Recommender system

Recommendation system are kind of information filtering system that predict the response, that user can give depend upon previous responses of users

This system provide recommendation in generally two ways:
1. Collaborative
2. Content-based filtering
3. Hybrid Recommender Systems
4. Mobile Recommender Systems

Collaborative filtering: This approach build a model based on user past behaviour an also from similar decision made by other users. It act as an relationship between users and items. Similarity of items is determined by the similarity of the ratings of those items by the users who have rated both items. The advantage of collaborative recommendation system is that it does not rely on machine based content and can be used for more complex data. A large amount of data is collected during this process in terms of information on users’ behaviors, activities or preferences and predicting what users will like based on their similarity to other users.

The information can me collected through two modes:

Implicit mode: like asking a user to rate an item, asking a user to rank a collection of items

Explicit mode: like observing the items that a user views, keeping a record of the items that a user purchases

Examples: Facebook, MySpace, LinkedIn, and other social networks use collaborative filtering to recommend new friends, groups, and other social connections
**Content-based filtering**: This approach builds a model based on event properties that is by utilizing the characteristics of an item in order to recommend other items. Similarity of items is determined by measuring the similarity in their properties. In this approach, a user profile is built, focusing on a model of the user's preference and a history of the user's interaction with the recommender system. Pandora Radio is a popular example of a content-based recommender system that plays music with similar characteristics to that of a song provided by the user as an initial seed.

Examples: Rotten Tomatoes, Internet Movie Database, Jinni, and Rovi Corporation

**Hybrid Recommender Systems**: This approach is a combination of collaborative filtering and content-based filtering.

Example: Netflix

**Mobile Recommender Systems**: These are particularly context-sensitive recommendations which are on cloud 9 in today's world.

Example: mobile recommender system is one that offers potentially profitable driving routes for taxi drivers in a city.