**Software Design and Engineering**

**Lab Document**

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| **High Level Purpose Statement:** | I want to use Gradle for dependency management and application execution for a Java project that uses an API call and JSON parsing to display random useless facts. |
| **Experimental Design:** | First I had to figure out how to create a Gradle Project in Intellij IDEA. Then I had to find the dependencies for Gradle that I would need for this project. I used OkHttp and Gson. I used the API uselessfacts.jsph.pl for the random facts.  Then I had to make sure the program could be ran using a gradle command so that it can be easily executed by my peers. |
| **Resources Available:** | • **Gradle Documentation**: <https://docs.gradle.org/>  • **OkHttp Documentation**: <https://square.github.io/okhttp/>  • **Gson Documentation**: <https://github.com/google/gson>  • **IntelliJ IDEA Documentation**: <https://www.jetbrains.com/help/idea/gradle.html> |
| **Time Estimate:** | I think I will spend about 10 hours on the project. I will have to do a lot of research to figure out what dependencies I will need and to experiment with structuring my Java project to make proper use of the dependencies and API call so that the program functions well and can be used by my peers. |
| **Experiment Notes:** | I really enjoyed how seamless Gradle made it to run my program from the command line. |
| **Results:** | I successfully implemented the program. It will generate 1 useless fact to the command line each time you run it. |
| **Consequences for the Future:** | This project was a fun chance to experiment with API calls, JSON parsing, and Gradle. |