**Advanced Object Oriented Software Development**

**Main Assignment**

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**Runner**

The Runner class declared instance of the Menu class and calls a method from the Menu class to run a console menu and allow the user to input a JAR file to be analysed. The JAR must be added to the path for it to be analysed correctly.

**Menu**

The Menu() method allows the user to input a JAR file with a console which outputs information about each of the classes. Then the user can get either the attribute hiding factor or the method hiding factor calculation of each class contained in the JAR file. The database does not store the information to a database as I was unable to get it to function correctly. If it did would output the metrics from the stored data from the database.

**JARInformation**

This class contains a method that has a parameter of type Class. The method outputs information such as the fields, method, number of methods and method parameters to the screen.

**JARInformationList**

This class would be linked to the database, but I am unable to get it working correctly.

**AttributeHidingFactor**

This class calculates the attribute hiding factor of each class. It adds a score depending on the visibility of the attribute and then calculates and outputs the result.

**MethodHidingFactor**

This class calculates the method hiding factor of each class. It adds a score depending on the visibility of the method and then calculates and outputs the result.

**UML Diagram**

