# What's With THAT Name?!

Baby Name Popularity Predictor

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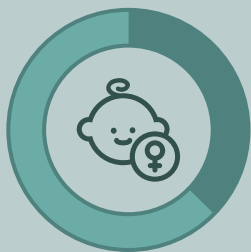# Why a name popularity predictor?

## STRENGTHS

- People with easier-to-pronounce names often have higher status positions at work (NYU, 2011)

- People with common names are more likely to be hired (Marquette University)

- Women with gender-neutral names are more likely to succeed in male-dominated fields like STEM and law (Atlantic, 2014)

- Men with shorter first names are overrepresented in the c-suite (LinkedIn, 2011)

## WEAKNESSES

- Uncommon names are associated with juvenile delinquency (Shippensburg U, 2009)

- Boys with "girl's names" are more likely to be suspended from school (UoF, 2005)

- Roughly 11 percent of parents experience baby name remorse (BabyCenter) –one reason? It got too popular
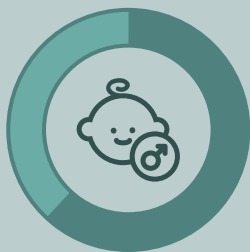
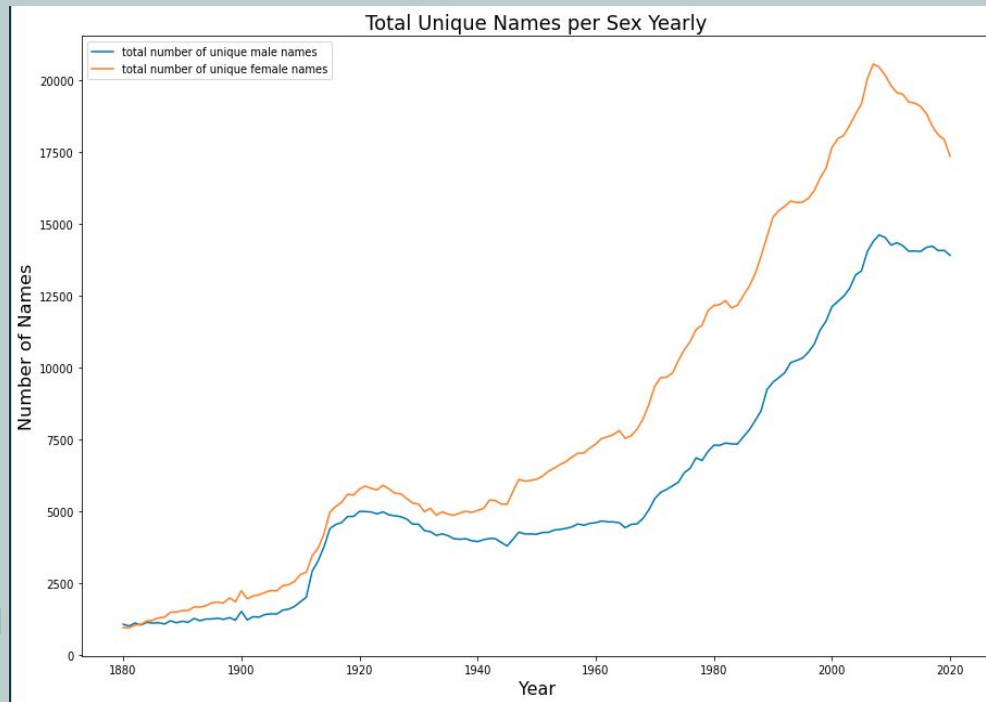# The DATA - US Social Security



68905

1880-2020

At least 5 registered
in a year
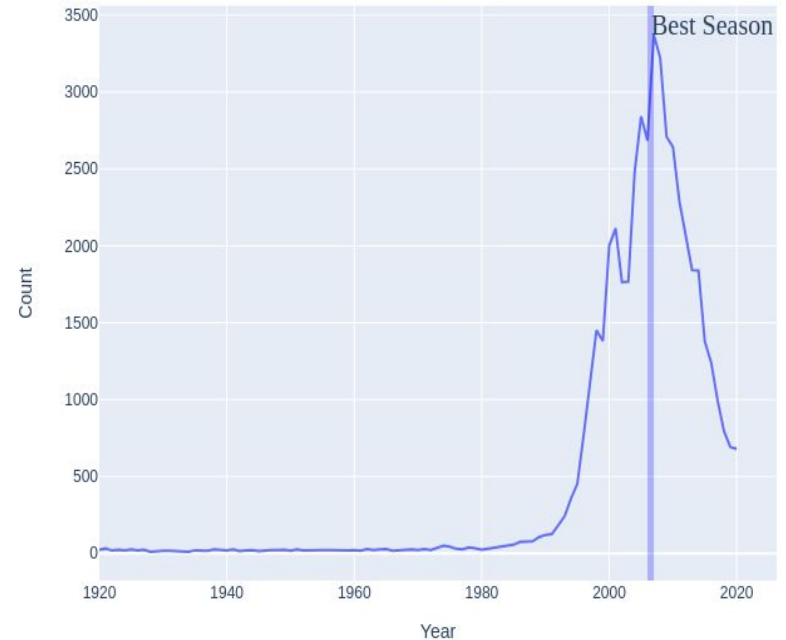
42567

1880-2020

At least 5 registered
in a year

## Total Unique Names per Sex Yearly

— total number of unique male names
— total number of unique female names

Number of Names

Year

# Pop Culture Effects?

Could he have caused the spike?



PEYTON MANNING

https://www.nfl.com/news/sidelines/peyton-manning



'Trends for the Name Peyton

Best Season

Count

Year

# Pop Culture Effects?

And then there's this guy...

'Trends for the Name Brady

Best Season
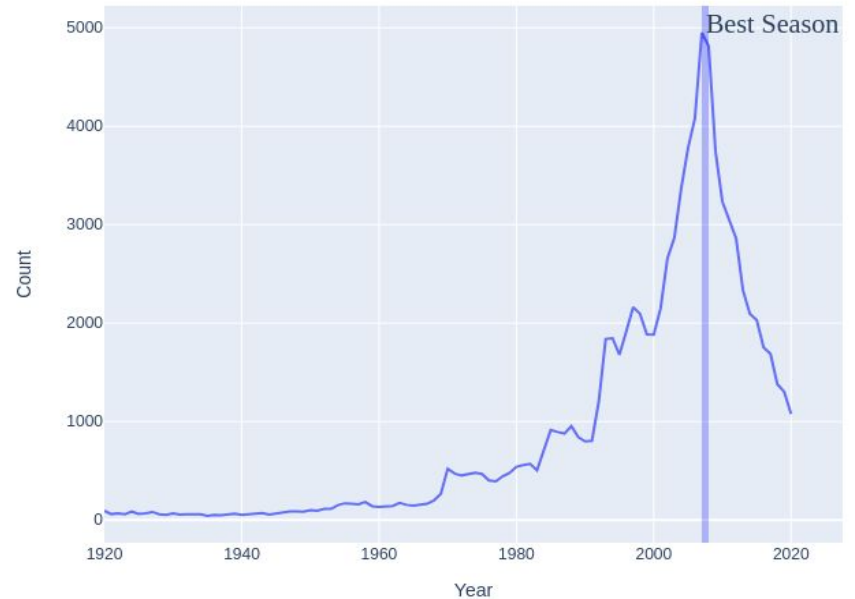
# Pop Culture Effects?
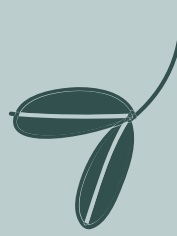
Not to be outdone by the fellas...
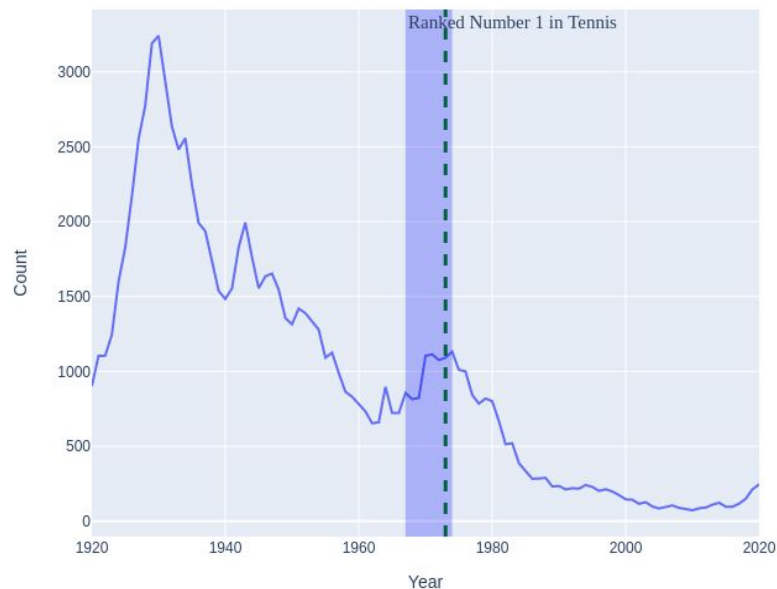
'Trends for the Name Serena

First Pro Match to First Championship

# Pop Culture Effects?


Trends for the Name Billie

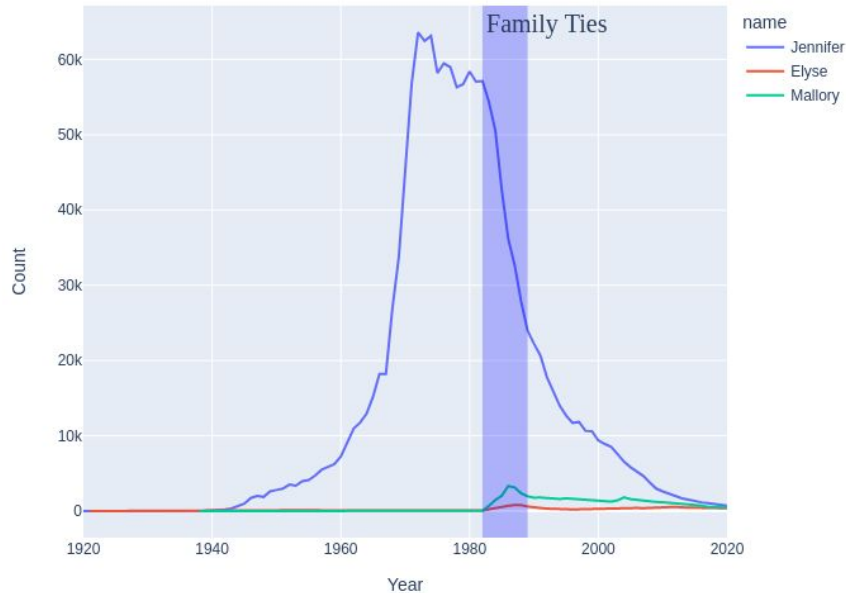Worldwide TV Audience of over 90 Million

# Pop Culture Effects?



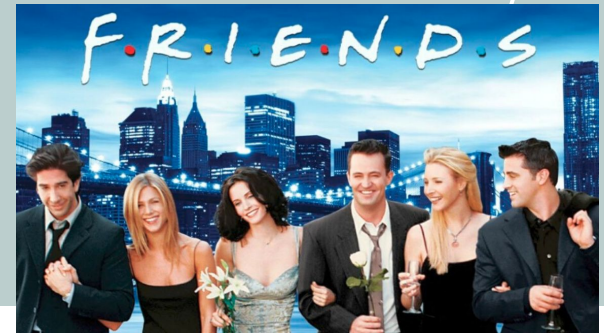One third of all households watched the show....



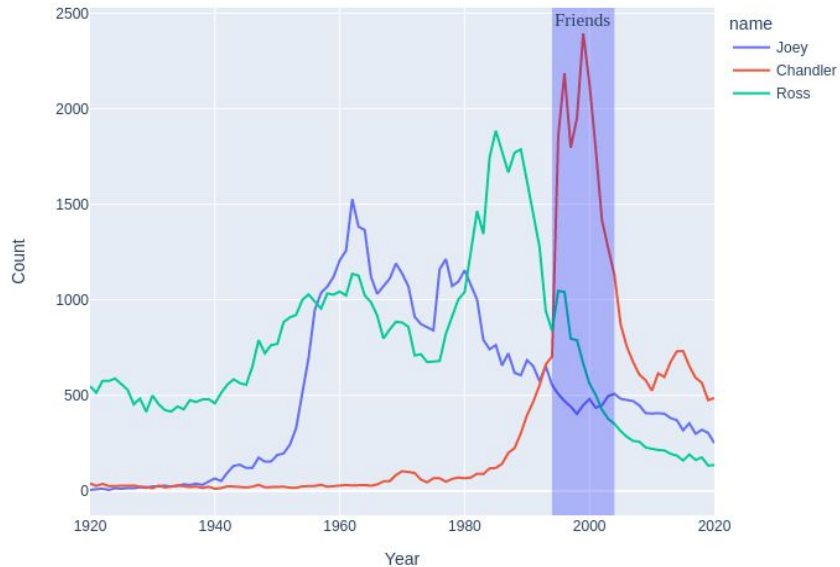'Trends for the Female Names in 'Family Ties'



'Trends for the Male Names in 'Family Ties'

# Pop Culture Effects?



Trends for the Male Names In Friends

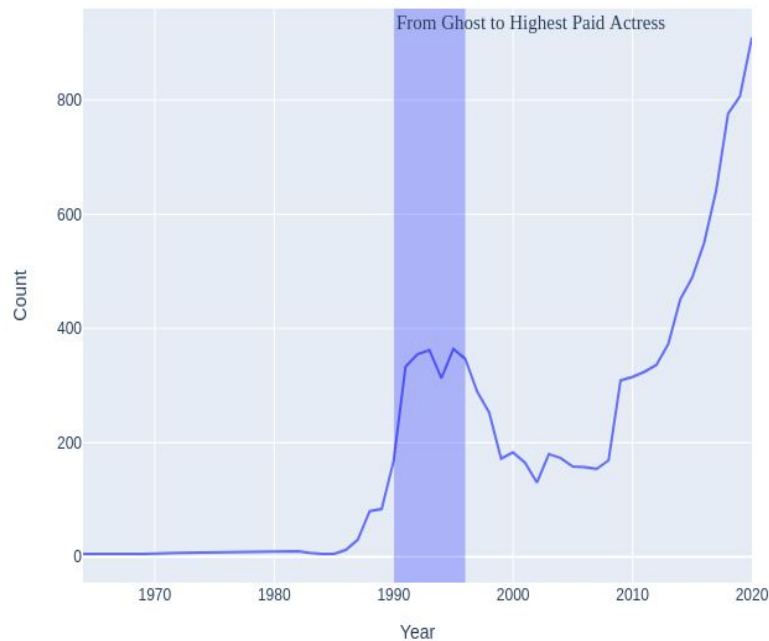Trends for the Female Names In Friends

# Pop Culture Effects?



- Breakthrough role in "Ghost" (Highest Grossing Film of 1990)
- "A Few Good Men" (1992)
- "Indecent Proposal" (1993)
- "Disclosure" (1994)
- "Stripetease" (1995)-highest paid actress in film history

- Movie bombs :
    - "The Scarlet Letter" (1995)
    - "The Juror" (1996)
    - "G.I. Jane" (1997)



Trends for the Name Demi

From Ghost to Highest Paid Actress

# Model Data – Popular Names

1058

1920-2020

At least 825 counts
in one year

649

1920-2020

At least 993 counts
in one year

Set narrowed:

*at least 10 years of popular counts

**FINAL SET FOR MODEL**

● ● ● ○ ○ ○ ○    751

● ● ● ● ● ○ ○    484

● ● ● ● ● ● ●    1235

# MODEL PERFORMANCE

**Baseline Prediction**

Last count of name

**50.2 %**

Outperformed baseline in 50.2 percent of female names

**57.6 %**

Outperformed baseline in 57.6 percent of male names

# Recommendations

We were limited by processing power and data storage limitations:

- **Grab larger set of names to examine and model**

- **Include cultural/ethnic/locational data**

- **Include exogenous trends and events to assist model**
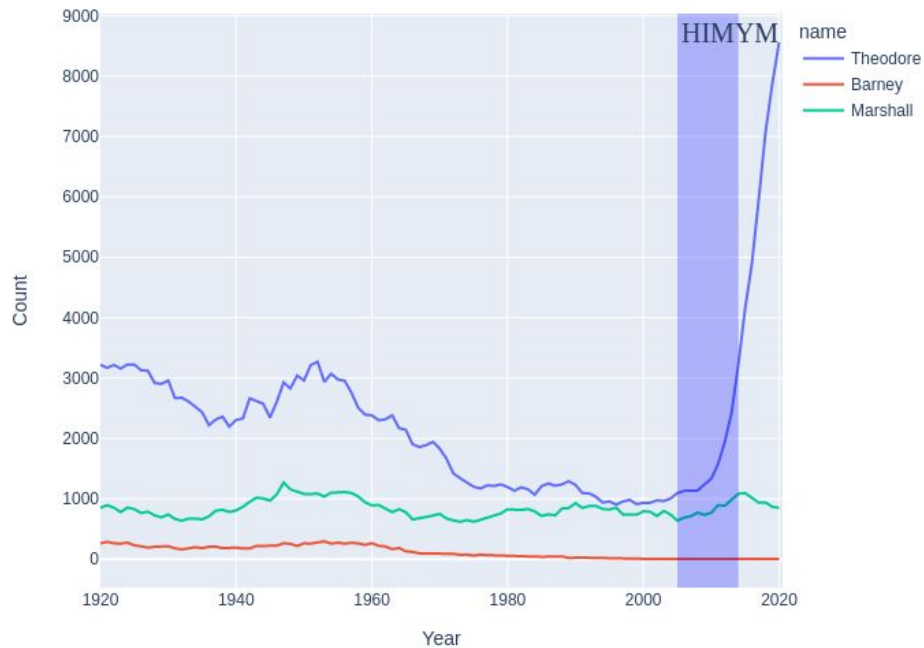
# Name Popularity Predictor App

https://share.streamlit.io/nasimmosley/capstone-submission/finalbabyapp.py

# THANKS!

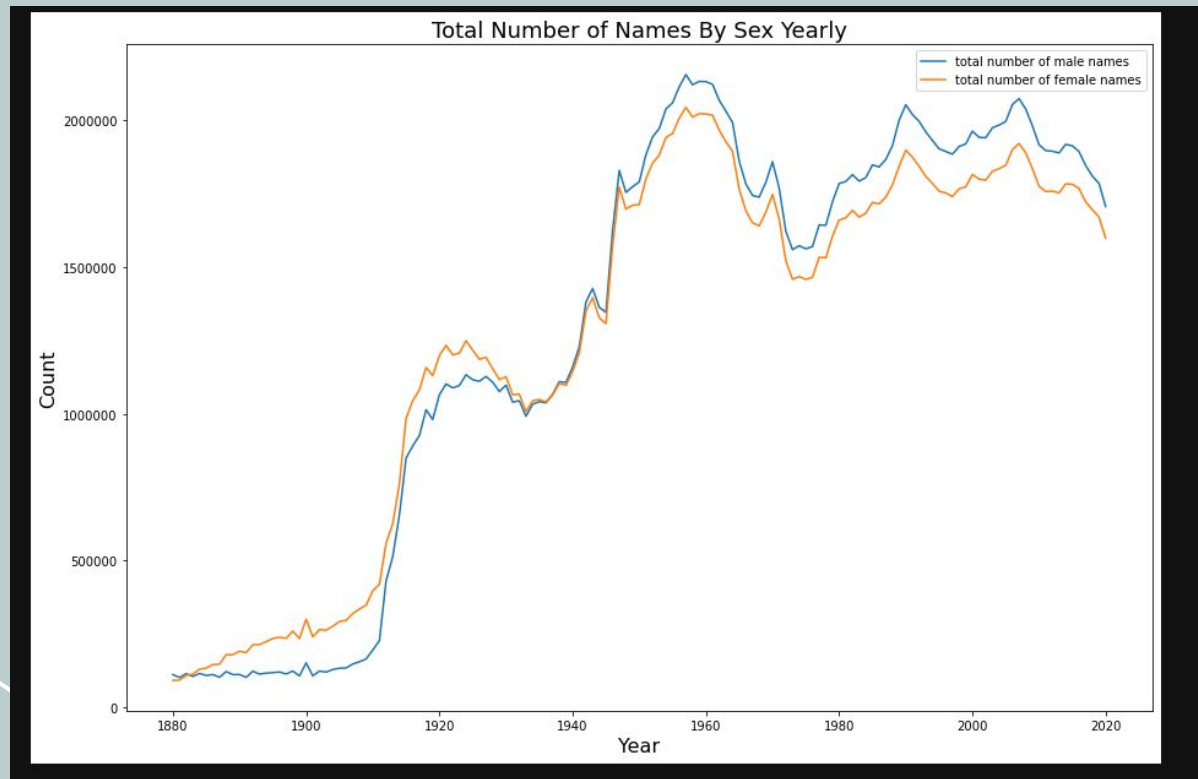## DOES ANYONE HAVE ANY QUESTIONS?

# Pop Culture Effects.



'Trends for the Male Names in 'How I Met Your Mother'

# Additional Slides

# Additional Slides



Total Count for 'Popular' Names by Year