Mathematics for Kids Recommender System (MARS) - BG and PM

The presentation was very good and the students were able to reply to my questions (even though sometime they tried to just defend their approach rather than replying to the point). The project report is generally well written. The state of the art is adequate, but the students do not seem to have taken (reused) too much from existing researches and techniques, only very basic ones (Pearson correlation, Levenshtein distance). The mathematical notation is sometime imprecise. There are symbols that are not defined (e.g. I_{uv}). There is no implementation whatsoever (which was not required, I know). The proposed technique is "tested" on a simple scenario (very simple - even if the students had access to a more reasonable data set). The matching of the active user with neighbour users is done with a combination of two similarity/distance metrics in order to take into account both similarity of ratings and similarity of the history of previously tried exercises. The identification of the candidate exercises that can be suggested to the user is not sound: in the students' proposal these exercises must be part of the neighbour profile that is matched with the exercises' history of the target user, while they should be exercises that the neighbour users have completed after that. In general, the problem addressed by this project is a classification one, and the students realise it and discuss it in the evaluation section (they suggest to measure precision and recall indeed). But the proposed technique is regression. This is inconsistent. I think that there is still much space for improvement before starting the implementation of this solution.

Points: 13.5

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Taste The Tour - LB and ST

The presentation was very good even if some important details of the proposed solution were missing (data structures, algorithms). This is also true for the report. The language used in the report is always informal and the math details are not described. The precise recommendation algorithm is never fully described (in the presentation and in the report). I was able to understand it because I read the project report already (three times). The proposed solution is not really personalised, or at least there is no learning process that predicts the user preferences as it is normal in RSs. The proposed interaction allows a user to specify general preferences on the type of POIs and to enter a topic that should link together the recommended items. The recommendation technique is basically recommending what most of the people do, i.e., the sequence of recommended items are items that are typically visited one after the other (and are close). The feedback of the user is used in a strange way: if the user confirm that a POI is relevant for a topic then the POI is tagged with the topic, but if this does not occur, instead of decreasing the association of the POI to the topic, the system touches the transition probabilities, which have nothing to do with the topic. The students prepared a mockup of the user interface, which is good, and described some very good ideas for the evaluation of the application.

Points: 13.5

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Personality-Based Adaptive User Interface - DM and MS

This is a unusual project: it is not describing a new recommendation technique but a new way to adapt the user interface of a recommender system to the user. It is an interesting project because it is based on sound and novel research results in the area of intelligent user interfaces, decision making and preference learning. It shows that the students have read and digested a good amount of scientific articles and techniques. The students have also developed new solutions for six interfaces (with a partial implementation) and have also conducted a simple user study to determine one of them (policy based). The presentation was OK, but I had the impression that it could have been done better (more clear). Anyway, overall the evaluation is very positive and I am really looking forward to see the results of this interesting research activity.

Points: 15