## How Users Ride the Carousel: Exploring the Design of Multi-List Recommender Interfaces From a User Perspective

Supplementary Material

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## PROTOTYPICAL MOVIE RECOMMENDER SYSTEM

Figure 1 shows a screenshot of the prototypical movie recommender system used for the study. For implementation details, please see the paper itself.

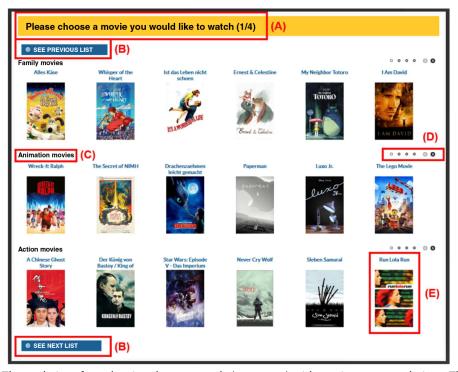


Fig. 1. The study interface, showing three carousels (same type) with movie recommendations: The task description is shown at the top (A). For the purpose of data logging, vertical scrolling is implemented via buttons (B). Each carousel has a descriptive label (C) and can be scrolled horizontally (D). Recommendations are presented based on movie title and poster (E). A mouse click opens a dialog with additional information. The space between items is enlarged or decreased for the other conditions, i.e., with 4 or 8 visible items.

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## **QUESTIONNAIRE CONSTRUCTS**

Below are the constructs that we selected from the recommender systems evaluation frameworks by Knijnenburg et al. and Pu et al.:

- Perceived recommendation quality [1]:
  - I liked the movies recommended by the system.
  - The recommended movies fitted my preference.
- Perceived recommendation diversity [1]:
  - The recommendations contained a lot of variety.
- Choice satisfaction [1]:
  - I like the movie I've chosen.
- Choice difficulty [1]:
  - Making a choice was an overwhelming task.
- Perceived system effectiveness [1]:
  - I would recommend the system to others.
- Perceived usage effort [1]:
  - The system is convenient.
  - I have to invest a lot of effort in the system.
- Perceived transparency [2]:
  - I understood why the movies were recommended to me.
- Overall satisfaction [2]:
  - Overall, I am satisfied with the movie recommender.

Note that these items were carefully translated from English to German. For more details about the questionnaire and the study in general, please see the paper itself.

## **REFERENCES**

- [1] Bart P. Knijnenburg, Martijn C. Willemsen, and Alfred Kobsa. 2011. A Pragmatic Procedure to Support the User-Centric Evaluation of Recommender Systems. In *RecSys '11: Proceedings of the 5th ACM Conference on Recommender Systems*. ACM, New York, NY, USA, 321–324.
- [2] Pearl Pu, Li Chen, and Rong Hu. 2011. A User-Centric Evaluation Framework for Recommender Systems. In RecSys '11: Proceedings of the 5th ACM Conference on Recommender Systems. ACM, New York, NY, USA, 157–164.