Collaborative Filtering vs. Content-based Filtering

Find the best items that hit the spot!







### Find the best items that hit the spot!



YouTube algorithm when I'm bored

YouTube algorithm when I have to study

Nobody: Youtube Recommendations :



Youtube algorithm has brought us together again



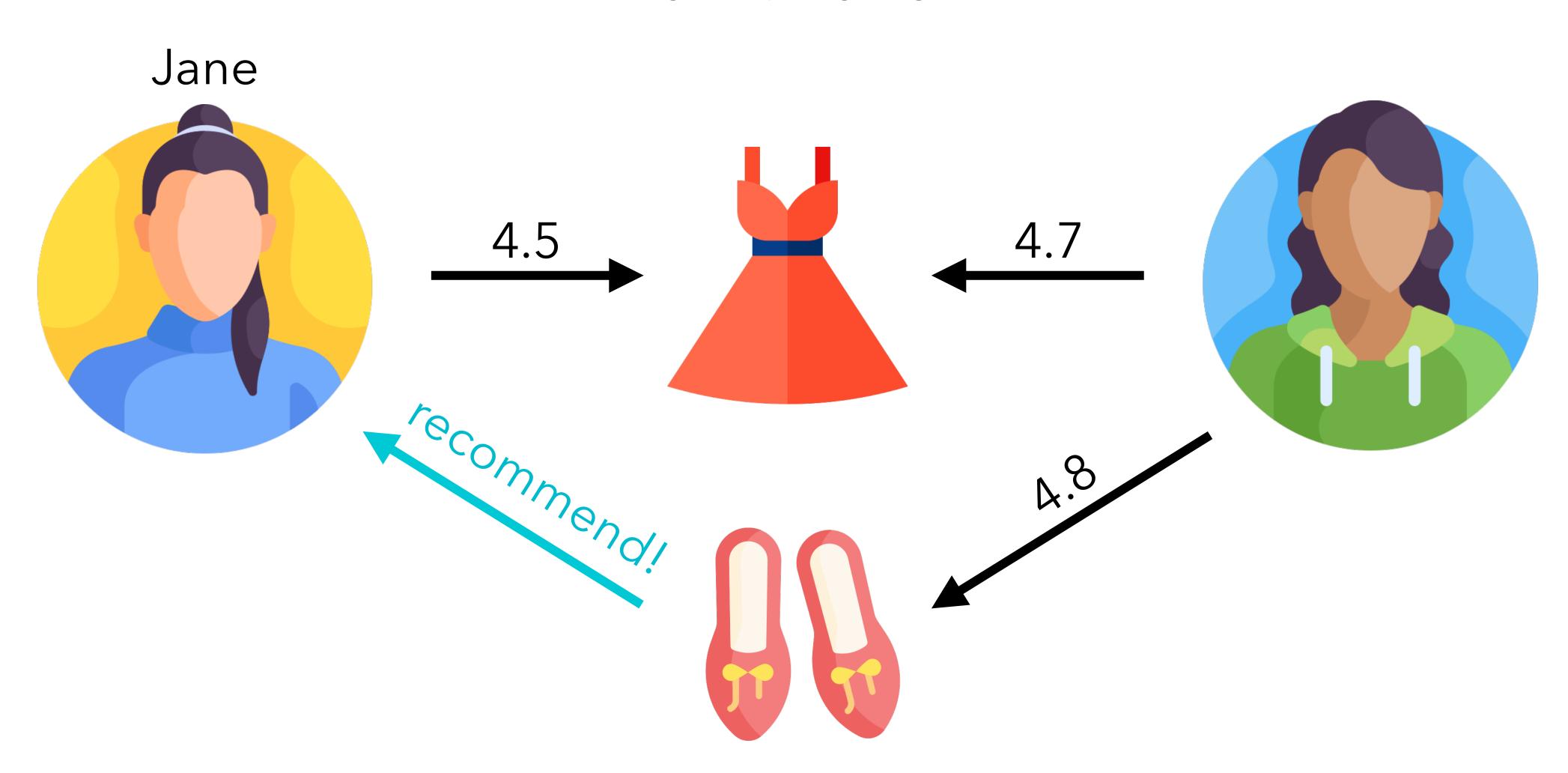
Even India knows....

Collaborative Filtering

Content-based Filtering

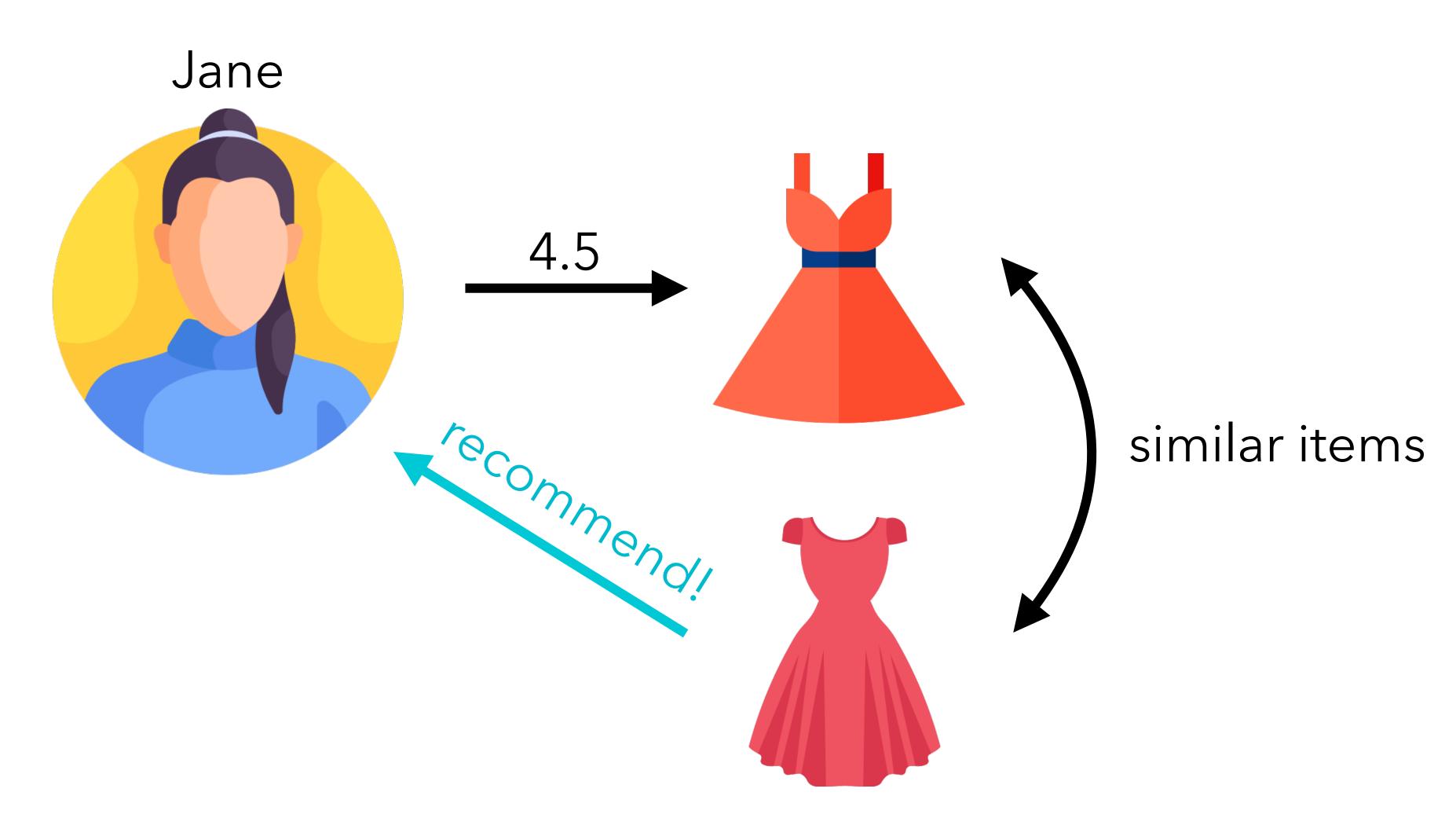
# Collaborative Filtering

How it works?



# Content-based Filtering

How it works?



# Wrap - Up

#### Let's compare these two methods

	Collaborative Filtering	Content-based Filtering
Pros	No need to have domain knowledge	Easier to scale to a large number of users Tailored recommendation
Cons	Cold-start problem	Hard to obtain explicit profiles of items/users

https://developers.google.com/machine-learning/recommendation/content-based/summary https://developers.google.com/machine-learning/recommendation/collaborative/summary

#### References

• <a href="https://analyticsindiamag.com/collaborative-filtering-vs-content-based-filtering-for-recommender-systems/">https://analyticsindiamag.com/collaborative-filtering-vs-content-based-filtering-for-recommender-systems/</a>

• <a href="https://towardsdatascience.com/introduction-to-recommender-systems-i-97ibd274f42i">https://towardsdatascience.com/introduction-to-recommender-systems-i-97ibd274f42i</a>

• code for content-based filtering

https://www.kdnuggets.com/2019/11/content-based-recommender-using-natural-language-processing-nlp.html

# Thank You 🎺