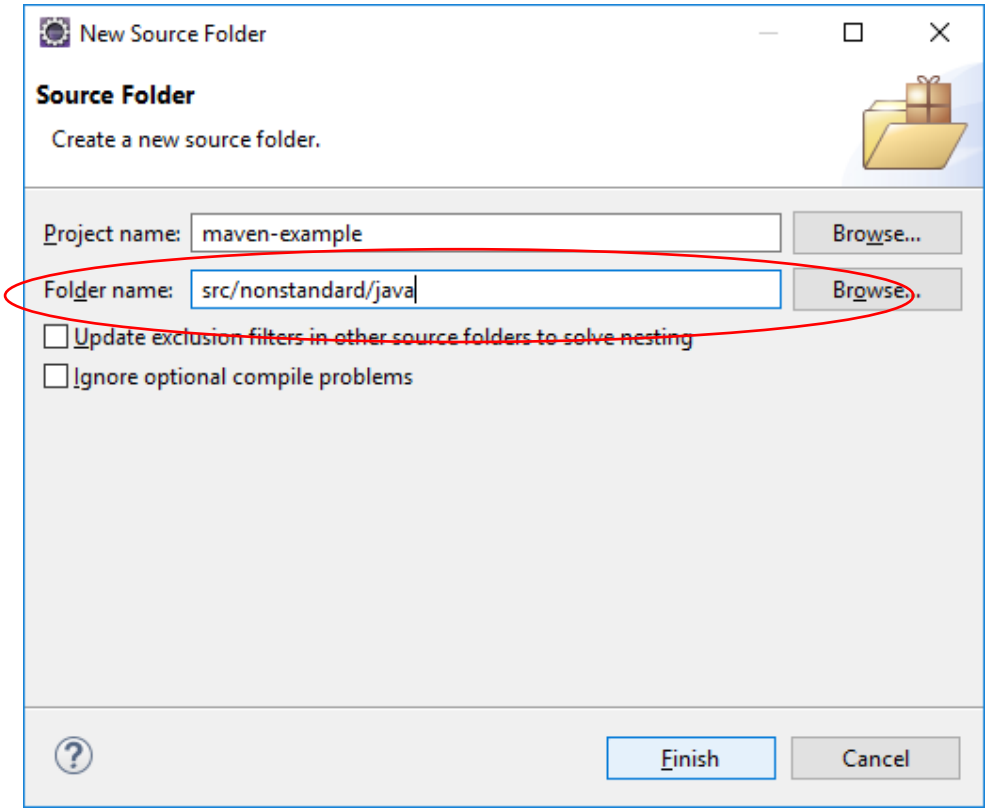

Markers
Properties
Servers
Data Source Explorer
Snippets
Terminal
EPBYMINW3531
maven-example (EPBYMINW3531)
Microsoft Windows [Version 10.0.17134.345]
(c) 2018 Microsoft Corporation. All rights reserved.
D:\Workspaces\JD2t\maven-example>mvn site

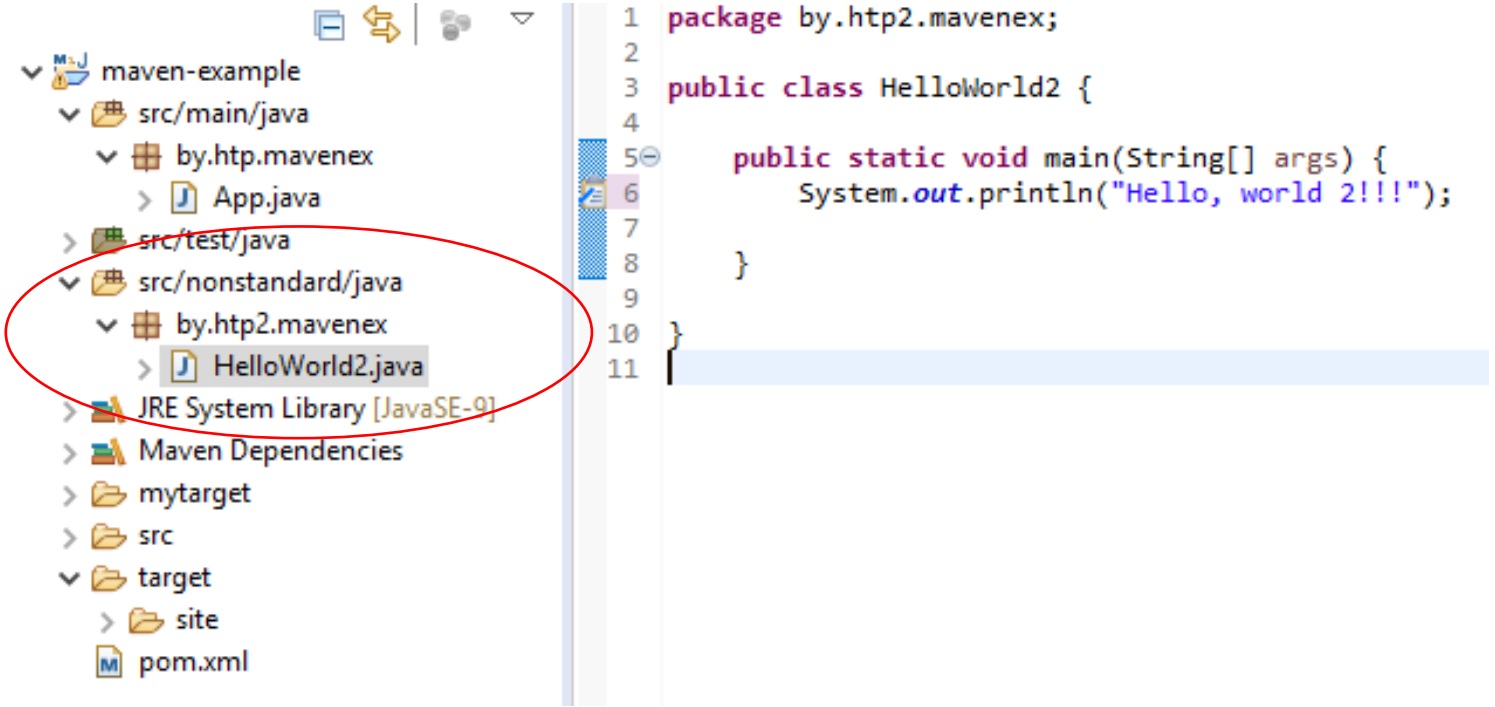

Project Explorer
maven-example
src/main/java
by.htp.mavenex
src/test/java
JRE System Library [JavaSE-9]
Maven Dependencies
src
target
site
css
images
dependencies.html
dependency-info.html
index.html
licenses.html
plugin-management.html
plugins.html
project-info.html
summary.html
team.html
pom.xml

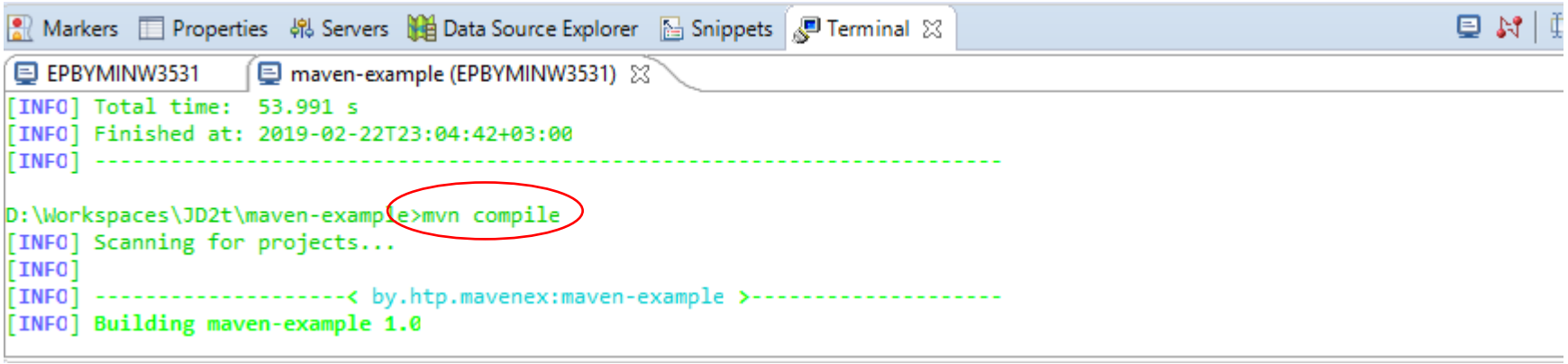

pom.xml
index.html
maven-example – Project Information
file:///D:/Workspaces/JD2t/maven-example/target/site/project-info.html
maven-example
Last Published: 2019-02-22 | Version: 1.0
maven-example
Project Documentation
Project Information
Dependencies
Dependency Information
About
Licenses
Plugin Management
Plugins
Summary
Team
Built by: maven
Project Information
This document provides an overview of the various documents and links that are part of this project's general information. All of this content is automatically generated by Maven on behalf of the project.
Overview
Document
Description
Dependencies
This document lists the project's dependencies and provides information on each dependency.
Dependency Information
This document describes how to to include this project as a dependency using various dependency management tools.
About
There is currently no description associated with this project.
Licenses
This document lists the project license(s).

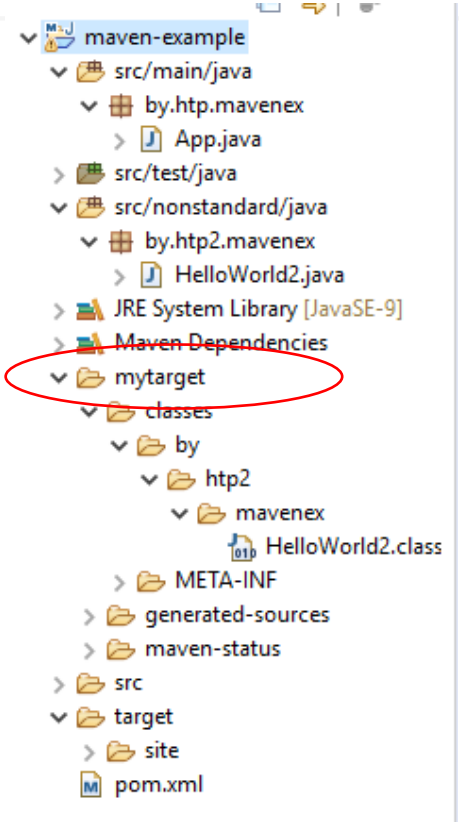
```
<build>

 <sourceDirectory>src/nonstandard/java</sourceDirectory>
 <directory>mytarget</directory>
```


File Edit Navigate Search Project Run Design Window Help
Project Explorer
pom.xml
index.html
maven-example – Project Information
<name>Ivan Ivanov</name>
<email>ivan@gmail.com</email>
</developer>
maven-example
src/main/java
New
Go Into
Open Type Hierarchy F4
Show In Alt+Shift+W
Show in Local Terminal
Copy Ctrl+C
Copy Qualified Name
Paste Ctrl+V
Delete Delete
Remove from Context Ctrl+Alt+Shift+Down
Build Path
Project...
Annotation
Class
Enum
Interface
Package
Source Folder
Example...
Other... Ctrl+N
<!-- lock down plugins versions t


New Source Folder
Source Folder
Create a new source folder.
Project name:
maven-example
Browse...
Folder name:
src/nonstandard/java
Browse...
Update exclusion filters in other source folders to solve nesting
Ignore optional compile problems
Finish
Cancel


maven-example
src/main/java
by.htp.mavenex
App.java
src/test/java
src/nonstandard/java
by.htp2.mavenex
HelloWorld2.java
JRE System Library [JavaSE-9]
Maven Dependencies
mytarget
src
target
site
pom.xml
1 package by.htp2.mavenex;
2
3 public class HelloWorld2 {
4
5 public static void main(String[] args) {
6 System.out.println("Hello, world 2!!!");
7
8 }
9
10 }
11


Markers
Properties
Servers
Data Source Explorer
Snippets
Terminal
EPBYMINW3531
maven-example (EPBYMINW3531)
[INFO] Total time: 53.991 s
[INFO] Finished at: 2019-02-22T23:04:42+03:00
[INFO] --
D:\Workspaces\JD2t\maven-example>mvn compile
[INFO] Scanning for projects...
[INFO]
[INFO] --------------------< by.htp.mavenex:maven-example >--------------------
[INFO] Building maven-example 1.0


maven-example
src/main/java
by.htp.mavenex
App.java
src/test/java
src/nonstandard/java
by.htp2.mavenex
HelloWorld2.java
JRE System Library [JavaSE-9]
Maven Dependencies
mytarget
classes
by
htp2
mavenex
HelloWorld2.class
META-INF
generated-sources
maven-status
src
target
site
pom.xml

MAVEN. UNIT 02