# Bracket Generator - Java version

The original version of this program was written in 2010 using Visual Basic .Net. I wrote it to streamline the process of making tournament brackets and *Texas Match Cards* for my Judo club. There was a mistake in the match numbering algorithm specifically for the loser's brackets. I decided to rework this project to fix the errors and to learn a bit about Java.

Here is the interaction of the classes in this project:
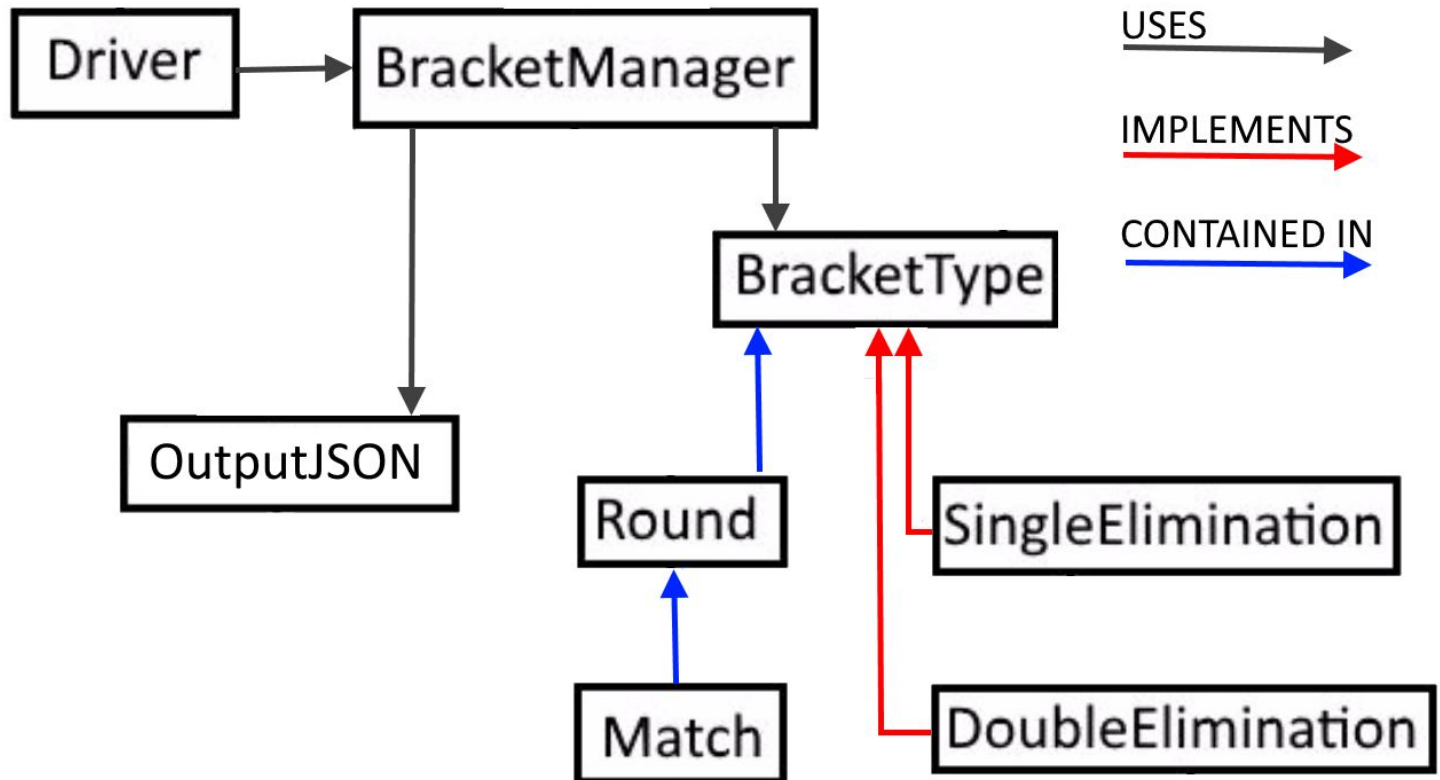


The main program only interacts with the *BracketManager* class. The driver program does not need to explicitly create brackets, rounds, or matches. The *BracketManager* class is in a package with all of the support classes, and the package must be imported into the driver.

*BracketType* is an abstract class which has specific types of brackets (single/double elimination) as children. The *buildBracket* method is implemented specially to make the structure of a given bracket type. The DoubleElimination class's *buildBracket* method is not currently implemented.

A *Bracket* contains rounds, and rounds contain matches. I chose to add the *Round* class to simplify the process of traversing matches within rounds, which are contained within brackets which are stored by *BracketManager*. My old project contained clunky algorithms to deal with the awful manner in which I stored the matches.

The output is a JSON file which should be plugged into a frontend so that players can pull up their brackets by searching their names.

The following features may be added at some point:
- Double Elimination format support (both true double and modified double)
- Round Robin format support
- Repechage format support