Applied Artificial Intelligence Project -2

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Domain: Movie Recommendation System (MRS)

Recommendation systems are an active way to target customers and provide them with the content they are seeking. It has been shown to drastically improve businesses and it is a core component of most e-commerce platforms. Movie Recommendation System is a fuzzy logic based system designed using JESS Rule Engine and the FuzzyJESS extension and can recommend movies to user based on preferences and age grouping.

In this system, the user is able to get a list of recommended movies by providing their age group and preferences for each category.

The various age groupings are as follows:

- 1) young-kid: Between 10 and 16 years
- 2) young-adult: Between 17 and 36 years
- 3) middle-age: Between 37 and 60 years
- 4) old: Over 60 years.

The user can also input preference of "love-it" or "hate-it" for each category. The various categories include:

- 1) Action
- 2) Adventure
- 3) Animation
- 4) Comedy
- 5) Crime
- 6) Documentary
- 7) Drama
- 8) Family
- 9) Fantasy
- 10) Foreign
- 11) History
- 12) Horror
- 13) Mystery
- 14) Romance
- 15) Sci-Fi
- 16) Sports
- 17) Thriller
- 18) War
- 19) Western

170 rules have been used to construct this recommendation system.

Future Work

- 1) More movies as recommendation content
- 2) Various levels of preferences instead of a binary preference.
- 3) Robust character handling.
- 4) Only simple QA has been conducted and in-depth QA needs to be conducted for ironing out other bugs.
- 5) Exploit Fuzzy logic with more age groups and parameters to recommend movies.

Expected Output:

• The recommendation system will recommend movies based on your preferences and age-group. Note: It will recommend some popular movies if all preferences are given as "hate-it".

<u>Instructions to run the system:</u>

- Save the "moviesRecommender-fuzzy.clp" file in the "Jess71p2\bin\" folder on your local system.
- On Eclipse, set Run Configuration for FuzzyJESS (nrc.fuzzy.jess.FuzzyMain as main class) and then run it using this configuration.