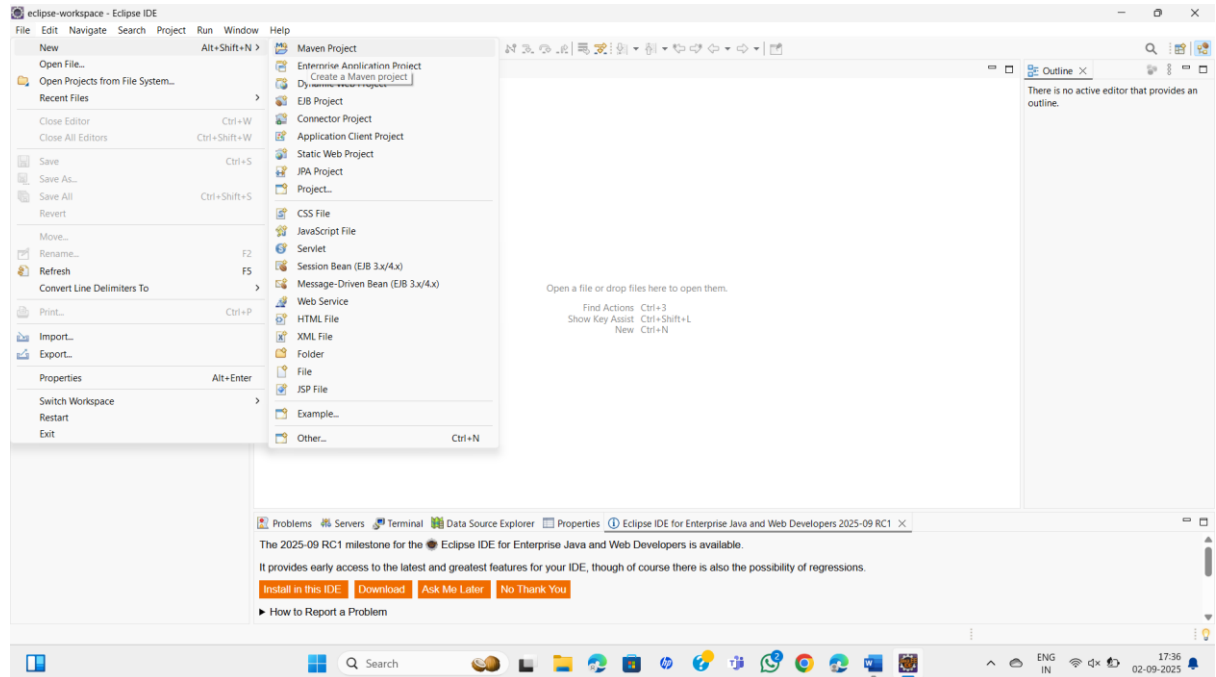
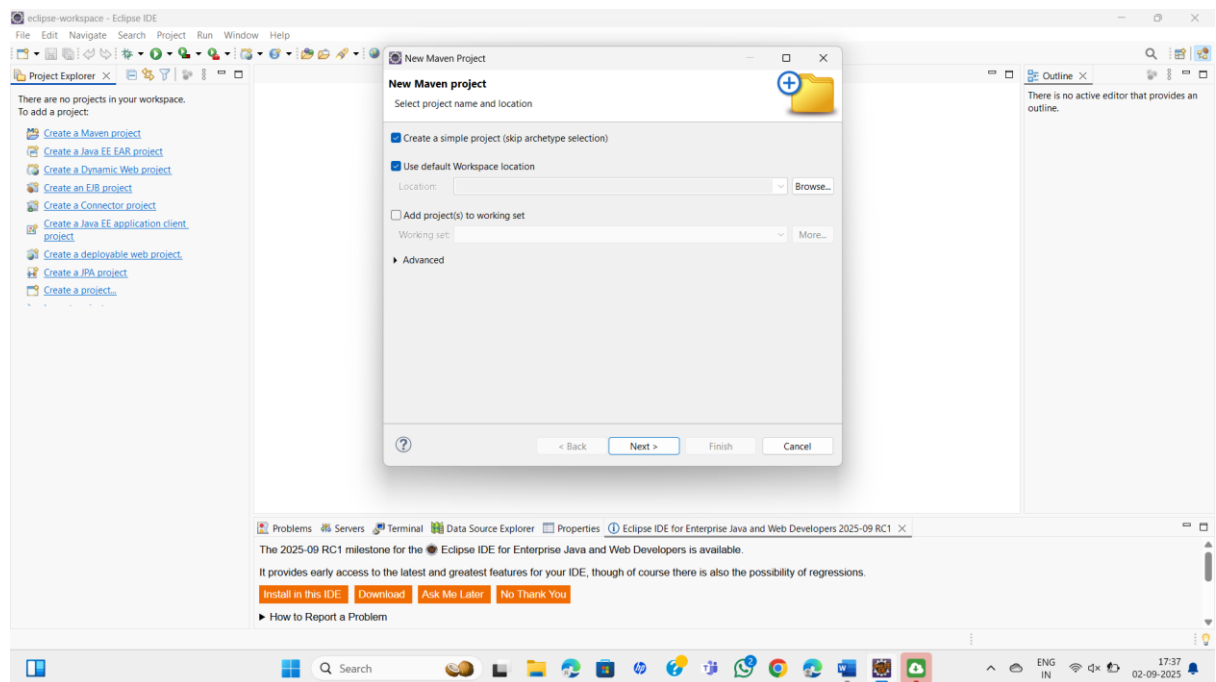


# Creating a Multi-Module Maven Project:

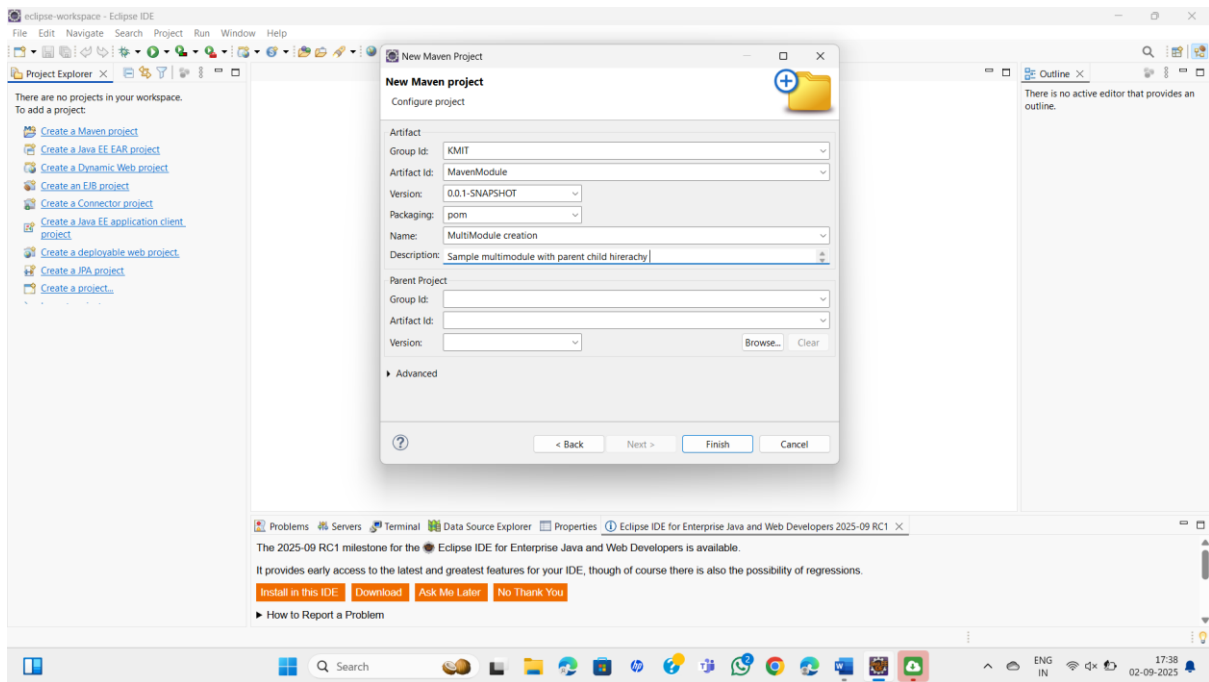
1. Open eclipse-> file-> new -> other -> Maven -> MavenProject ->click on next.



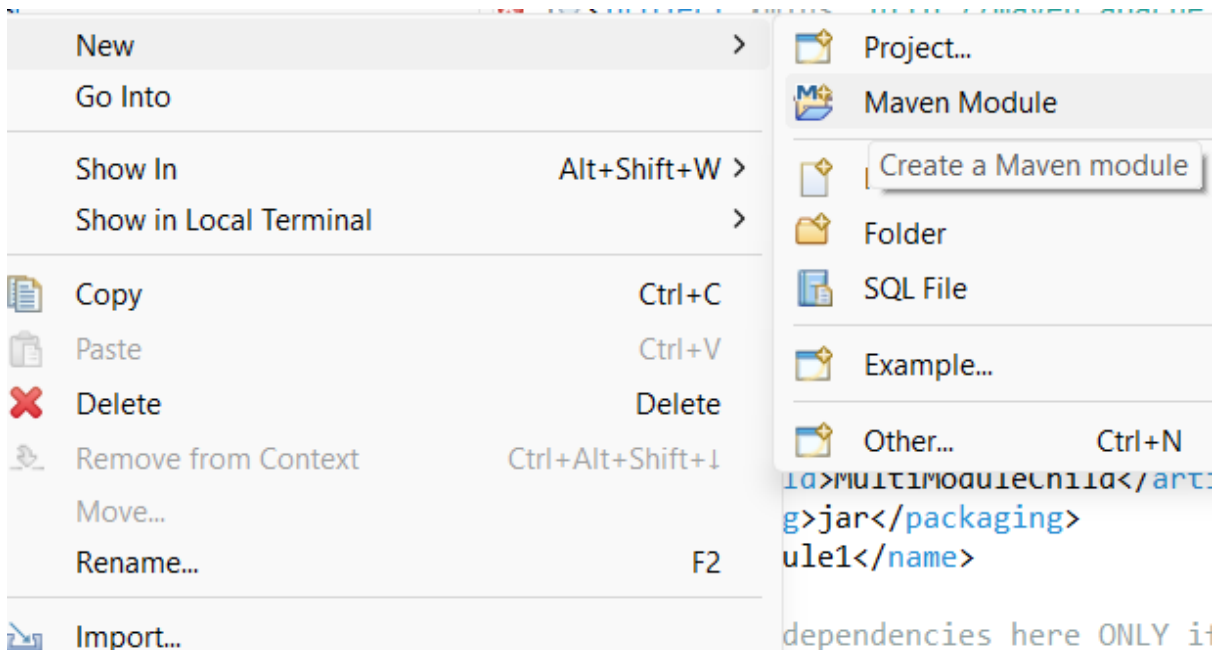
**2.Check the first option: Create a Simple project(skip archetype selection) and click on next.**



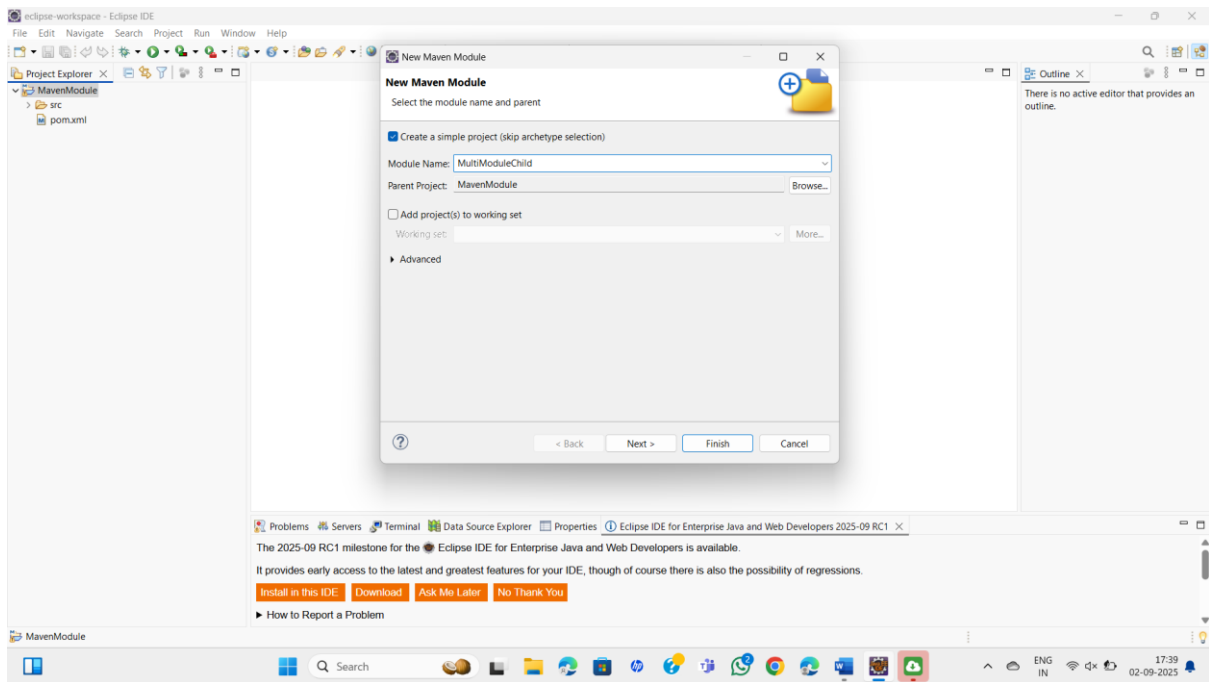
**3.Give groupId: KMIT, artifact ID: MultiModule, in the packaging tab select the drop down and opt for pom.**



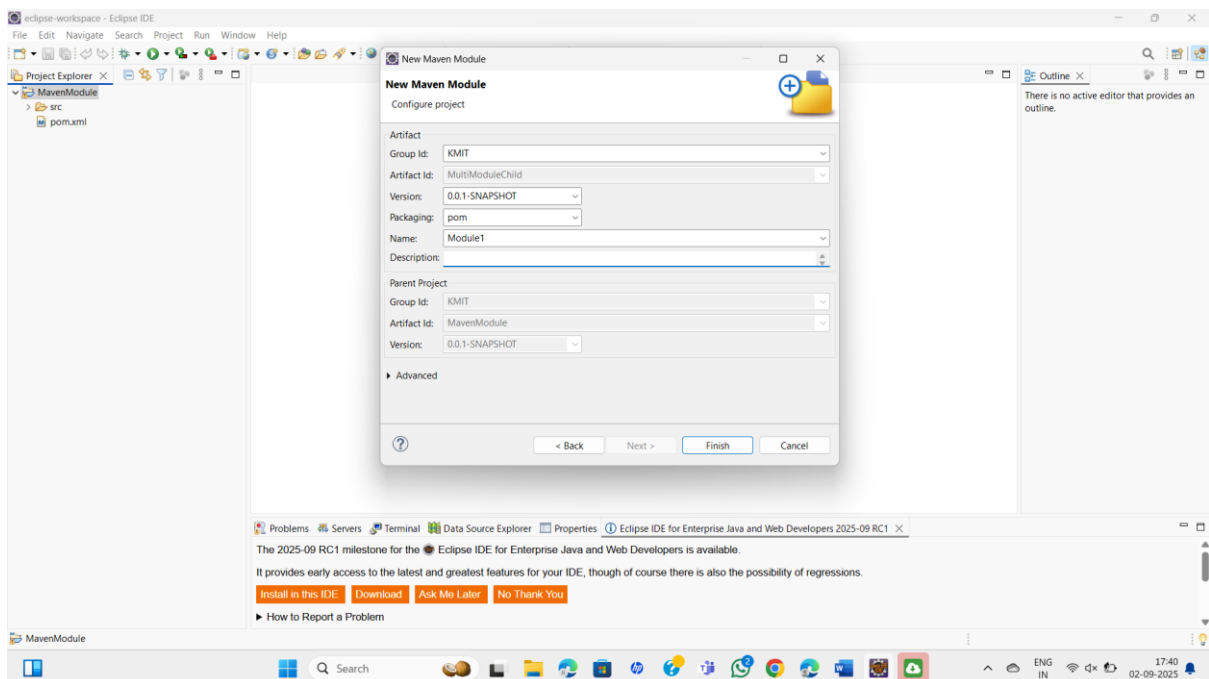
**4. Give Name: Multimodule creation and Description: Sample multimodule with parent child hierarchy and click on next.**



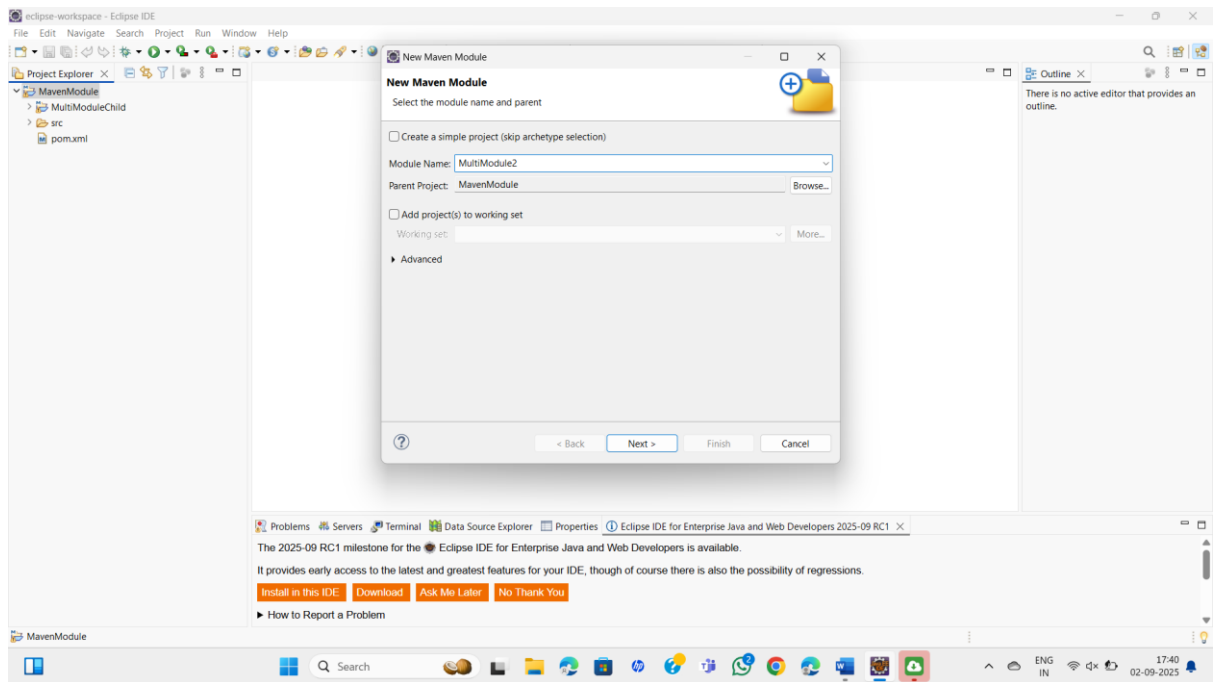
**5. Now the Multimodule folder is created and displayed in the project explorer on the left. Right click on the folder and opt new -> mavenModule**



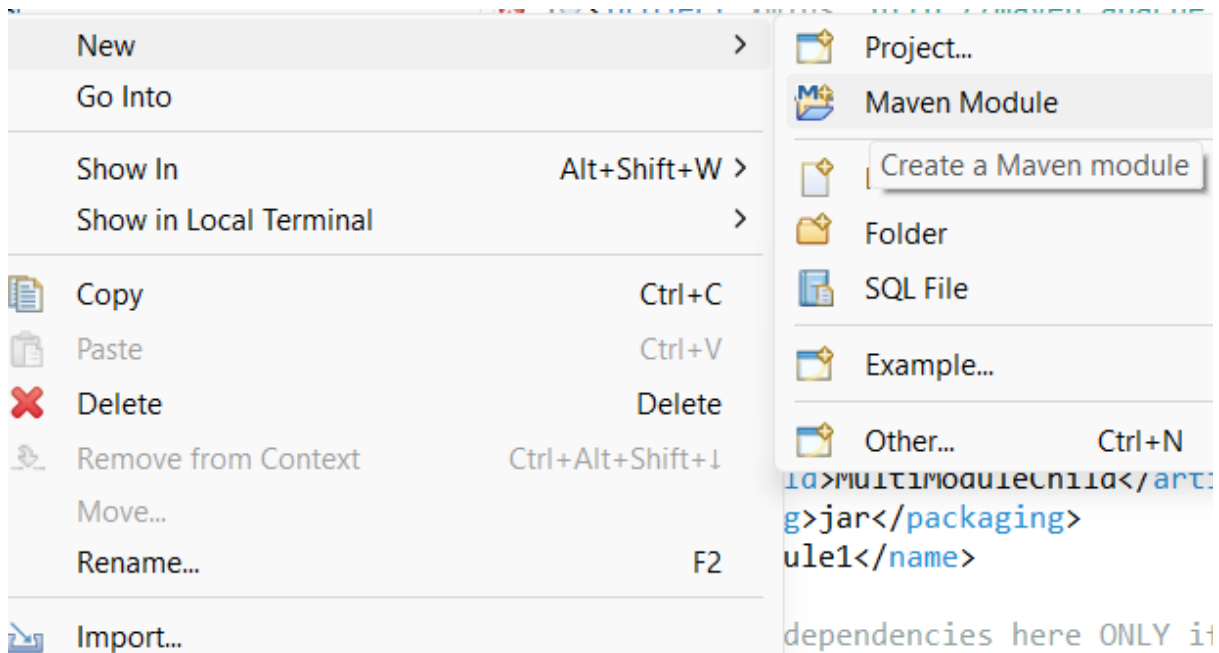
**6.Check the option Create a Simple project(skip archetype selection, give the artifactID: MultiModuleChild1 and click on next and finish**



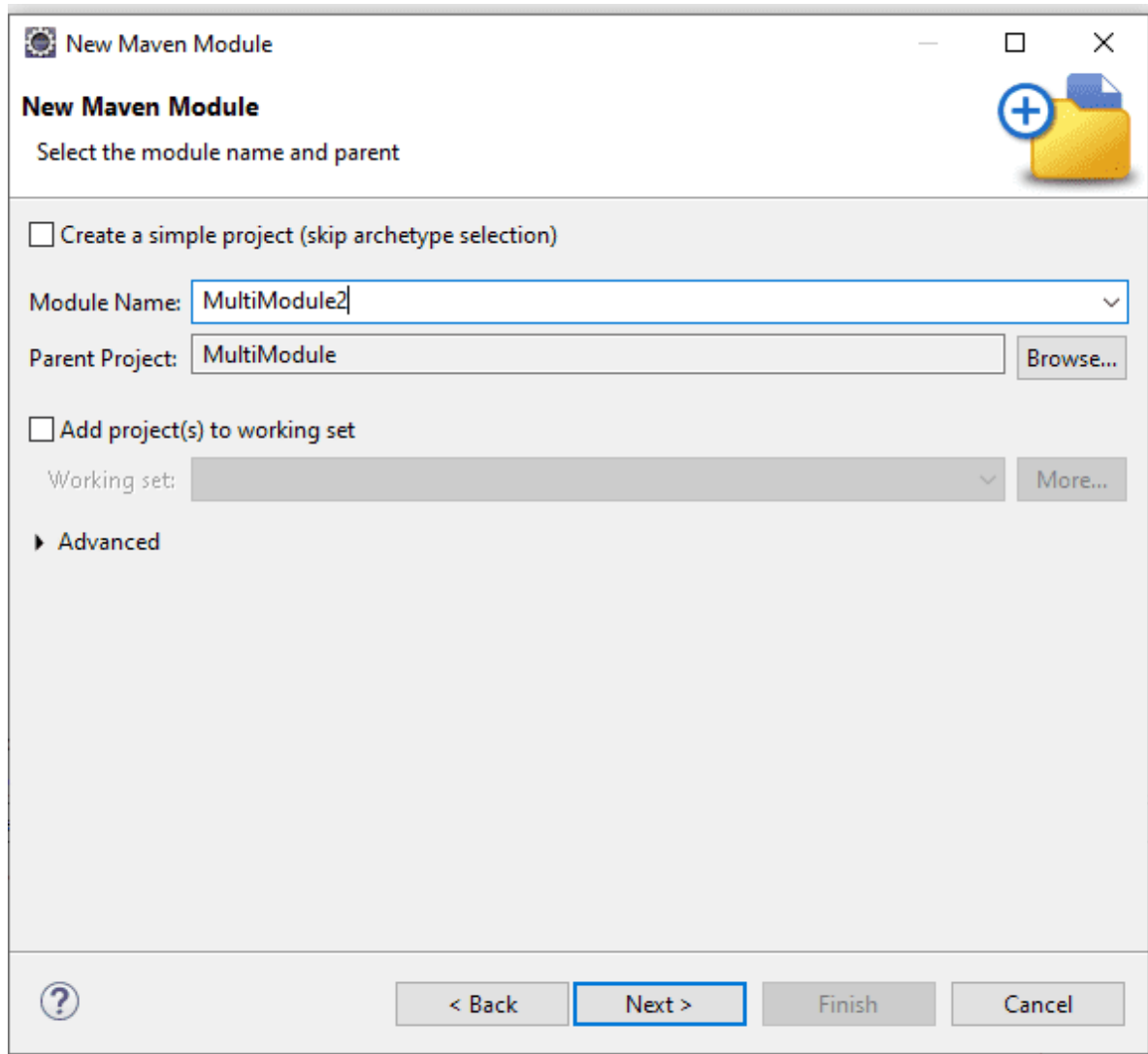
**7.Now you can see, the module1 we created is displayed in the project explorer with a separate pom.xml file.**



8. Right click on the **MultiModule** folder in the project explorer and opt new -> mavenModule



9. Give the artifactID: **MultiModuleChild2** and click on next.



The image shows a 'New Maven Module' dialog box. At the top, it says 'New Maven Module' and 'Select the module name and parent'. There is a checkbox for 'Create a simple project (skip archetype selection)'. Below that, the 'Module Name' is set to 'MultiModule2' and the 'Parent Project' is set to 'MultiModule'. There is a 'Browse...' button next to the parent project field. Below that, there is a checkbox for 'Add project(s) to working set' and a 'Working set:' dropdown menu with a 'More...' button. At the bottom, there is a 'Next >' button highlighted in blue, along with '< Back', 'Finish', and 'Cancel' buttons.

New Maven Module

Select the module name and parent

☐ Create a simple project (skip archetype selection)

Module Name: MultiModule2

Parent Project: MultiModule Browse...

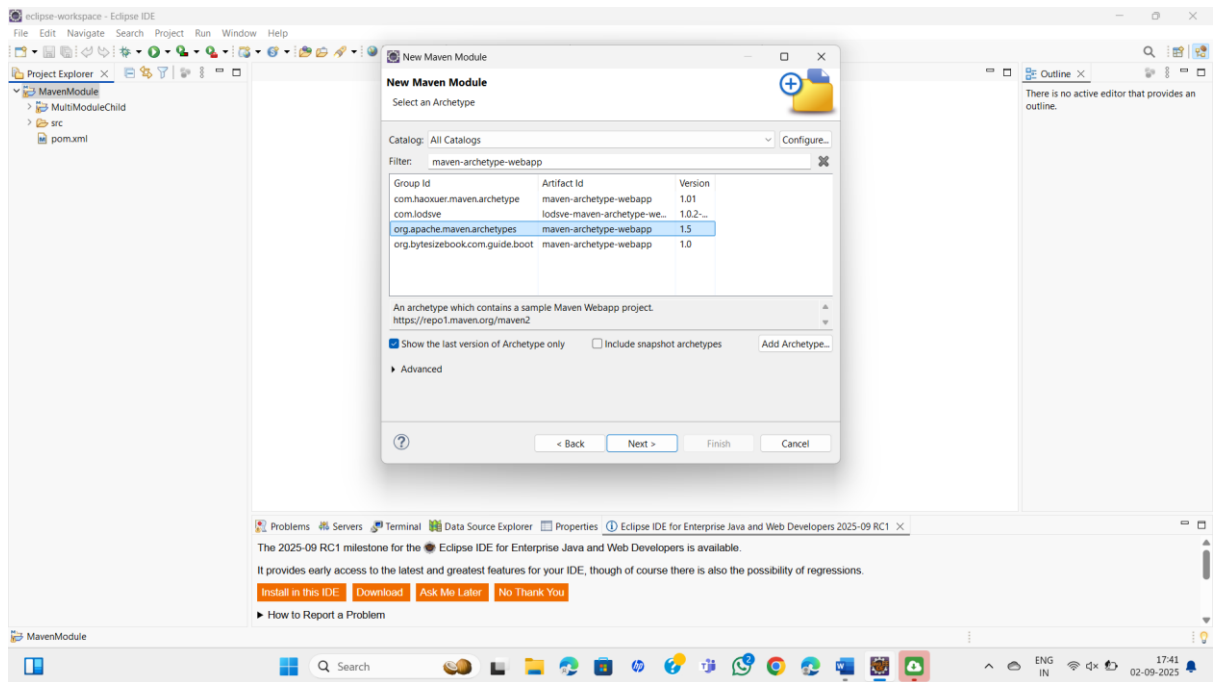
☐ Add project(s) to working set

Working set: More...

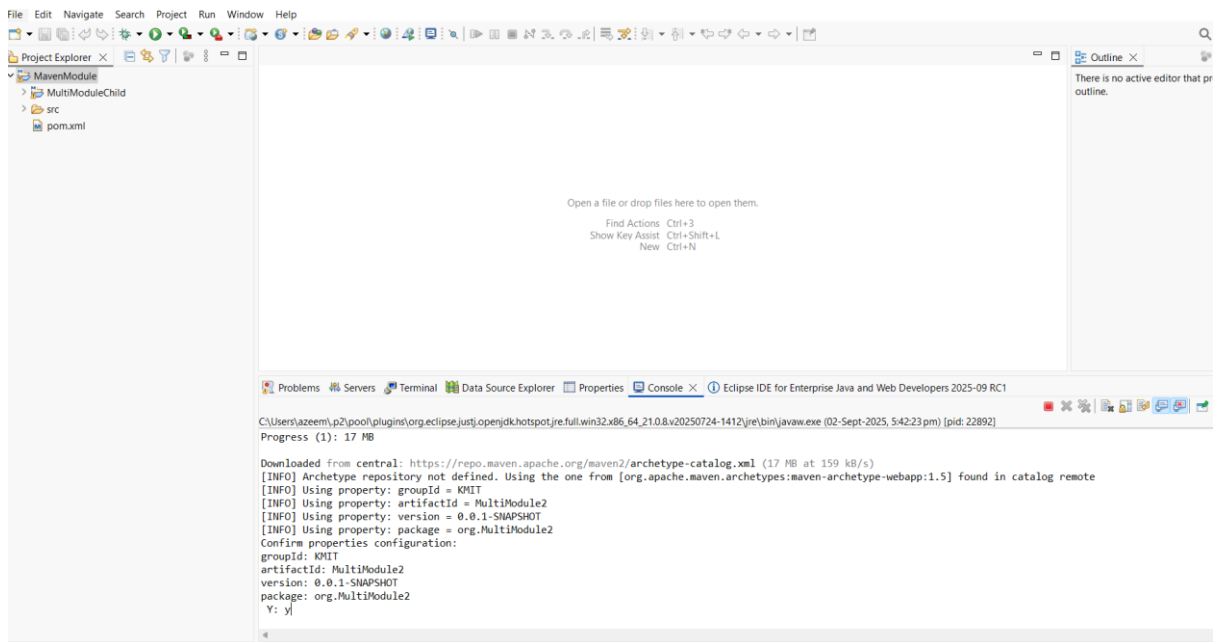
Advanced

< Back Next > Finish Cancel

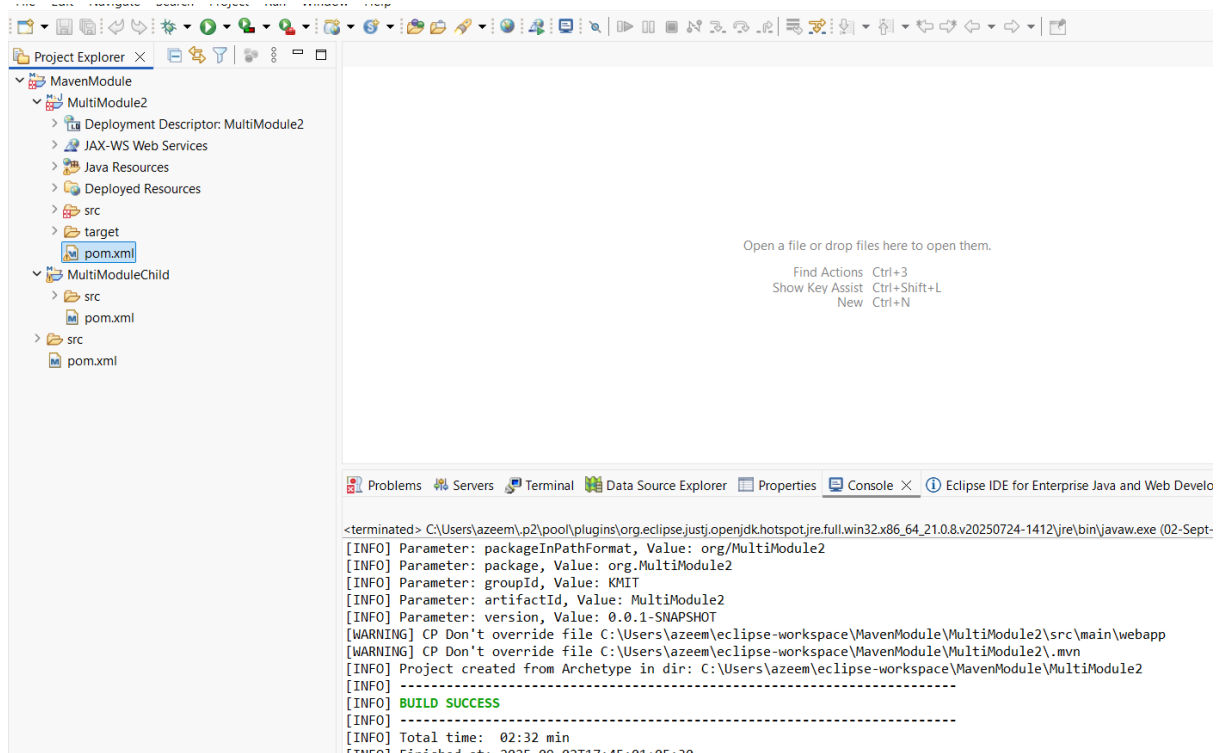
10. In filters search for maven-archetype-webapp, select the version 1.1/1.5 and click on next.



**11. Now click on finish, and confirm with a Y in the console.**

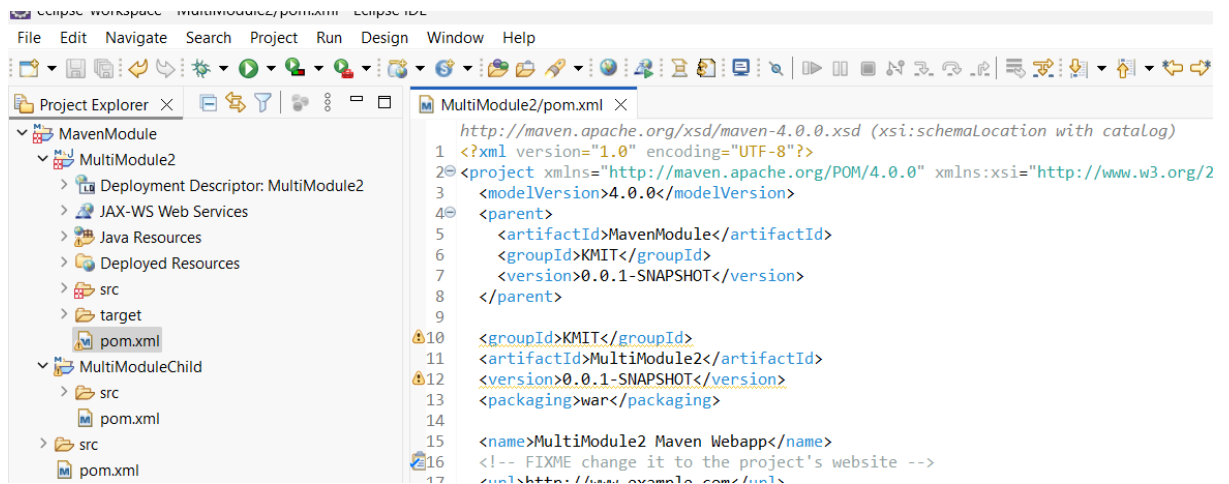


**12. Now you can watch the new child is being added to the parent project.**

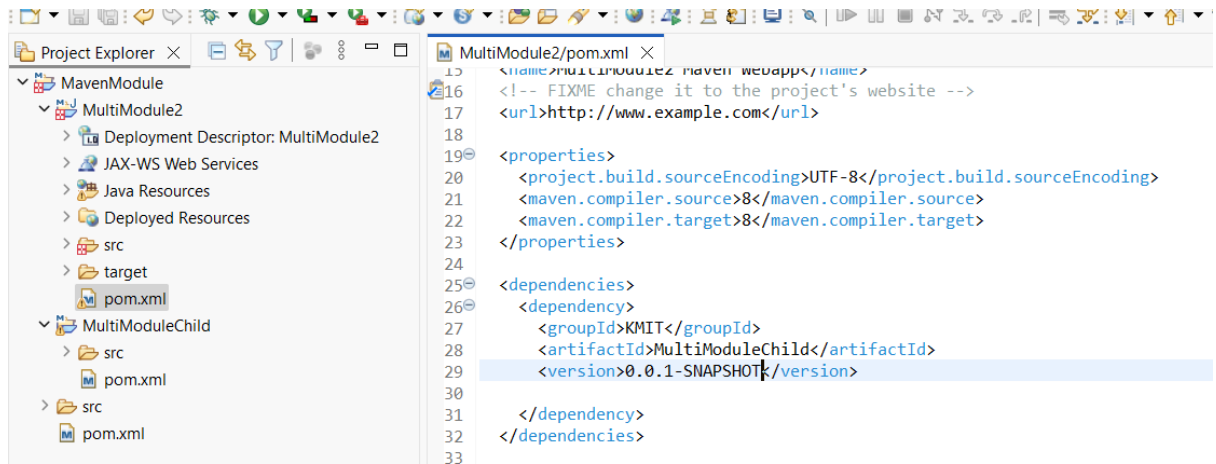


## Linking two modules in a Parent Project:

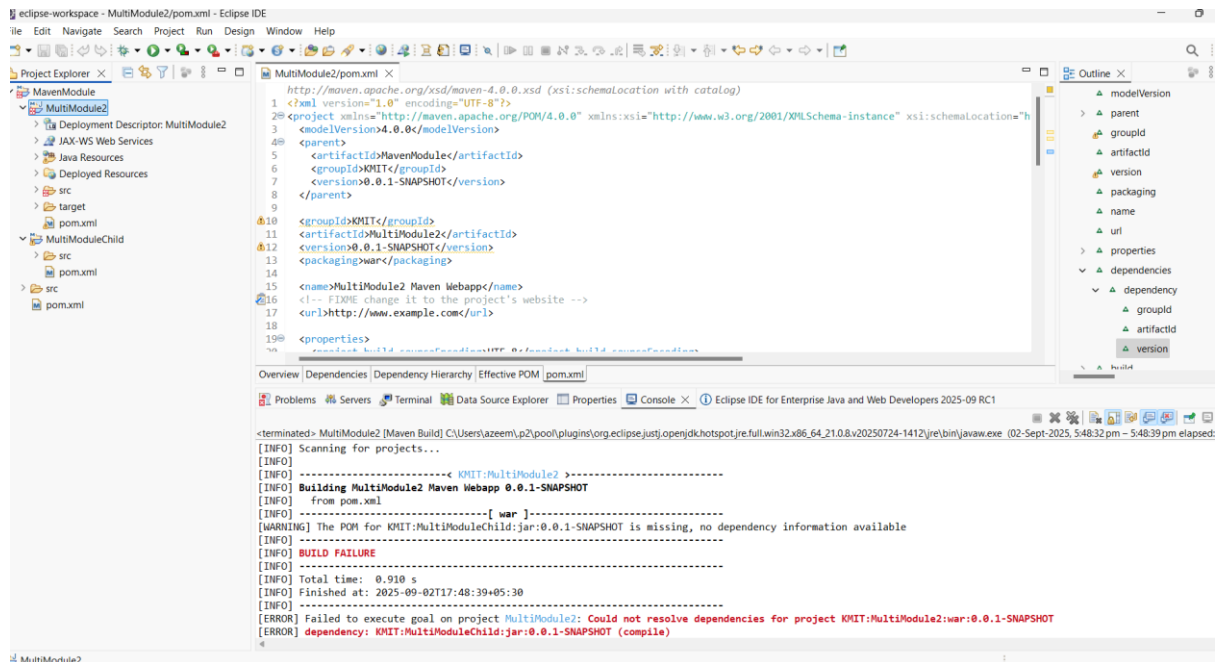
### 1. Goto pom.xml of child2.



### 2. Navigate to dependencies tag. Update the dependencies with child1 dependency as given below, and save pom.xml after update.



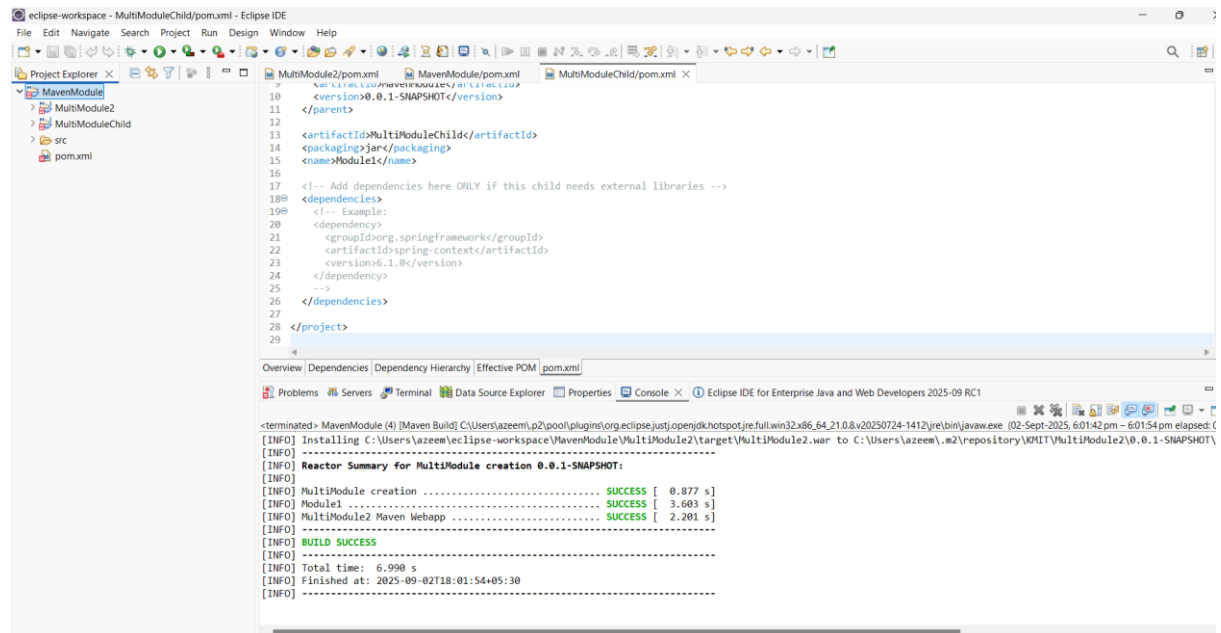
2. Now build the child2 by right clicking it and opting run as->maven build.



3. The build will be a **failure**. Because we haven't build the parent project and the child project. Child1 is dependent on parent. And Child2 is dependent on child2. SO we have to build ass the previous module first and then build the current child2.

4.After building parent and child1, build child2 now the build will be a **Success**

## Parent



The screenshot shows the Eclipse IDE interface with the 'MultiModuleChild/pom.xml' file open. The Project Explorer on the left shows the project structure: MavenModule, MultiModule2, MultiModuleChild, src, and pom.xml. The main editor displays the XML content of the POM file, which includes a parent reference to 'XNIT' and a list of dependencies. The console at the bottom shows the build output for 'MultiModule creation 0.0.1-SNAPSHOT', indicating success for 'MultiModule', 'Module1', and 'Module2'.

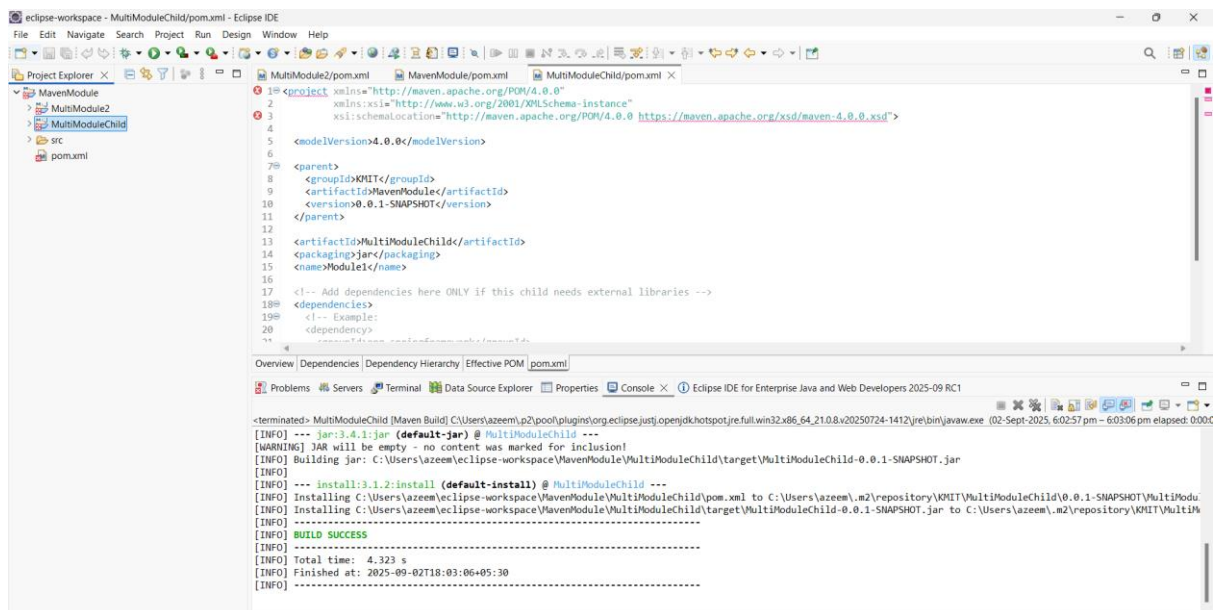
```
<?xml-stylesheet type="text/xsl" href="http://maven.apache.org/POM/4.0.0.xsl" />
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>XNIT</groupId>
    <artifactId>MavenModule</artifactId>
    <version>0.0.1-SNAPSHOT</version>
  </parent>
  <artifactId>MultiModuleChild</artifactId>
  <packaging>jar</packaging>
  <name>Module1</name>
  <!-- Add dependencies here ONLY if this child needs external libraries -->
  <dependencies>
    <!-- Example:
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context</artifactId>
      <version>6.1.0</version>
    </dependency>
    -->
  </dependencies>
</project>
```

Overview | Dependencies | Dependency Hierarchy | Effective POM | pom.xml

Problems | Servers | Terminal | Data Source Explorer | Properties | Console X | Eclipse IDE for Enterprise Java and Web Developers 2025-09 RC1

```
<terminated> MavenModule (4) [Maven Build] C:\Users\azeem\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.8.v20250724-1412\jre\bin\javaw.exe (02-Sept-2025, 6:01:42 pm - 6:01:54 pm elapsed: 0.000 s)
[INFO] Installing C:\Users\azeem\workspace\MavenModule\MultiModule2\target\MultiModule2.war to C:\Users\azeem\.m2\repository\XNIT\MultiModule2\0.0.1-SNAPSHOT\
[INFO] -----
[INFO] Reactor Summary for MultiModule creation 0.0.1-SNAPSHOT:
[INFO] -----
[INFO] MultiModule creation ..... SUCCESS [ 0.877 s]
[INFO] Module1 ..... SUCCESS [ 3.603 s]
[INFO] MultiModule2 Maven Webapp ..... SUCCESS [ 2.201 s]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 6.990 s
[INFO] Finished at: 2025-09-02T18:01:54+05:30
[INFO] -----
```

## Child 1



The screenshot shows the Eclipse IDE interface with the 'MultiModuleChild/pom.xml' file open. The Project Explorer on the left shows the project structure: MavenModule, MultiModule2, MultiModuleChild, src, and pom.xml. The main editor displays the XML content of the POM file, which includes a parent reference to 'XNIT' and a list of dependencies. The console at the bottom shows the build output for 'MultiModuleChild', indicating success for the child module.

```
<?xml-stylesheet type="text/xsl" href="http://maven.apache.org/POM/4.0.0.xsl" />
<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>
  <parent>
    <groupId>XNIT</groupId>
    <artifactId>MavenModule</artifactId>
    <version>0.0.1-SNAPSHOT</version>
  </parent>
  <artifactId>MultiModuleChild</artifactId>
  <packaging>jar</packaging>
  <name>Module1</name>
  <!-- Add dependencies here ONLY if this child needs external libraries -->
  <dependencies>
    <!-- Example:
    <dependency>
      <groupId>org.springframework</groupId>
      <artifactId>spring-context</artifactId>
      <version>6.1.0</version>
    </dependency>
    -->
  </dependencies>
</project>
```

Overview | Dependencies | Dependency Hierarchy | Effective POM | pom.xml

Problems | Servers | Terminal | Data Source Explorer | Properties | Console X | Eclipse IDE for Enterprise Java and Web Developers 2025-09 RC1

```
<terminated> MultiModuleChild [Maven Build] C:\Users\azeem\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.8.v20250724-1412\jre\bin\javaw.exe (02-Sept-2025, 6:02:57 pm - 6:03:06 pm elapsed: 0.000 s)
[INFO] --- jar:3.4.1:jar (default-jar) @ MultiModuleChild ---
[WARNING] JAR will be empty - no content was marked for inclusion!
[INFO] Building jar: C:\Users\azeem\workspace\MavenModule\MultiModuleChild\target\MultiModuleChild-0.0.1-SNAPSHOT.jar
[INFO] --- install:3.1.2:install (default-install) @ MultiModuleChild ---
[INFO] Installing C:\Users\azeem\workspace\MavenModule\MultiModuleChild\pom.xml to C:\Users\azeem\.m2\repository\XNIT\MultiModuleChild\0.0.1-SNAPSHOT\MultiModuleChild\pom.xml
[INFO] Installing C:\Users\azeem\workspace\MavenModule\MultiModuleChild\target\MultiModuleChild-0.0.1-SNAPSHOT.jar to C:\Users\azeem\.m2\repository\XNIT\MultiModuleChild\0.0.1-SNAPSHOT\MultiModuleChild\0.0.1-SNAPSHOT.jar
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 4.323 s
[INFO] Finished at: 2025-09-02T18:03:06+05:30
[INFO] -----
```

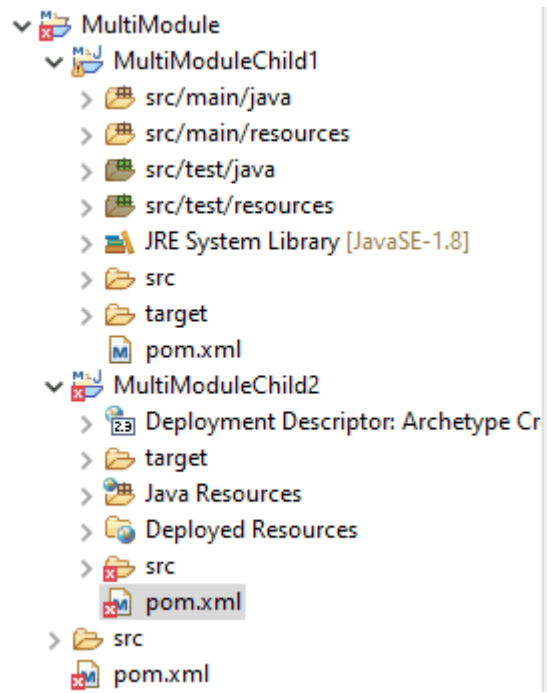
## Child 2

The screenshot shows the Eclipse IDE interface with the `MultiModuleChild/pom.xml` file open in the editor. The Project Explorer on the left shows the project structure: `MavenModule` (parent) and `MultiModuleChild` (child). The editor displays the following XML content:

```
<?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 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <parent>
    <groupId>KMIT</groupId>
    <artifactId>MavenModule</artifactId>
    <version>0.0.1-SNAPSHOT</version>
  </parent>
  <artifactId>MultiModuleChild</artifactId>
  <packaging>jar</packaging>
  <name>Module1</name>
  <!-- Add dependencies here ONLY if this child needs external libraries -->
  <dependencies>
    <!-- Example:
    <dependency>
      <groupId>com.google.guava</groupId>
      <artifactId>guava</artifactId>
      <version>31.1-jre</version>
    </dependency>
    </dependencies>
  </project>
```

The console output at the bottom shows the build process for `MultiModule2` (1) [Maven Build] C:\Users\azeem\p2\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86\_64\_21.0.8.v20250724-1412\jre\bin\java.exe (02-Sept-2025, 6:03:38 pm - 6:03:47 pm elapsed: 0:00:00):

```
<terminated> MultiModule2 (1) [Maven Build] C:\Users\azeem\p2\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_21.0.8.v20250724-1412\jre\bin\java.exe (02-Sept-2025, 6:03:38 pm - 6:03:47 pm elapsed: 0:00:00)
[INFO] Processing war project
[INFO] Copying webapp resources [C:\Users\azeem\workspace\MavenModule\MultiModule2\src\main\webapp]
[INFO] Building war: C:\Users\azeem\workspace\MavenModule\MultiModule2\target\MultiModule2.war
[INFO]
[INFO] --- install:3.1.2:install (default-install) @ MultiModule2 ---
[INFO] Installing C:\Users\azeem\workspace\MavenModule\MultiModule2\pom.xml to C:\Users\azeem\.m2\repository\KMIT\MultiModule2\0.0.1-SNAPSHOT\MultiModule2-0.0.1-SNAPSHOT.pom
[INFO] Installing C:\Users\azeem\workspace\MavenModule\MultiModule2\target\MultiModule2.war to C:\Users\azeem\.m2\repository\KMIT\MultiModule2\0.0.1-SNAPSHOT\MultiModule2-0.0.1-SNAPSHOT.war
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 4.546 s
[INFO] Finished at: 2025-09-02T18:03:47+05:30
[INFO]
```



Azeema firdous

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