

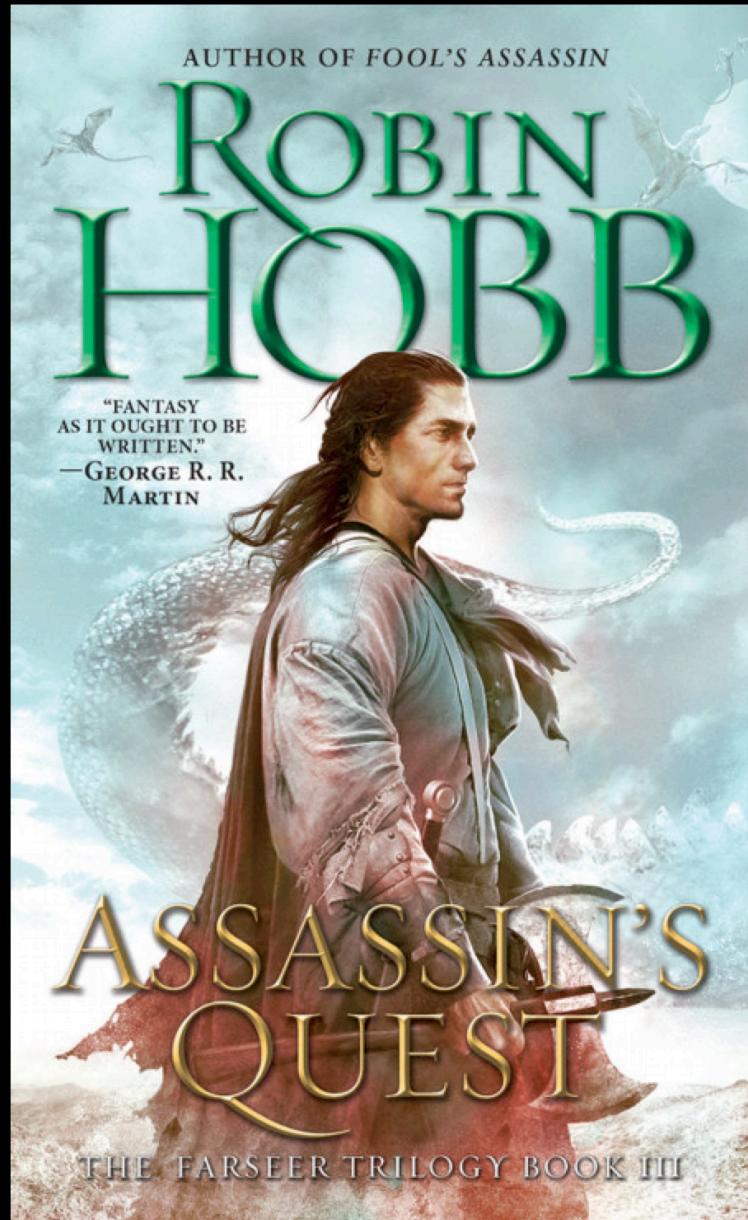


Better Reads: Improving on book recommendation systems

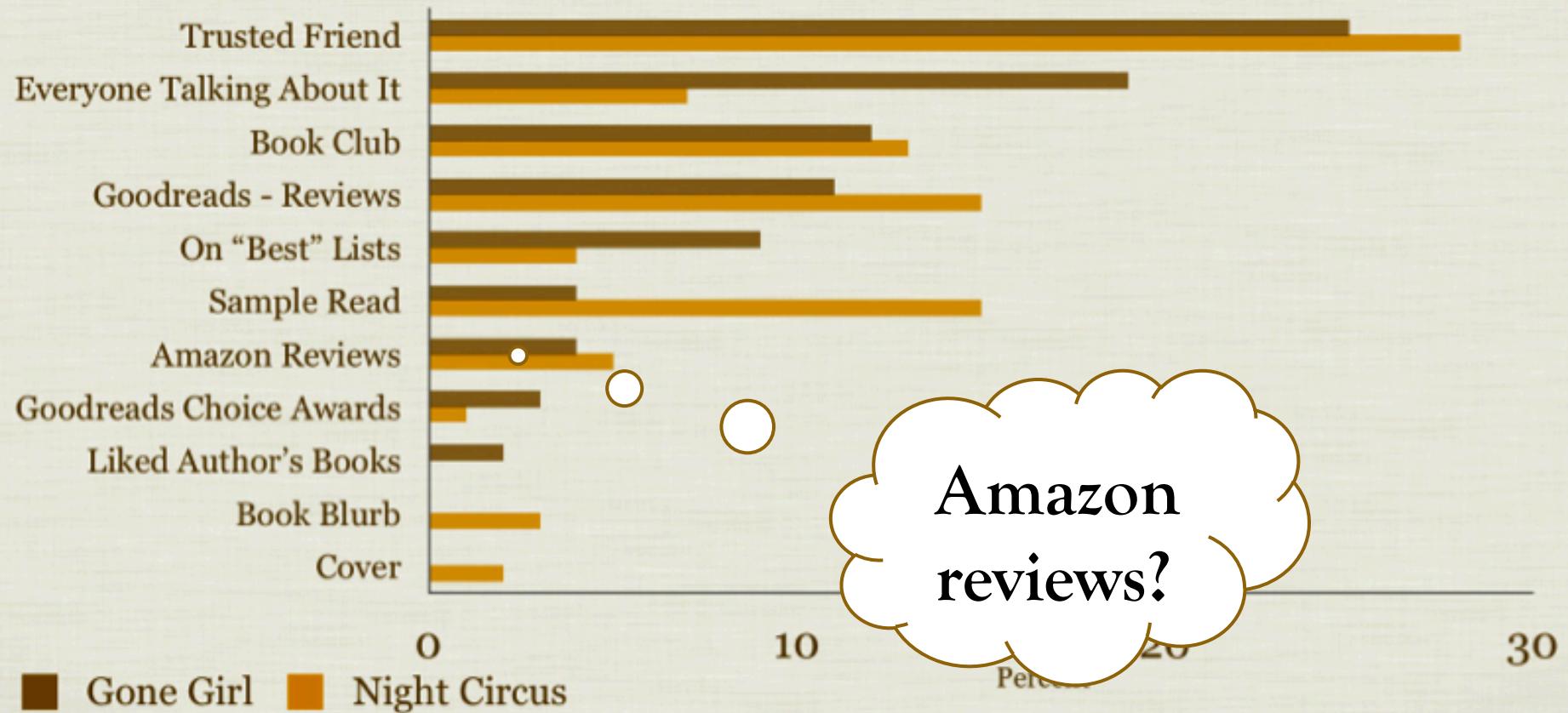
Clarence Stephen

Aa

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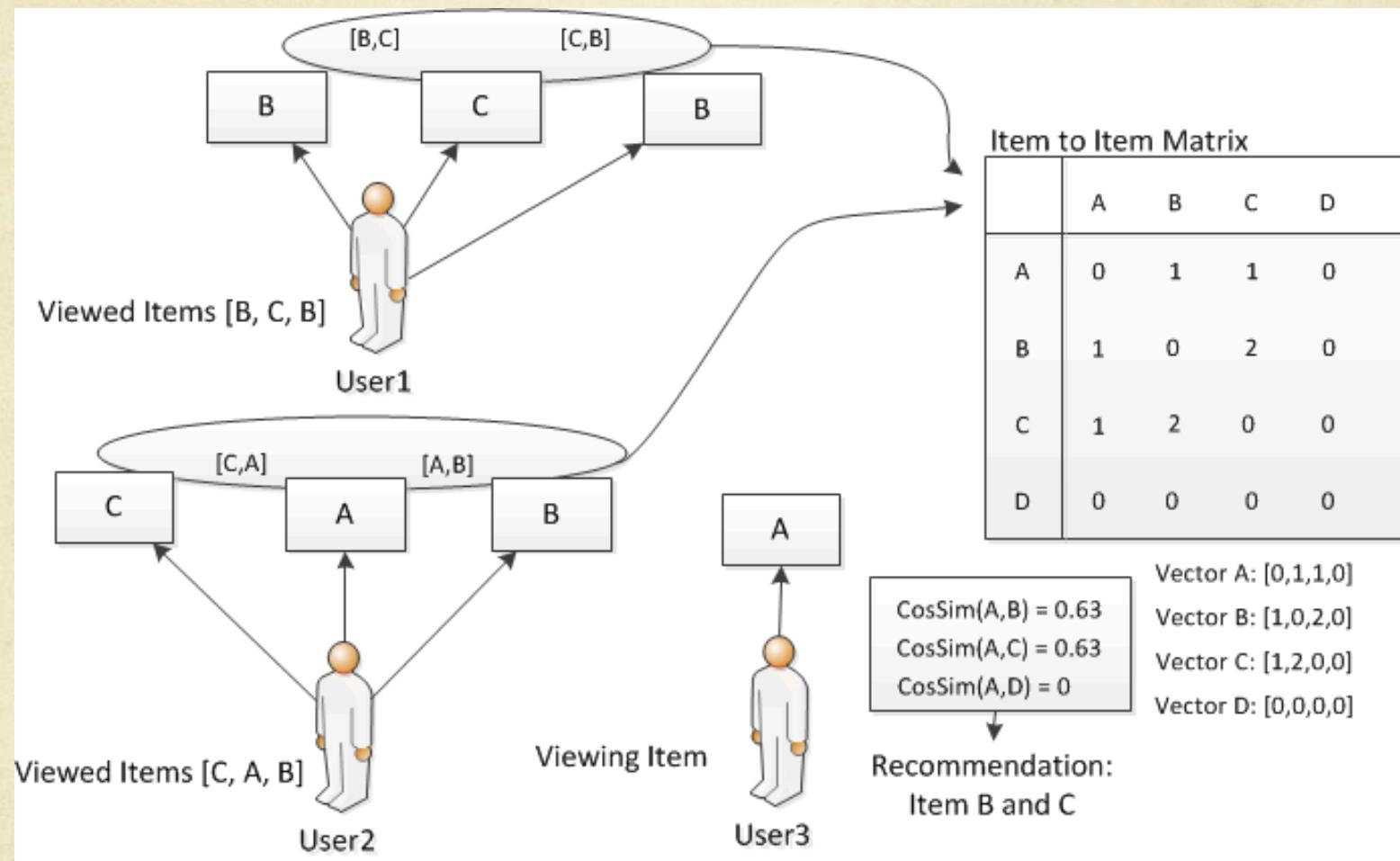


What Convinced You To Read The Book?



goodread

Amazon



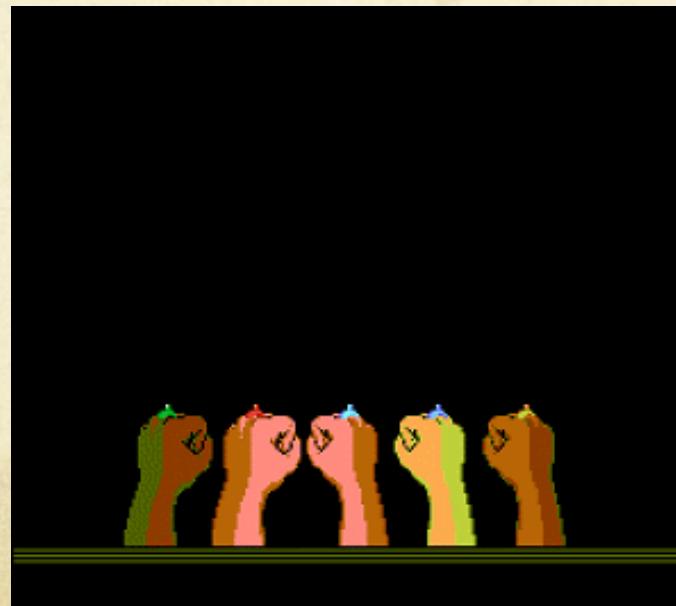
goodreads

Idea

goodreads



amazon



Data

goodreads

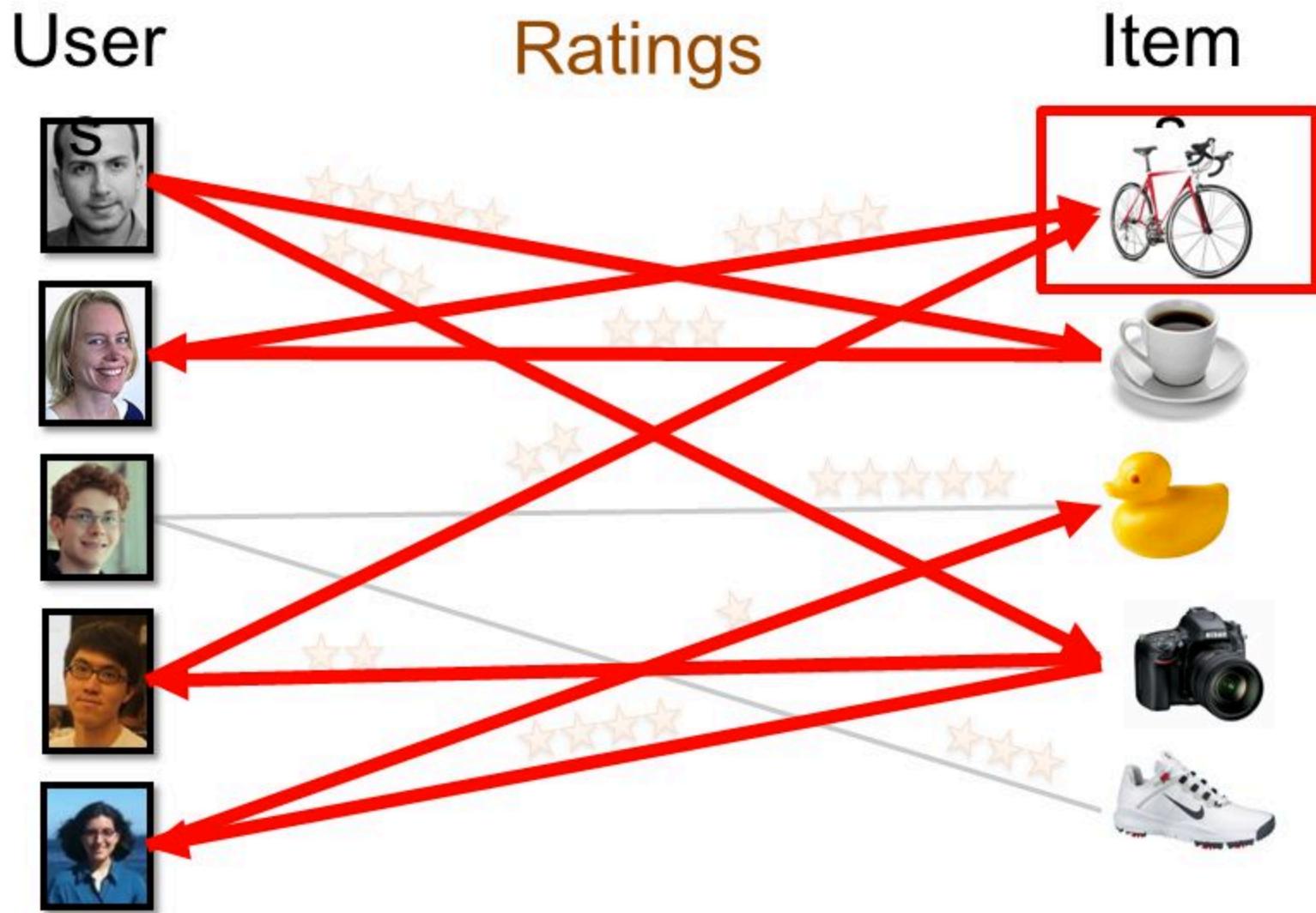


amazon

32.3 million reviews

8.1 million users

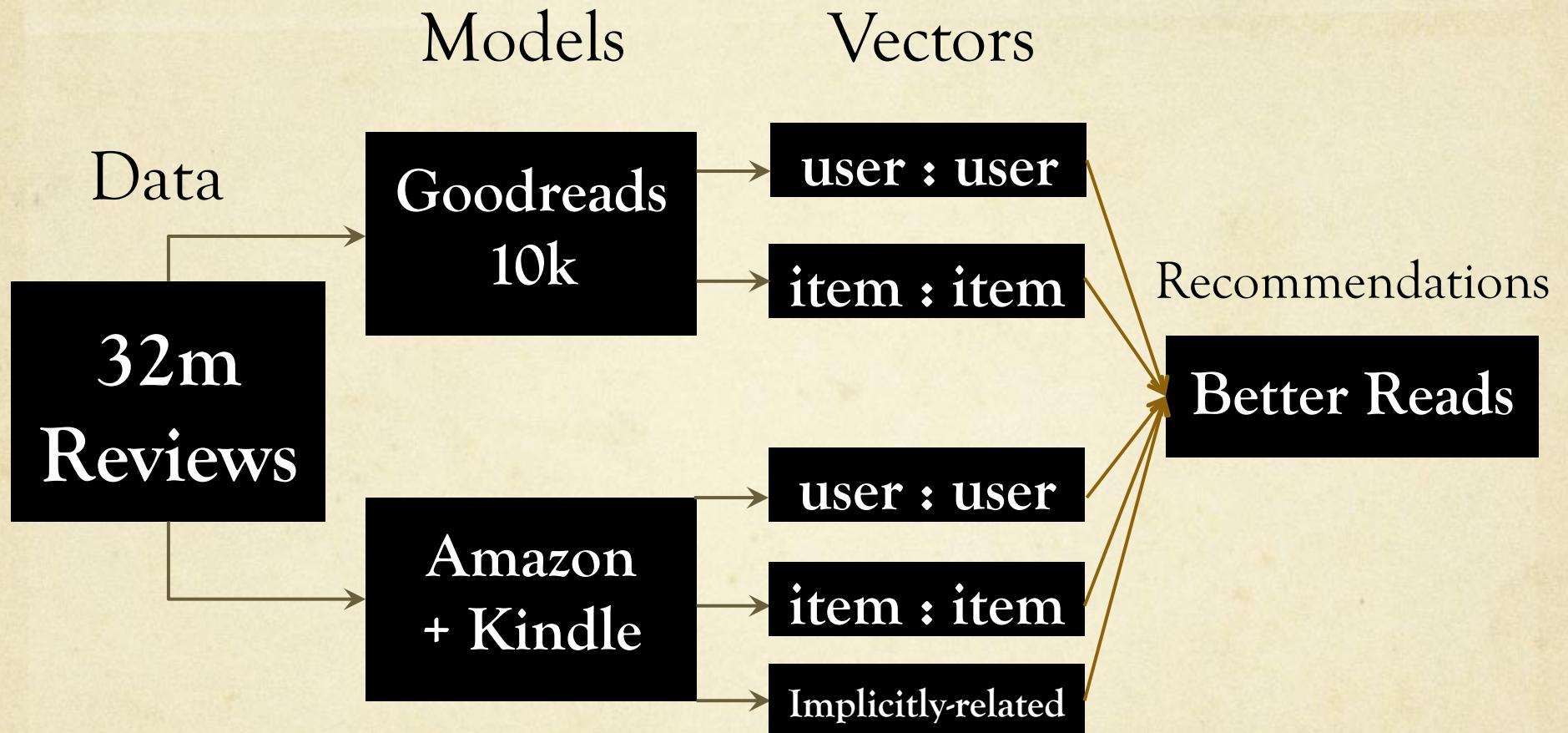
Collaborative Filtering



Process

- Behemoth Data Wrangling
- Parallel Processing Methods
(Cython, OpenMP)
- Implicit Library by Ben
Frederickson

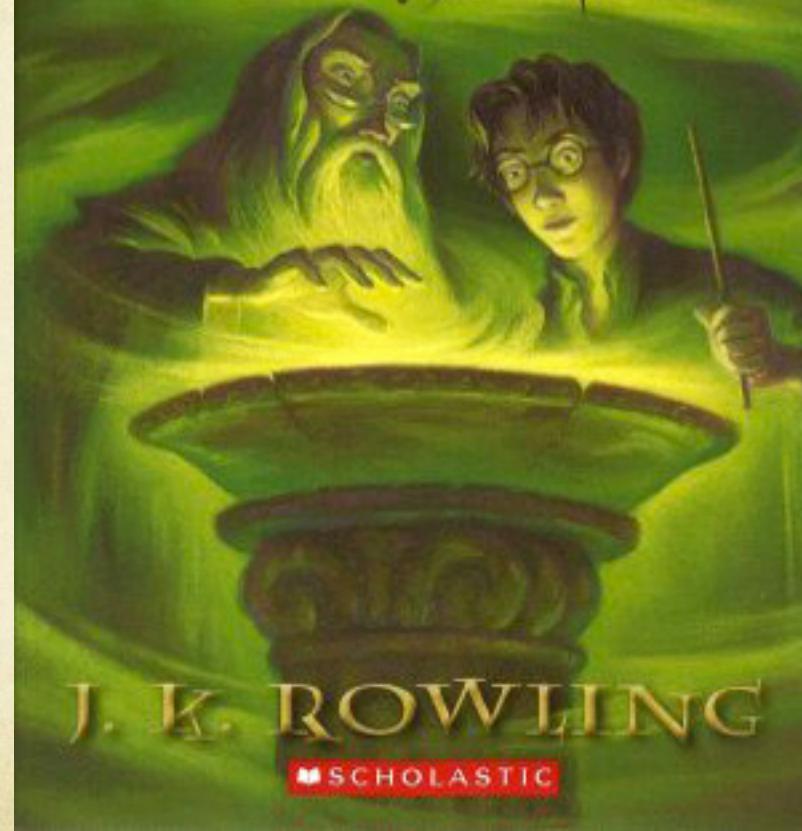
Recommendation System



THE ENTERTAINING NATIONAL BESTSELLER

Harry Potter

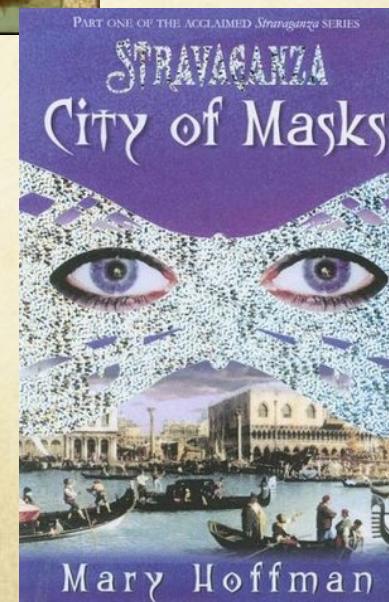
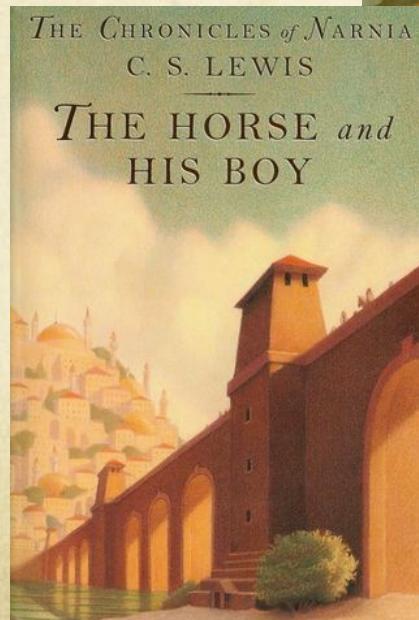
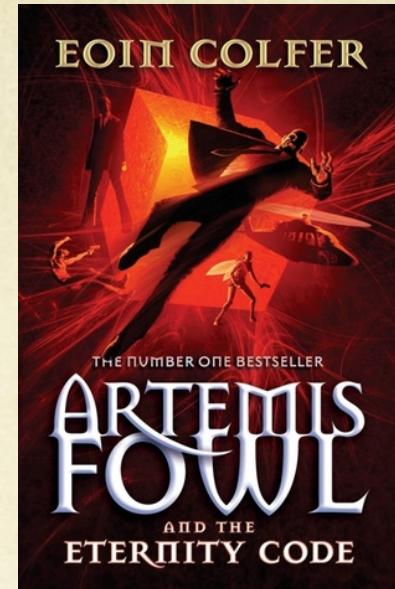
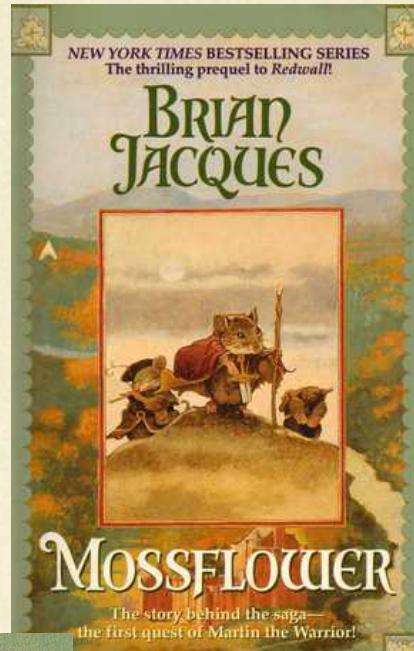
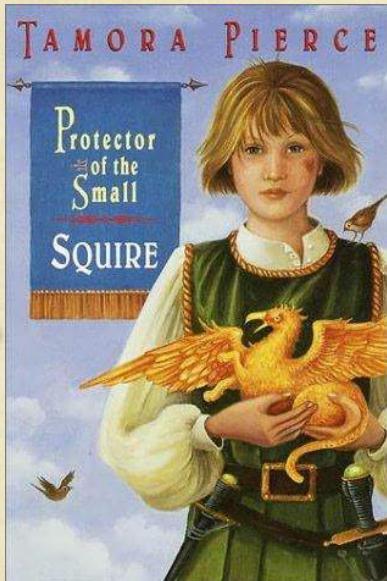
and the Half-Blood Prince



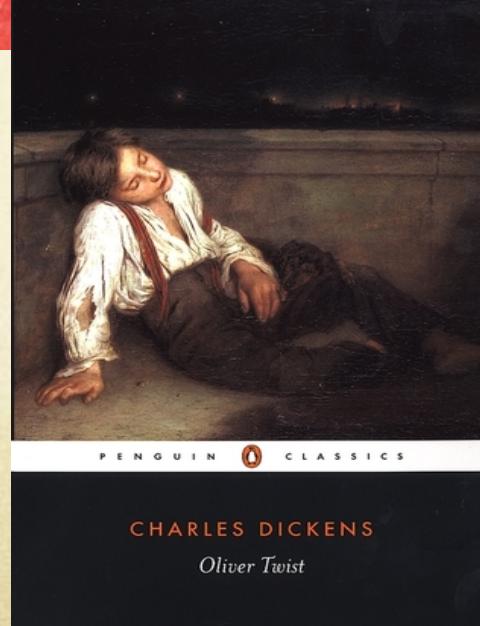
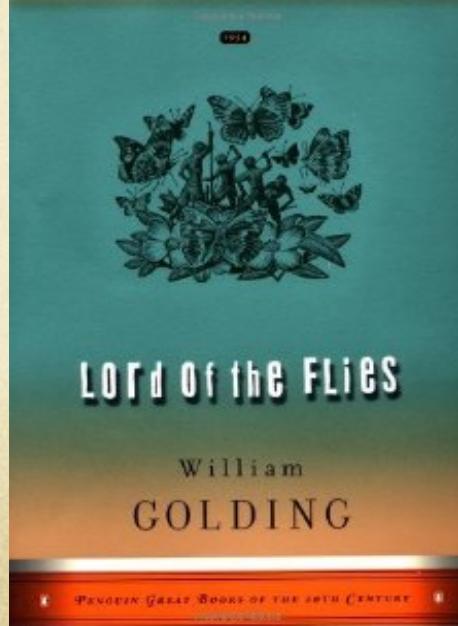
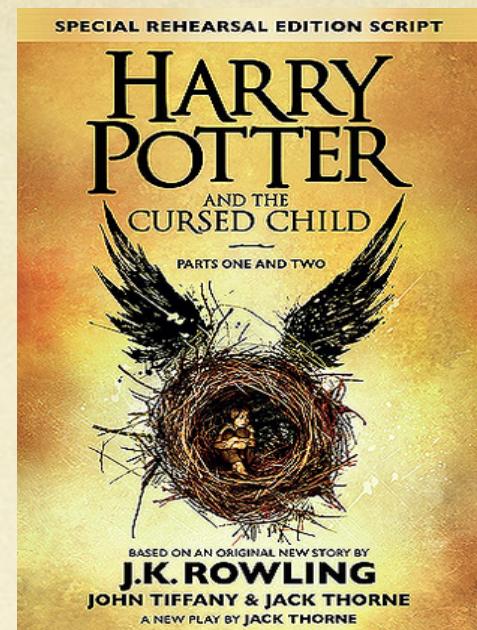
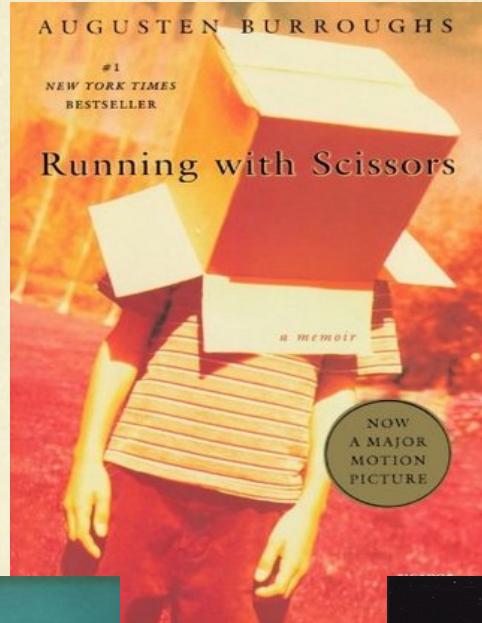
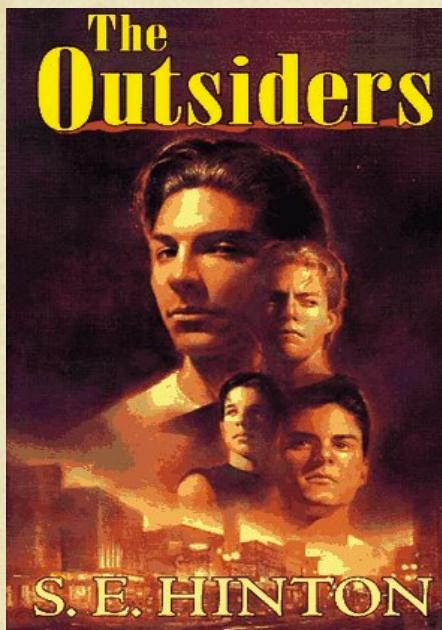
J. K. ROWLING

SCHOLASTIC

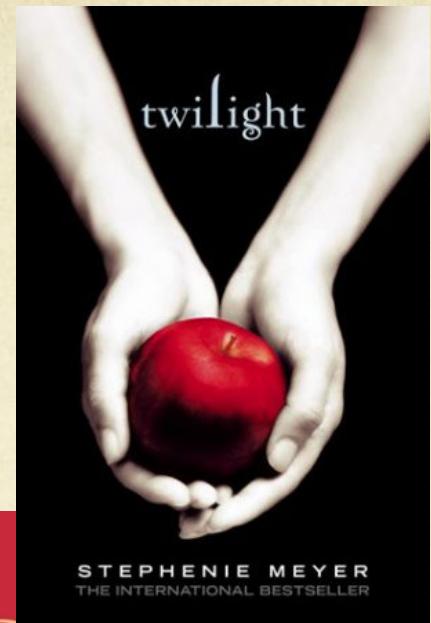
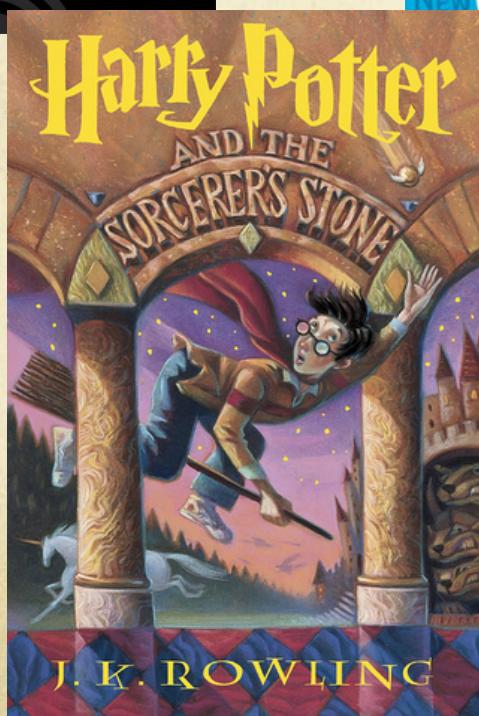
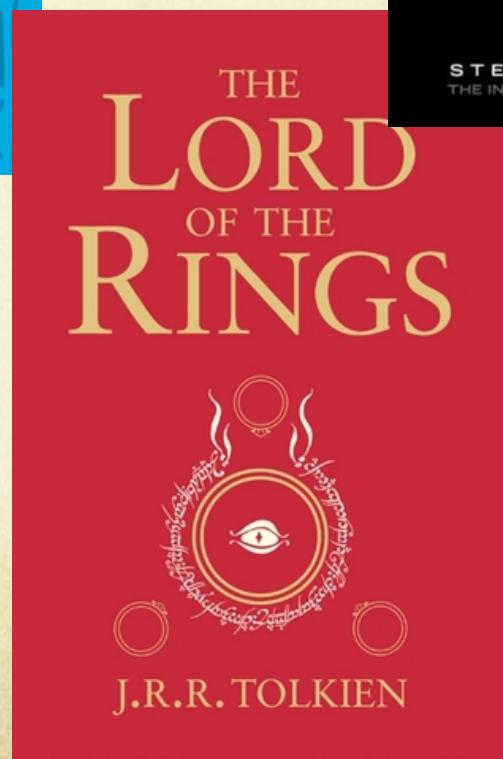
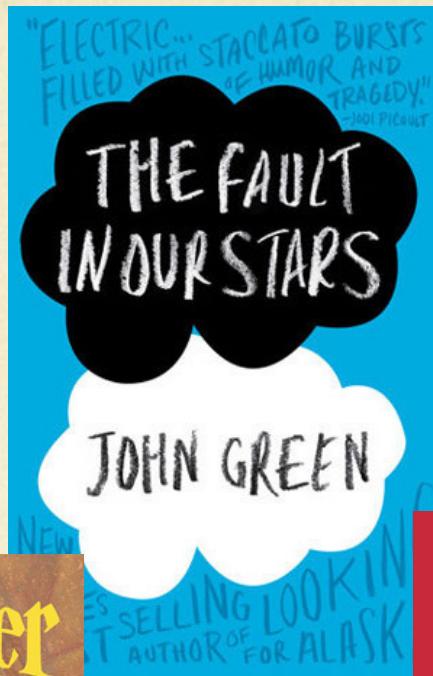
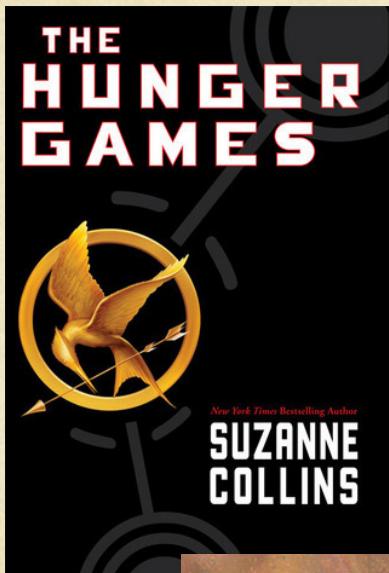
Goodreads Default



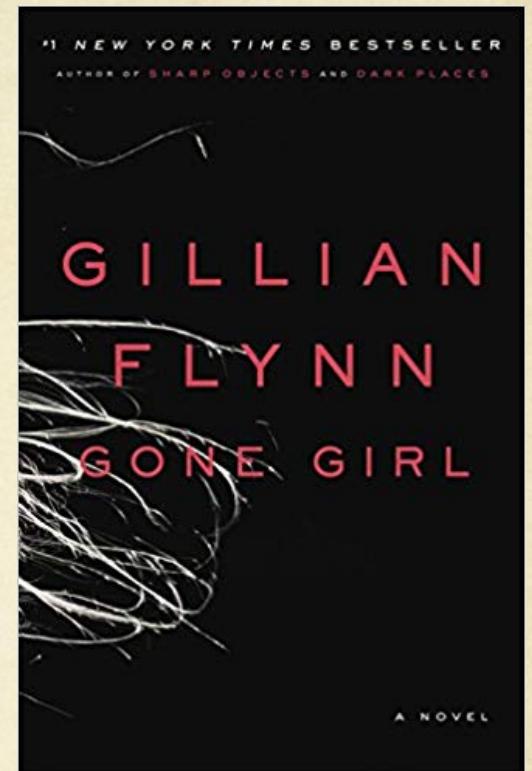
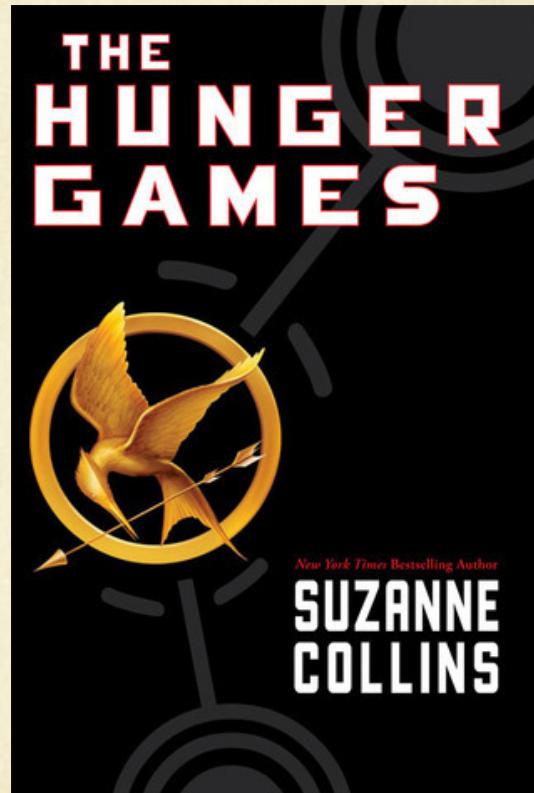
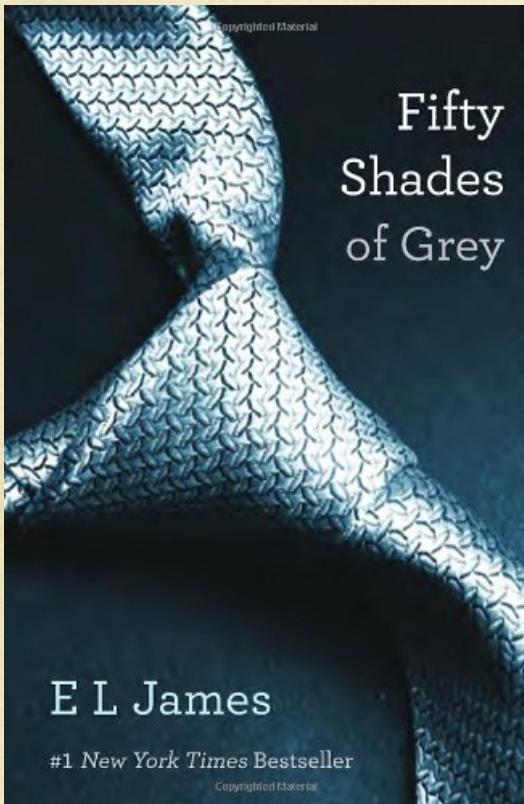
Goodreads-10k (user : item)



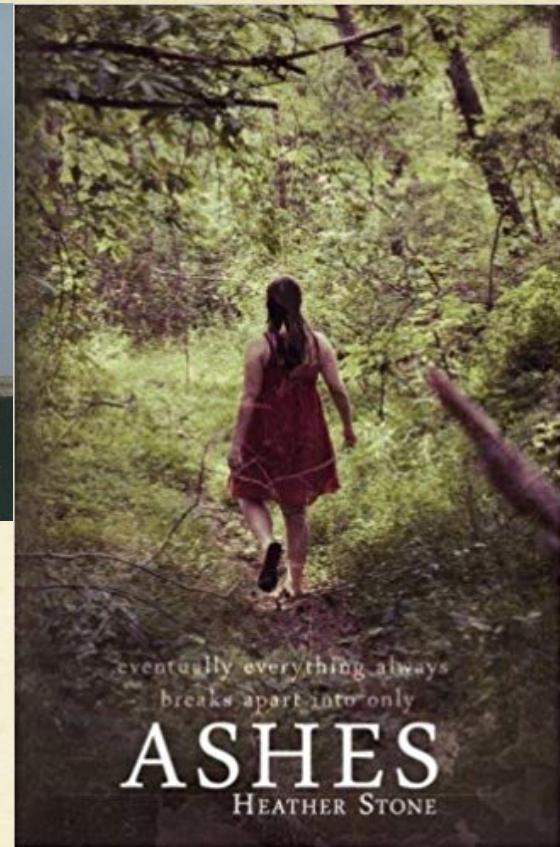
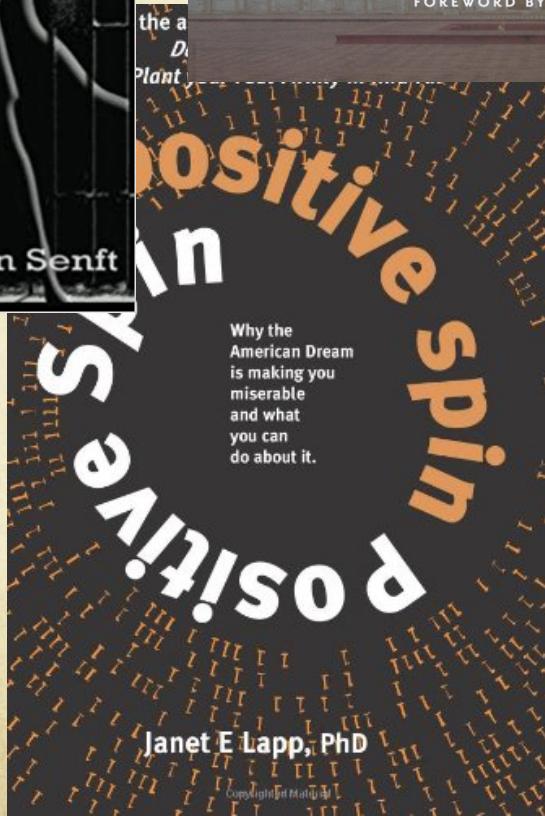
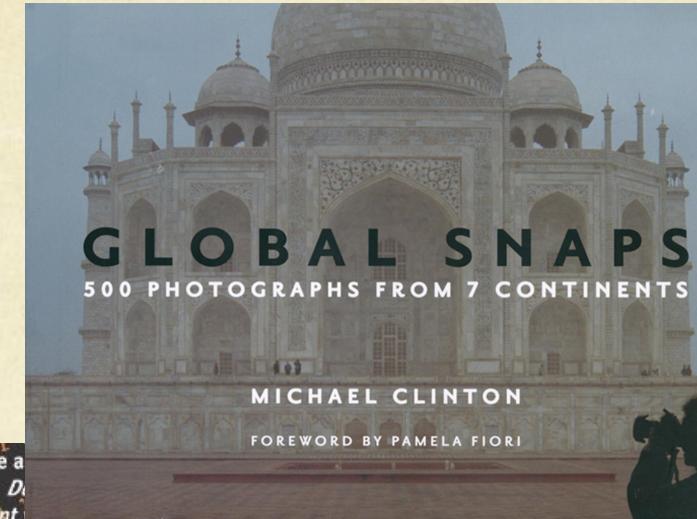
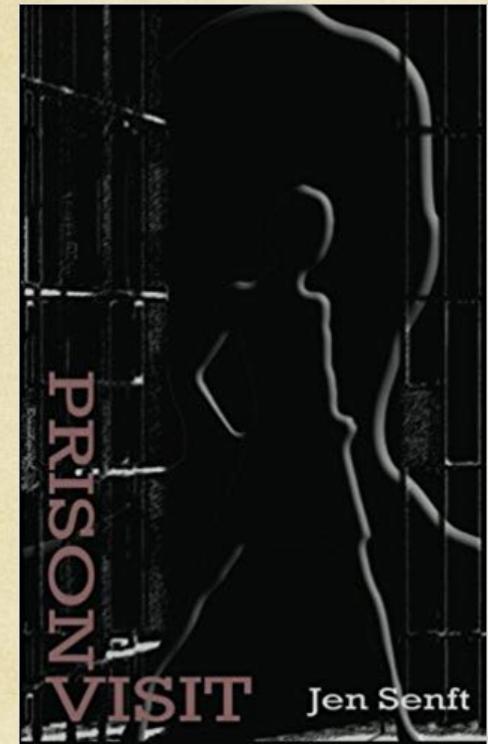
Goodreads-10k (item : item)



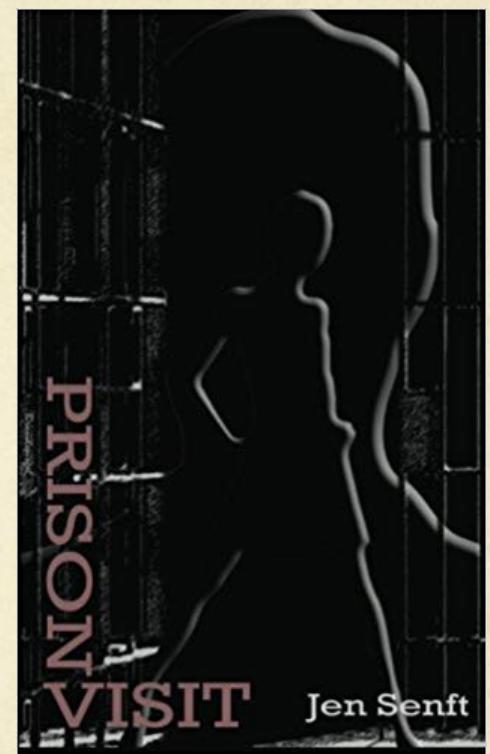
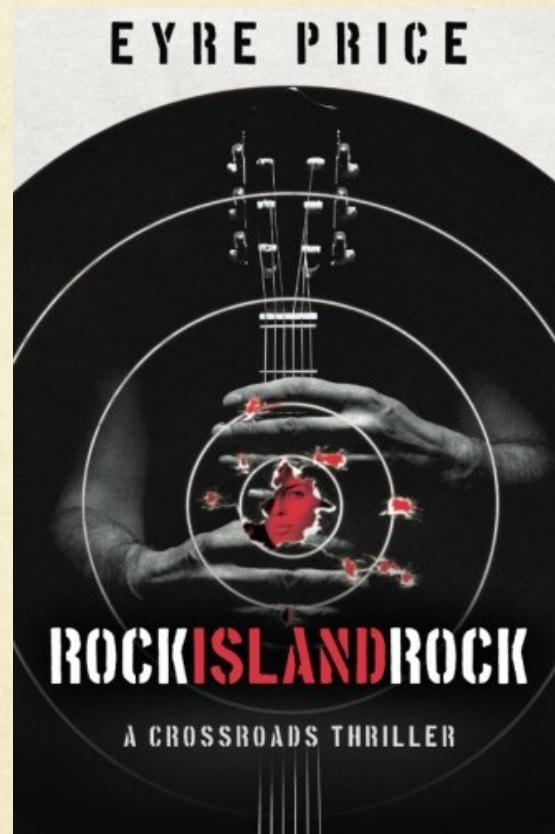
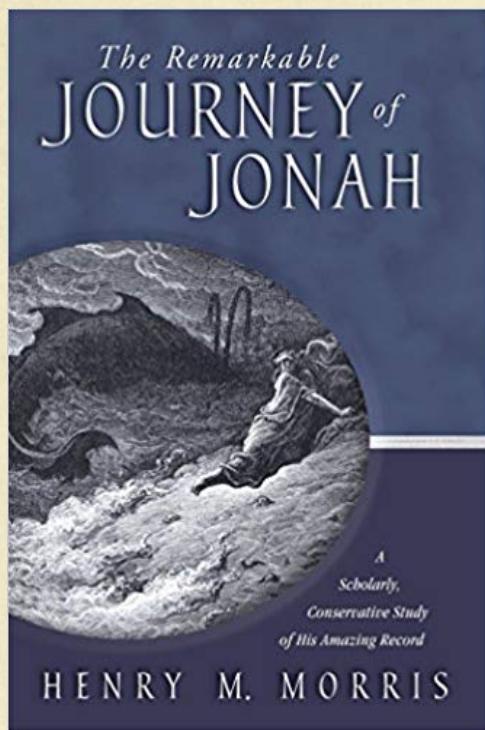
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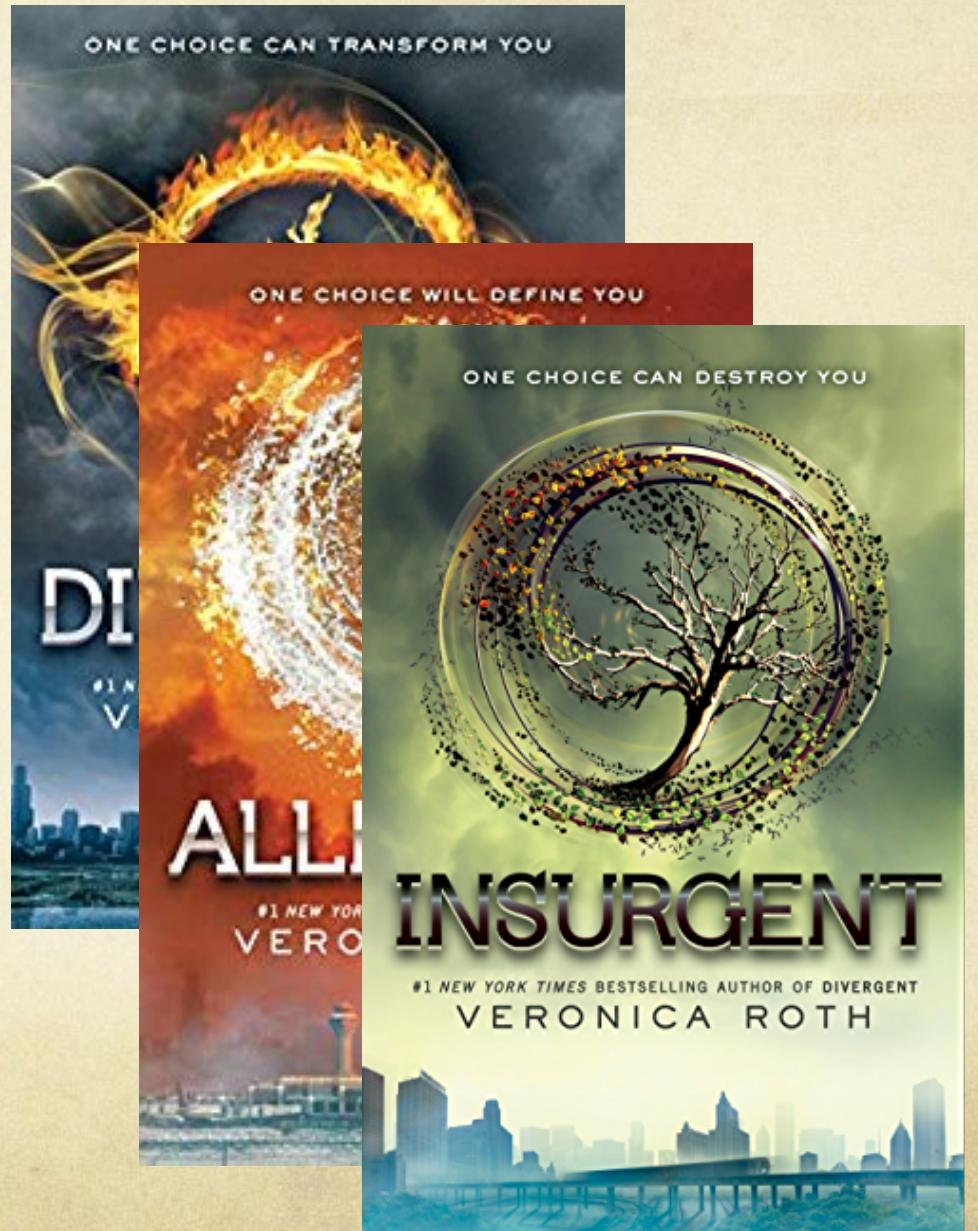
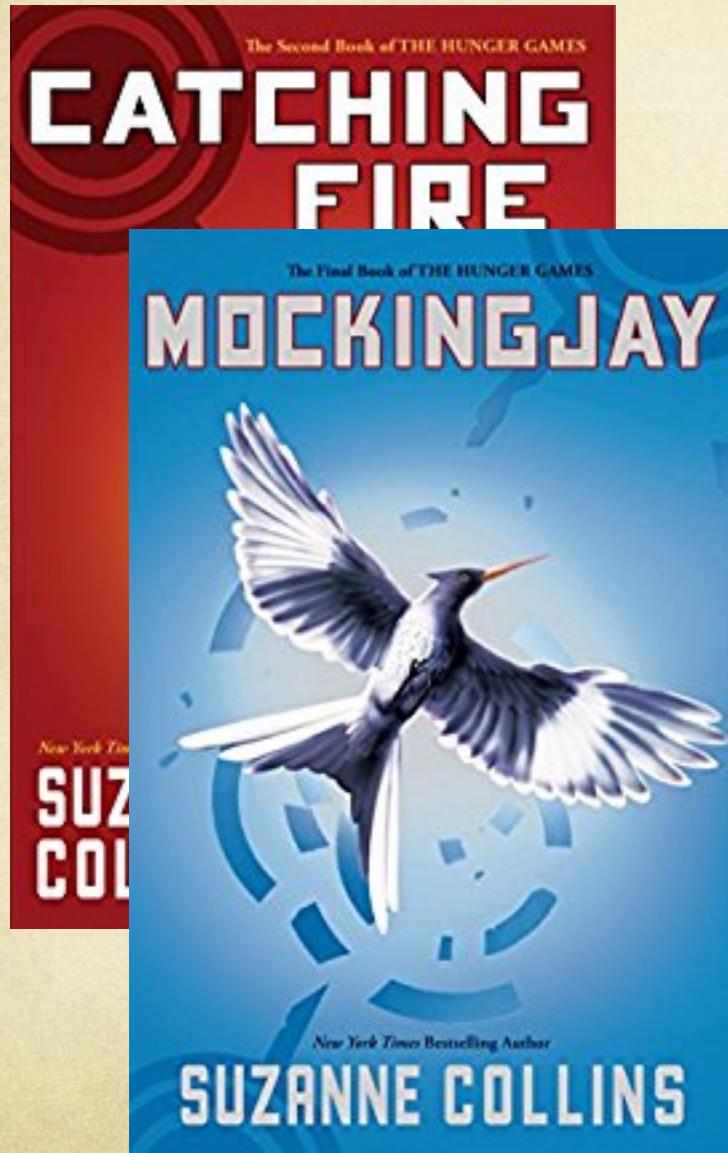
Amazon (user : item)



Amazon (item : item)



Amazon (Implicitly-related)



What to read next?

- Curated vs. Experimental (*user : item*)



- Mainstream vs. Discovery (*item : item*)



- Linear – Amazon Implicit

Citations

- **github.com/benfred/implicit**
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- J. McAuley, C. Targett, J. Shi, A. van den Hengel. Image-based recommendations on styles and substitutes. SIGIR, 2015
- Y. Hu, Y. Koren, C. Volinksy. Collaborative Filtering for Implicit Feedback Datasets. AT&T Research. Computer, 2009

Clarence Stephen



- clarence.stephen@gmail.com
- www.cognosis.solutions
- github.com/clarencestephen
- linkedin.com/in/clarencestephen