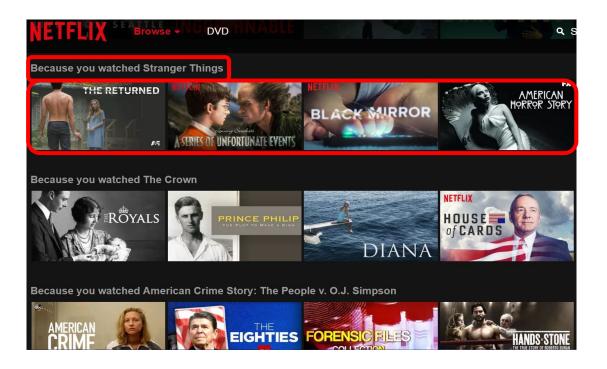
Personalized Recommender Systems



Netflix Recommendations





Amazon Book Recommendations



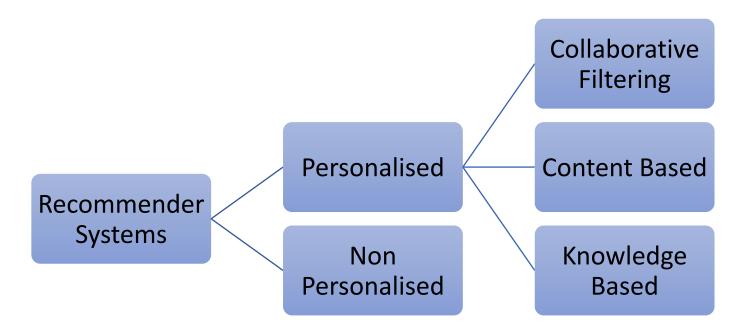


How to identify interests & preferences?

- Interests and preferences of users can be identified based on:
 - Past Behaviour
 - Relation to other users
 - Item Similarity
 - Context
 - Demographics
 - O ..



Categories of Recommender Systems





Recommender systems as a function

Given:

- User model (e.g. ratings, preferences, demographics, situational context)
- Items (with or without description of item characteristics)

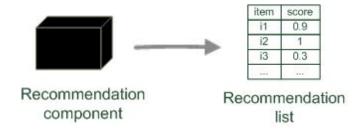
Find:

Relevance score. Used for ranking



Categories of recommender systems

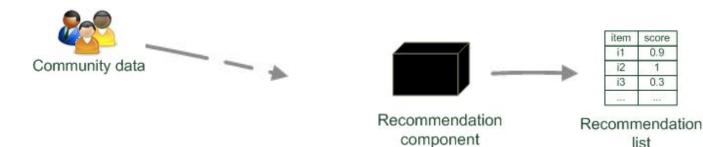
Personalized Recommender systems reduce information overload by estimating relevance





Collaborative Filtering Based Recommenders

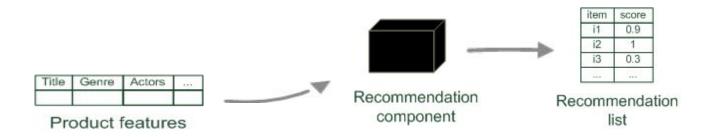
Collaborative: "Tell me what's popular among my peers"





Content Based Recommenders

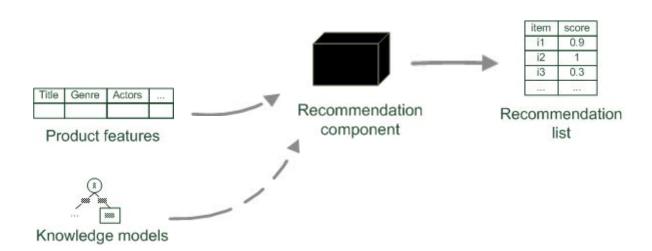
Content-based: "Show me more of the same what I've liked"





Knowledge Based Recommenders

Knowledge-based: "Tell me what fits based on my needs"





Hybrid Recommenders

Hybrid: combinations of various inputs and/or composition of different mechanism

Analytics Vidhya

