

To run this application go to root of directory:

```
java -cp ../lib/microstream/*../lib/fx/*../metrics.jar --enable-preview ie.gmit.sw.Runner
```

The class **AppWindow** uses **JavaFx** to display a user interface. It uses methods from the **Database** class to give functionality to most of the buttons, except for the **quit button** which exits the application.

The **select file** button enables the user to select a jar file from their system. The selected file is then converted to string format and passed into method **go** which subsequently handles the rest of the processing after pressing the process button.

The **Show DB contents button** outputs the data saved into the **microstream DB**.

The **Delete DB contents button** empties the microstream Database.

The **go** method in the Database class reads in a Jar file after it has been converted to string format. When a file is parsing it displays information about the classes and saves this information to the **microstream DB** using a linked list. When the file has finished parsing it displays the SLOCS from the **file** with a method from the **SLOC_Reader** class.

The overridden **showDatabase** method from the interface **QueryDatabase**. This method loops through the contents of the database and outputs the stored information.

The method **emptyDatabase** is overridden from the interface **QueryDatabase**. This method clears the stored data from the database.

The class **SLOC_Reader** contains the method **countLines** which takes in a string and displays the number of source lines in the file. It has its own class as this class has a single responsibility and can be reused outside of this application.

The interface **QueryDatabase** contains method stubs which could be used to query any database.

Every class and interfaces are placed into appropriate packages. Designed to avoid **cycles** and follows the **principles of package and cohesion and coupling**.

See UML below.

