Applied Artificial Intelligence Project -2
Username: Toothless

Domain: **Grocery shopping expert**

The main goal of the Recommender Systems (RS) was to help users in their decision making. This area proposes the development of RS to provide high-quality recommendations in different contexts. This expert grocery shopping recommendation is designed using fuzzy logic .The system takes in inputs from user to determine the grocery suggestion.The import nutrients considered here are protien,carbohydrates and fats.The final output is based on user's choice of type of food(veg or non veg) and nutrients requirement.

The system is designed to interact using the following functions in the Knowledge Base
- startup-To run application
- ask-user-to get user input
- ruleset-consists of set rules which are activated based on user response.
- Each rule yields on food suggestion

No salience is used.

Questions for user:

o the system asks the user what type of meal the user wants.

o It then asks the user if user wants high or low proteins.

o it asks the user if user wants less or more carbohydrates.

o it asks the user if user wants less or more fats.

Run Instructions:

1) Create a new Java project in eclipse. Make sure you include the JAR file "fuzzyJ-2.0.jar" under New Project > Libraries.

2) Add food.clp to the src folder of the project or create a new file and copy the contents of food.clp into the blank file. Make sure you save the file with .clp extension.

3) In the run configurations of the file, change "jess.Main" to "nrc.fuzzy.jess.FuzzyMain".

4) Run the project. In case you run into any errors, make sure that the run configs is pointed to the FuzzyMain as by default it is shifted back to jess.Main.

Test cases:

Note: The allowed input values are given in the parenthesis when a question is asked to the user.

#1

Input Data:nonveg/high/high/high

```
WELCOME TO GROCERY SHOPPING EXPERT!. I am here to help you!
Please type your name and press Enter> test1

###################################################
Hello, test1.

Please answer the following questions and we will tell you groceries to buy.

What type of food would you like to have?( veg or nonveg):
nonveg
Do you want to have a low/high protein grocery?( low or high):
high
Do you want to have a low/high carbohydrate grocery?( low or high):
high
Do you want to have a low/high fats grocery?( low or high):
high
You can buy chicken breast,shrimp,turkey breast.
```

#2

Input Data:veg/high/high/low

```
WELCOME TO GROCERY SHOPPING EXPERT!. I am here to help you!
Please type your name and press Enter> tes2

################################################
Hello, tes2.

Please answer the following questions and we will tell you groceries to buy.

What type of food would you like to have?( veg or nonveg):
veg
Do you want to have a low/high protein grocery?( low or high):
high
Do you want to have a low/high carbohydrate grocery?( low or high):
high
Do you want to have a low/high fats grocery?( low or high):
low
You can buy flaxseed,avacado,cinamon,green tea,lentils and bananas.
```