Book Recommendation System using JESS

Modern day business has become very intelligent with companies using AI to attract customers and sell their products. One such business is selling products on online stores. This project is based on one such online store – a bookstore which has a unique feature of recommending books to its online users and increasing its business.

The recommendations depend on various factors like the user profile – age, favorite genre, etc and the user's purchase history. Based on these, the user sees a recommended list of books on his screen. There is a high chance that the user will get attracted to the books since they are not randomly recommended but are based on his profile and history.

I have based the recommendation system and hence created the rule engine in JESS on three factors:

1. User's favorite genre
2. User's age
3. User's recent purchase history

The rule engine is written in JESS and is contained in the "**Recommendation.clp**" file.
The classes are created in Java and imported into JESS as *deftemplates*. The architecture of the program is based on JESS manual's chapter 11 example of a *store discount offer system.* Thus, it is basically JESS embedded into a Java Program.

Running the program:

1. Import the *BookRecommendationSystem* folder as an eclipse project.
2. Make sure that the project explorer shows "**Recommendation.clp**" file along with 8 java files.
3. Open the BookRecommendationSystem.java file and run it.
4. On the console, there are 6 dummy users. Select one of the user by entering the user number and pressing ENTER.
5. You will see the user's profile, recent purchase and recommendations based on profile and recent purchase. The recommended books may be 2, 3, 4 or even 5 based on the different factors.