Master's Thesis proposal

General Information

Master's Thesis Title:	**Modelling navigation and user's preferences in a group recommender system**
Orientation:	☐ professional ☒ research
M.Sc. Th. Advisor's Dept. & University:	MAIA,UB
M.Sc. Th. Advisor:	Maria Salamó
M.Sc. Th. Advisor e-mail:	maria@maia.ub.es
Observations:	The master thesis is partially involved in a project

M.Sc. Thesis Description

Main issues / Brief Description:

The project goal is the study and development of specific techniques for making recommendations to groups.

Detailed Description:

Conversational group recommender systems focus on identifying user's individual preferences and then try to find a compromise that is fair and acceptable to all members of the group. A static model of preferences is unrealistic. In such recommender systems, there are social interactions and unexpected new information over time which may cause a person change her mind in an unforeseeable way. In this project, we will investigate how to model user's preferences and how to recommend in a content-based group recommender system.

The thesis work will involve:
- Study of conversational group recommender systems [1, 2].
- Modelling user preferences and group preferences [3 , 4].
- Development of the proposals for aggregating product preferences and for arriving to a final agreement inside a group recommender system [3].
- Generalisation to different domains.
- Evaluation and result analysis of the proposals.

[1] Smyth, B. (2007) 'Case-Based Recommendation' Eds. Brusilovsky, P., Kobsa, A., Neidl, W. The Adaptive Web: Methods and Strategies of Web Personalization. Lecture Notes in Computer Science, Vol. 4321. Springer-Verlag, Berlin Heidelberg New York.

[2] Bridge, D., Göker, M. H., McGinty, L., and Smyth, B. (2005). Case-based recommender systems. Knowledge. Engineering. Review 20, 3 (pp. 315-320).

[3] Jameson, A. and Smyth, B. (2007) 'Recommendation to groups' Eds. Brusilovsky, P., Kobsa, A., Neidl, W. The Adaptive Web: Methods and Strategies of Web Personalization. Lecture Notes in Computer Science, Vol. 4321. Springer-Verlag, Berlin Heidelberg New York, pages 596-627.

[4] Salamó, M., Reilly, J., McGinty, L., & Smyth, B. (2005). Knowledge discovery from user preferences in conversational recommendation. In Knowledge Discovery in Databases: 9th European Conference on Principles and Practice of Knowledge Discovery in Databases, (pp. 228–239). Springer

Other comments:
We recommend applicants to have minimal knowledge of machine learning and data mining although it is not a sine quan non condition.

Barcelona, October 18th 2010