

Dear students,

there is an update for the "fuzzy assignment". First of all, there was a bug in the current version of the FuzzyDL reasoner, which might have misled you during the first task. Here is a procedure to update your reasoner:

1) Find the `.jar` file with the reasoner. If you installed the reasoner from the archive, the directory is "[install dir]/fuzzyowl205/FuzzyDL". In case of the VirtualBox image, it is in `/opt/FuzzyOWL-2.05/FuzzyDL`.

2) Replace the jar with the following file:

<https://dl.dropboxusercontent.com/u/7439168/FuzzyDL.jar>

If you don't trust Dropbox, check the file's SHA256 sum:

```
e9bd9e09d2712d445b0259c05c675c15de288049b4f581aa70ea174e72729fe5
```

On the VirtualBox image, you will have to become the root user:

```
$ wget https://dl.dropboxusercontent.com/u/7439168/FuzzyDL.jar
```

```
$ sudo cp FuzzyDL.jar /opt/FuzzyOWL-2.05/FuzzyDL/
```

Then enter the root password (which is "dl").

3) Edit the execution script. It can be found in "[install dir]/fuzzydl" for the archive-based installation or `/usr/local/bin/fuzzydl` for the VirtualBox image. Replace its last call with the following line:

```
java "-Djava.library.path=$GUROBI_HOME/lib" -cp "$GUROBI_HOME/lib/gurobi.jar:$FUZZYOWL_HOME/FuzzyDL/FuzzyDL.jar" fuzzydl.parser.Parser "$@"
```

Again, on the VirtualBox image, you will have to become the root. Start with the following command:

```
$ sudo nano /usr/local/bin/fuzzydl
```

4) Run the following example:

```
(instance i a 0.54)
(instance i b 0.62)
(implies (or a b) c 0.71)
(min-instance? i c)
```

You should get the answer

```
Is i instance of c ? >= 0.71
```

instead of 0.87, which was derived by the old version.

You're done!

Many thanks to Vojtěch Létal and Jakub Podlaha for pointing this out.

Please note that the updated version arrived directly from Umberto Straccia, who is currently developing a new version of the software. This new version is very likely to be tested less than the old one. Despite I was unable to find any bug, please be vigilant towards any suspicious behavior and report it as quickly as possible.

Secondly, there were some questions around the 4th question, which proved I have underestimated your creativity. :) Sometimes, your modification of axiom line#13 in question 2 implied that the correction of axiom line#17 in question 4 does not affect the membership degree of any individual. Some of you asked, what to do in such case.

In that case, feel free to answer question 4 something like: "The membership of JoanBaez and BobDylan did not change." Subsequently, in question 5, both of your simulations would yield an equal result.

Nevertheless, I strongly encourage you to modify the line#13 in such a way, that correcting axiom #17 makes a change in the reasoner. Watching a different result from both executions of the reasoner should give you a very good insight into its internal workings. (To achieve such result, here goes a hint: Let's make a folk singer each person, who performed *both* at the Woodstock and the March on Washington.)

If you had any further questions, please feel free to ask!

Best regards,
Radek Černoch