

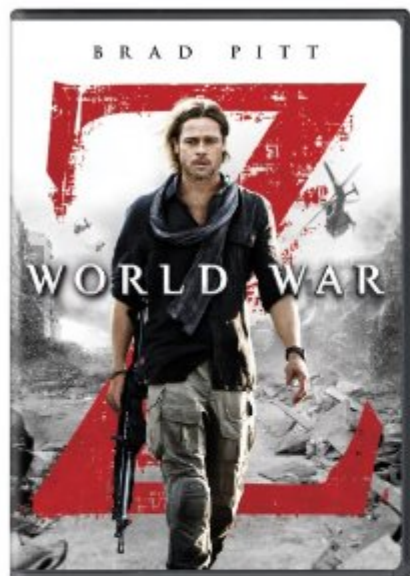
# CS 595

# Project Proposal

Elise Thrasher

# Problem Statement

The ratings for the same movies  
on Amazon.com and RottenTomatoes.com  
are sometimes not proportionally equivalent.



Roll over image to zoom in



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## World War Z (2013)

[Brad Pitt](#) (Actor), [Mireille Enos](#) (Actor), [Marc Forster](#) (Director) | Rated: PG-13 | Format: DVD

★★★★☆ (1,273 customer reviews)

List Price: ~~\$29.99~~

Price: **\$14.99** ✓Prime

You Save: **\$15.00** (50%)

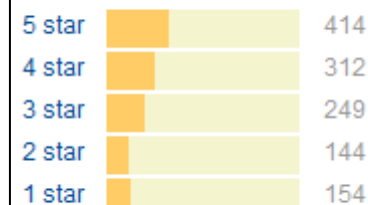
**In Stock.**

Ships from and sold by **Amazon.com**. Gift-wrap available.

**13 new** from **\$13.47**    **3 used** from **\$10.99**

★★★★☆ (1,273)

3.5 out of 5 stars



[See all 1,273 customer reviews](#)

Watch Instantly with **amazon** instant video

	Rent	Buy
World War Z	<b>\$3.99</b>	<b>\$14.99</b>
World War Z (Unrated)	<b>\$3.99</b>	<b>\$14.99</b>

### Other Formats & Versions

		Amazon Price	New from	Used from
+	Multi-Format	2-Disc Version	<b>\$19.99</b> ✓Prime	<b>\$14.98</b>
	Blu-ray	2-Disc Version	--	--
+	DVD	1-Disc Version	<b>\$14.99</b> ✓Prime	<b>\$10.99</b>

$$3.5 / 5 = 70\%$$



▶ **PLAY TRAILER**

## World War Z (2013)

TOMATOMETER

All Critics | Top Critics

AUDIENCE



**67%**



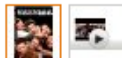
Average Rating: 6.2/10  
Reviews Counted: 240  
Fresh: 161 | Rotten: 79

It's uneven and diverges from the source book, but World War Z still brings smart, fast-moving thrills and a solid performance from Brad Pitt to the zombie genre.



**74%**

**liked it**  
Average Rating: 3.8/5  
User Ratings: 231,499



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## This Is the End (+UltraViolet Digital Copy) (2013)

[James Franco](#) (Actor), [Jonah Hill](#) (Actor), [Seth Rogen](#) (Director), [Evan Goldberg](#) (Director) | Rated: R | Format: DVD

★★★★☆ ☒ (251 customer reviews)

List Price: ~~\$30.99~~

Price: **\$17.96** ✓Prime

You Save: **\$13.03** (42%)

**In Stock.**

Ships from and sold by **Amazon.com**. Gift-wrap available.

**10 new** from ~~\$17.96~~ **3 used** from ~~\$13.96~~

Watch Instantly with **amazon** instant video

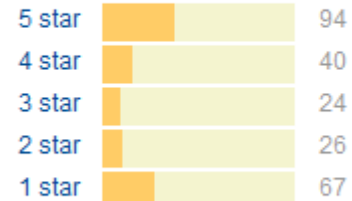
This Is The End

### Other Formats & Versions

		Amazon Price		New from	Used from
Multi-Format	2-Disc Version	<del>\$22.96</del>	✓Prime	\$21.98	\$17.96
DVD	1-Disc Version	<del>\$17.96</del>	✓Prime	\$17.96	\$13.96

★★★★☆ (251)

3.3 out of 5 stars



[See all 251 customer reviews](#)

$3.3 / 5 =$   
**66%**



▶ **PLAY TRAILER**

## This Is the End (2013)

TOMATOMETER <sup>?</sup>

All Critics | Top Critics



**84%**

Average Rating: 7.1/10  
Reviews Counted: 202  
Fresh: 169 | Rotten: 33

Energetic, self-deprecating performances and enough guffaw-inducing humor make up for the flaws in This Is the End loosely written script.

AUDIENCE <sup>?</sup>

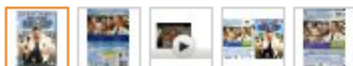


**78%**

liked it  
Average Rating: 3.9/5  
User Ratings: 134,867



Roll over image to zoom in



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## Paul Blart: Mall Cop (2009)

[Kevin James](#) (Actor) | Rated: PG | Format: DVD

★★★★☆ (194 customer reviews)

List Price: ~~\$14.99~~

Price: **\$10.54** ✓Prime

You Save: \$4.45 (30%)

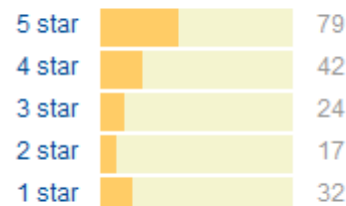
**In Stock.**

Ships from and sold by **Amazon.com**. Gift-wrap available.

**76 new** from \$3.66 **300 used** from \$0.01 **2 collectible** from \$9.99

★★★★☆ (194)

3.6 out of 5 stars



[See all 194 customer reviews](#)

Watch Instantly with **amazon** instant video

Paul Blart: Mall Cop

Rent

Buy

—

**\$9.99**

### Other Formats & Versions

		Amazon Price		New from	Used from
+	Blu-ray	2-Disc Version	<b>\$9.95</b> ✓Prime	\$3.20	\$1.53
+	DVD	1-Disc Version	<b>\$10.54</b> ✓Prime	\$3.66	\$0.01

$$3.6 / 5 = 72\%$$



▶ PLAY TRAILER

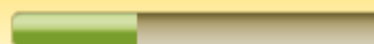
## Paul Blart: Mall Cop (2009)

TOMATOMETER ?

All Critics | Top Critics

✱ **33%**

Average Rating: 4.6/10  
Reviews Counted: 113  
Fresh: 37 | Rotten: 76



Paul Blart: Mall Cop has some laughs, but its plot is flimsy and lacking in any sustained comic momentum.

AUDIENCE ?

**46%**

liked it  
Average Rating: 3.1/5  
User Ratings: 388,821



## Dennis the Menace (Special Edition) (2003)

[Walter Matthau](#) (Actor), [Christopher Lloyd](#) (Actor), [Nick Castle](#) (Director) | Rated: PG | Format: DVD

★★★★★ (228 customer reviews)

List Price: ~~\$5.97~~

Price: **\$3.99** ✓Prime

You Save: **\$1.98 (33%)**

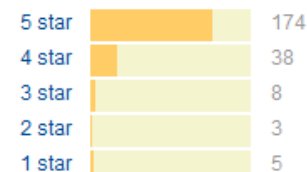
**In Stock.**

Ships from and sold by **Amazon.com**. Gift-wrap available.

**50 new** from **\$2.62** **43 used** from **\$0.01**

★★★★★ (228)

4.6 out of 5 stars



[See all 228 customer reviews](#)

[Click to open expanded view](#)



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Watch Instantly with **amazon** instant video

Dennis the Menace

**Prime Members**

**Rent**

**Buy**

**\$0.00** ✓Prime  
(unlimited streaming)

**\$2.99**

**\$9.99**

**Other Formats & Versions**

**Amazon Price**

**New from**

**Used from**

DVD

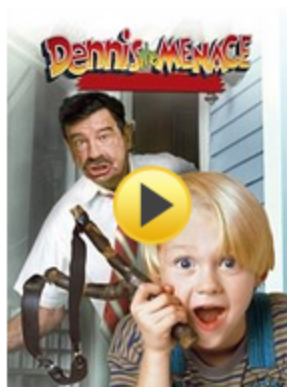
Special Edition

**\$3.99** ✓Prime

**\$2.62**

**\$0.01**

**4.6 / 5 =  
92%**



**▶ PLAY TRAILER**

## Dennis the Menace (2003)

**TOMATOMETER** ?

All Critics | Top Critics

**23%**

Average Rating: 3.9/10  
Reviews Counted: 22  
Fresh: 5 | Rotten: 17

Walter Matthau does a nice job as Mr. Wilson, but Dennis the Menace follows the Home Alone formula far too closely.

**AUDIENCE** ?

**42%**

liked it  
Average Rating: 2.7/5  
User Ratings: 255,439

# Hypothesis

- By treating reviews as “bags of words”, I can analyze the contents of the reviews on both sites for the same movie.
- Words or phrases that occur more frequently in the contentious movies may indicate the users having different criteria upon which they are reviewing. For example:
  - Price
  - Shipping
  - DVD Special Features
  - Packaging Design
  - Nostalgia
  - Bias

# Method

- Collect movie information from Amazon.com and RottenTomatoes.com
- Analyze text of front-page reviews on each site for each movie, focusing on unigram and bigram counts across all reviews
- If time permits, analyze other features as well.
- Identify words or phrases frequently associated with each site and/or rating



# Data (1)

- Use Amazon.com to filter movies by release date. Do not filter by ratings, popularity, or any other metric.
  - Coming soon
  - New releases (< 3 months)
  - Recent releases (< 1 year)
  - Stable releases (< 10 years)
- Find the same movie listings on RottenTomatoes.com.
- Ensure sufficient number of reviews on both pages.

# Data (2)

- Analyze unigrams and bigram text across all reviews for each site
- If time permits, add in other features:
  - Number of reviews
  - Release date (DVD and Theater)
  - Review dates
  - Box Office Gross
  - Ratings by Critics/Most Helpful Reviews
  - Adaptation or Original Work
  - Genre

# Related Work

- Wong, Felix Ming Fai, Soumya Sen, and Mung Chiang. "Why watching movie tweets won't tell the whole story?." *Proceedings of the 2012 ACM workshop on Workshop on online social networks*. ACM, 2012.
  - Compares tweet sentiment with ratings on IMDb and RottenTomatoes
- Zhuang, Li, Feng Jing, and Xiao-Yan Zhu. "Movie review mining and summarization." *Proceedings of the 15th ACM international conference on Information and knowledge management*. ACM, 2006.
  - Extract viewer's opinions about movie from reviews
  - Determine whether opinions are generally positive or generally negative

# Timeline

- Today, October 8: Proposal Presentation
- Week of Oct 15: Collect Data
- Week of Oct 22: Filter and Organize Data
- Week of Oct 29: Begin Parsing on Extracted Data
- Week of Nov 5: Finish Tests
- Week of Nov 12: Collect and Analyze Results
- Week of Nov 19: Project Presentation
- Week of Nov 26: Project Paper Due