





OOP with Java Homework 05: Mayen

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- Introduction
- 2 Tasks



Introduction



- We want to practice Maven, Libraries, and JUnit
- This homework is comprised of four tasks for one project
- Send me a zip archive named hw05_[your_student_id].zip (where [your_student_id] is replaced with your student id) containing the whole project folder (see later)

Maven, Libraries and JUnit



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- We want to test this.



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- The Maven assembly plugin can even help us to build a jar of our application which already and directly contains all these required libraries, so we do not need to distribute them with our software



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- We want to make three simple test cases for our Main class:
 - Check that the static void main(String[] args) method actually produces an output file
 - Check whether it throws an NullPointerException if args==null
 - Check whether it throws an IllegalArgumentException if args.length<1



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The answer to this homework is a zip archive of the complete project folder after completing task hw05-4



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 - the JUnit test cases are already there, in folder src/test/java and package cn.edu.hfuu.iao as class MainTest



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 - The Maven pom.xml file lacks the dependency on the PDFBox library, so it cannot compile
 - Some of the JUnit test cases may fail and the cn.edu.hfuu.iao.Main class may need to be adapted so that all tests pass
 - After this is done, you can build the executable containing all the dependencies. . .



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- You will get lots of compiler errors: Ignore them until Task hw05-2.

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- The following page provides the dependency information as given below

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- Then click on the project, select "Maven" and then "Update Project..."
- The compiler errors should now disappear
- The answer to this question is the updated pom.xml file (which includes also the answer to hw05-1).

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- Run the JUnit tests again. If everything works: OK, if not: start again at step 1.



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- The answer to this question is the updated Main.java file and a text file with the list of tailing test cases
- Do not worry much about lots of console output, PDFBox is very verbose and might do things such as initializing font caches and so on. You can ignore all of this, even Exceptions printed to the console. The only thing that matters is JUnit output.



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- You will find a new folder called target, containing a file called hw05-task-0.0.1-jar-with-dependencies.jar



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- Inside Eclipse, run the project as Maven build with the goals clean test install package
- You will find a new folder called target, containing a file called hw05-task-0.0.1-jar-with-dependencies.jar
- This is the stand-alone executable version of our PDF generator. It includes all dependencies.



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- Inside Eclipse, run the project as Maven build with the goals clean test install package
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- This is the stand-alone executable version of our PDF generator. It includes all dependencies.
- The file hw05-task-0.0.1-jar-with-dependencies.jar is the answer to this task.



谢谢 Thank you

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