

SQL File Evaluation (SQLFE) Tool

Installation Instructions

1. The SQLFE software, for now available only as Java source code to be loaded into an integrated development environment (IDE) such as Eclipse or IntelliJ IDEA, is available for download through GitHub at: <https://github.com/wagnerpj42/sql-file-evaluation> . Additional files, such as sample SQL submission files, a sample assignment properties file, and this documentation, are also available at this GitHub location.
2. INSTALLATION PROCESS
 - a. SQLFE currently can only be executed through an Integrated Development Environment (IDE). SQLFE has been tested and run on the Windows 10 operating system under the Eclipse and IntelliJ IDEA IDE environments. A valid Java 8 JDK must be available in the project space, though newer versions may work as well.
 - b. Create a project within your IDE.
 - i. The name of the project does not matter, but it always helps to use a descriptive name. e.g. SQLFE.
 - c. You must download at least the src folder found at this GitHub location. The SQLFE source code must be placed within an IDE so that the SQLFE src folder is at the top level of the IDE project, possibly replacing any src folder automatically created by the IDE.
 - d. Any necessary database connector JAR files must be available in the IDE project structure. Below is a list of supported database management systems (DBMSs) and their database connector files:
 - i. Oracle – ojdbc8.jar (preferred/tested), also possibly ojdbc7.jar (tested)
 - ii. MySQL – mysql-connector-java-8.0.22 (tested with MySQL Server 8.0) though other versions may work. Older versions of MySQL Server (e.g. 5.5) can work with older connector versions (e.g. mysql-connector-java-5.1.23-bin) with a slight change to the MySQLDataAccessObject class – contact wagnerpj@uwec.edu.
 - e. If these database connector files are not already present within the SQLFE project, these can be added as follows, assuming that you've downloaded the files from an available online source to someplace on your target system:
 - i. Eclipse – Right-click on your project name, choose Properties, choose Java Build Path, choose the Libraries tab, choose Add External JARs, browse to the location of the jar file (e.g. ojdbc8.jar) and choose Open, choose Apply and Close.

- ii. IntelliJ IDEA – Choose File, choose Project Structure, choose Project Settings / Modules, choose Dependencies, choose + on right, choose JARS or Directories, browse to path of the jar file (e.g. ojbc8.jar), OK as needed to finish.
- f. If you want to run the available JUnit tests, SQLFE must also have access to a JUnit 4 library. This must be added to the project structure of SQLFE.
 - i. Eclipse – Right-click on your project name, choose Properties, choose Java Build Path, choose the Libraries tab, choose Add Library, choose JUnit and Next, choose JUnit 4 from drop-down list, choose Finish, choose Apply and Close.
 - ii. IntelliJ IDEA – Go into the sqlfe/junit package and open one of the JUnit test files (e.g. CondAndCountTests). If one of the test annotations (that is, @Test) is red and signaling an error, that means JUnit is not available. Click on that annotation, which should then show a red bulb with suggestions. Within that, choose Add JUnit 4 Library and finish.
- g. At this point, SQLFE should be ready to run, by opening the Main.java file in the sqlfe/general package and choosing Run As/Java Application.