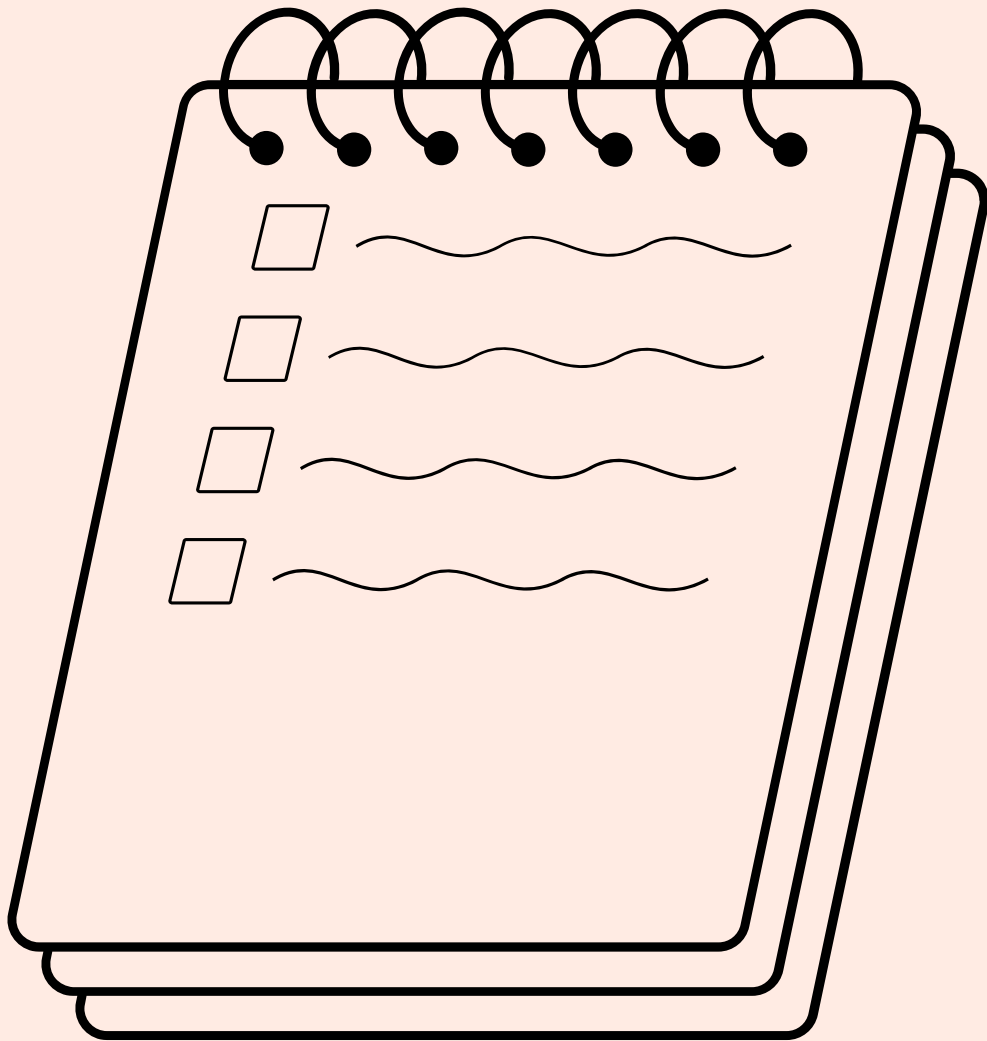


Sally Heinzl

Flatiron Capstone Project

TODAY'S AGENDA

1	Business Opportunity
2	Data & Methods
3	Recommendations



TRIVIA NIGHT POPULARITY

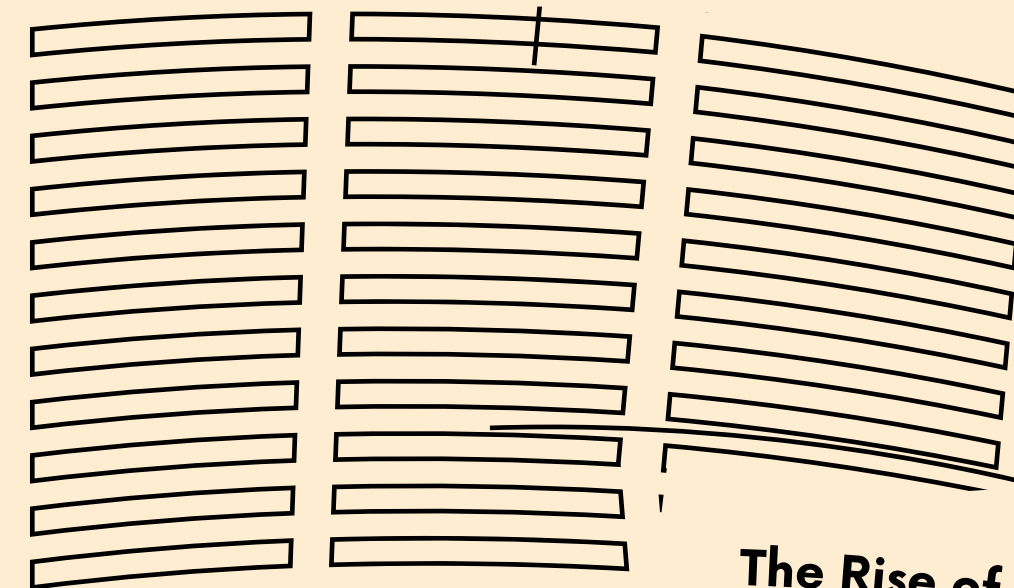
Evansville bars and restaurants enjoying 'Trivia Night' boom

Courier & Press 10/27/2021



Barroom Trivia Slayer? Get Your Quiz on Digitally

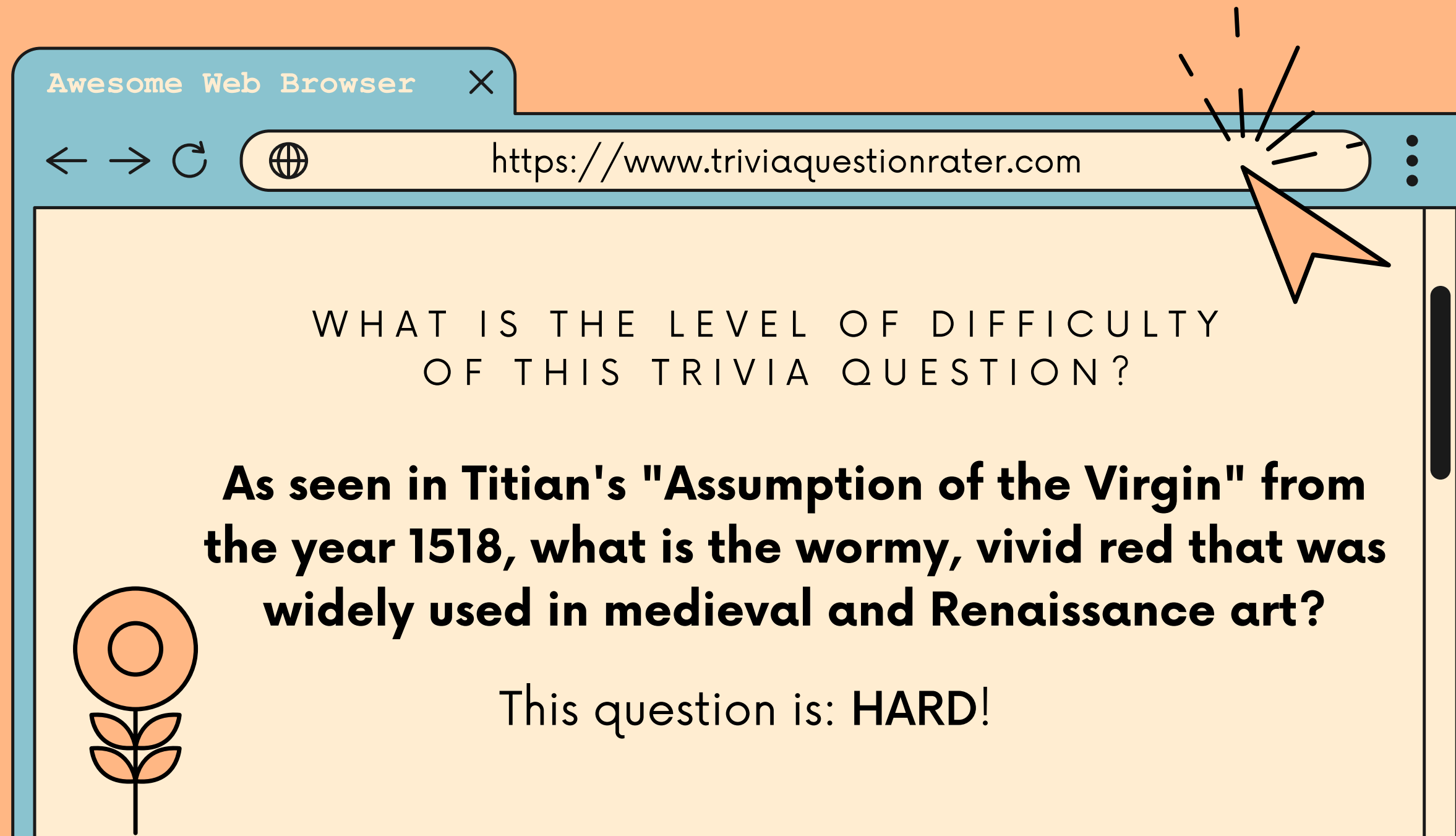
New York Times 11/28/2020



The Rise of Trivia Nights at Local Bars and Restaurants

Albany Democrat Herald
11/28/2020

BUSINESS OPPORTUNITY



THE DATASET

WordCloud - Jeopardy Correct Answers



- 364,000 Jeopardy! questions and answers
- Air dates from 1984-2021
- 47,752 unique categories

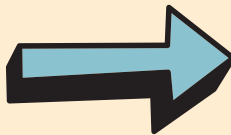
DETERMINING THE DIFFICULTY OF A QUESTION USING CLUE VALUES

Jeopardy! Round

1984

2001

100	200
200	400
300	600
400	800
500	1000

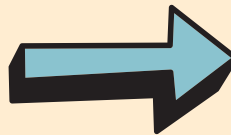


Double Jeopardy! Round

1984

2001

200	400
400	800
600	1200
800	1600
1000	2000



Daily
Double
Questions

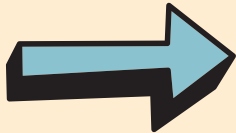
Final
Jeopardy
Questions

DETERMINING THE DIFFICULTY OF A QUESTION USING CLUE VALUES

Jeopardy! Round

1984

100
200
300
400
500



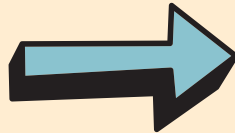
2001

200
400
600
800
1000

Double Jeopardy! Round

1984

200
400
600
800
1000



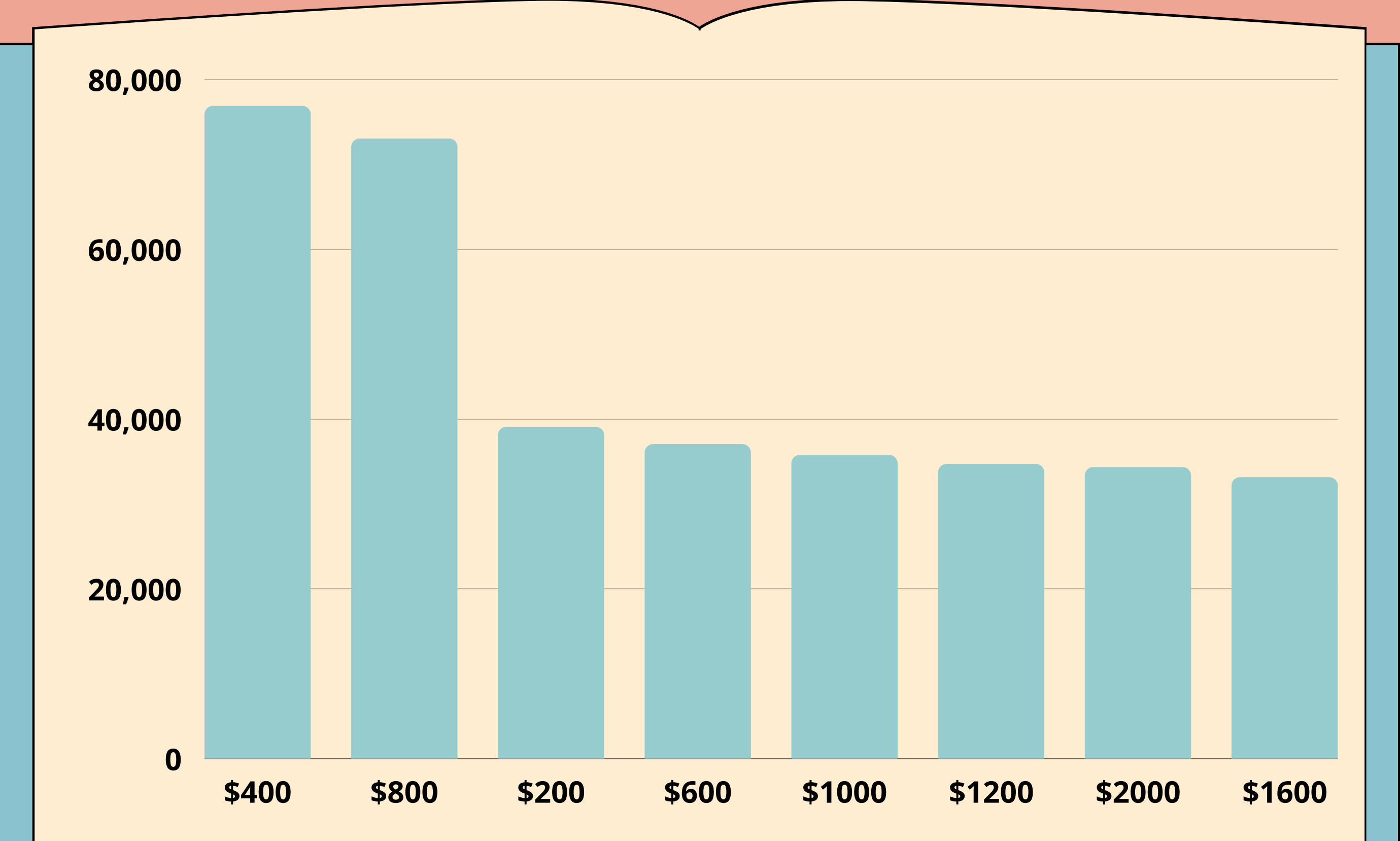
2001

400
800
1200
1600
2000

Daily
Double
Questions

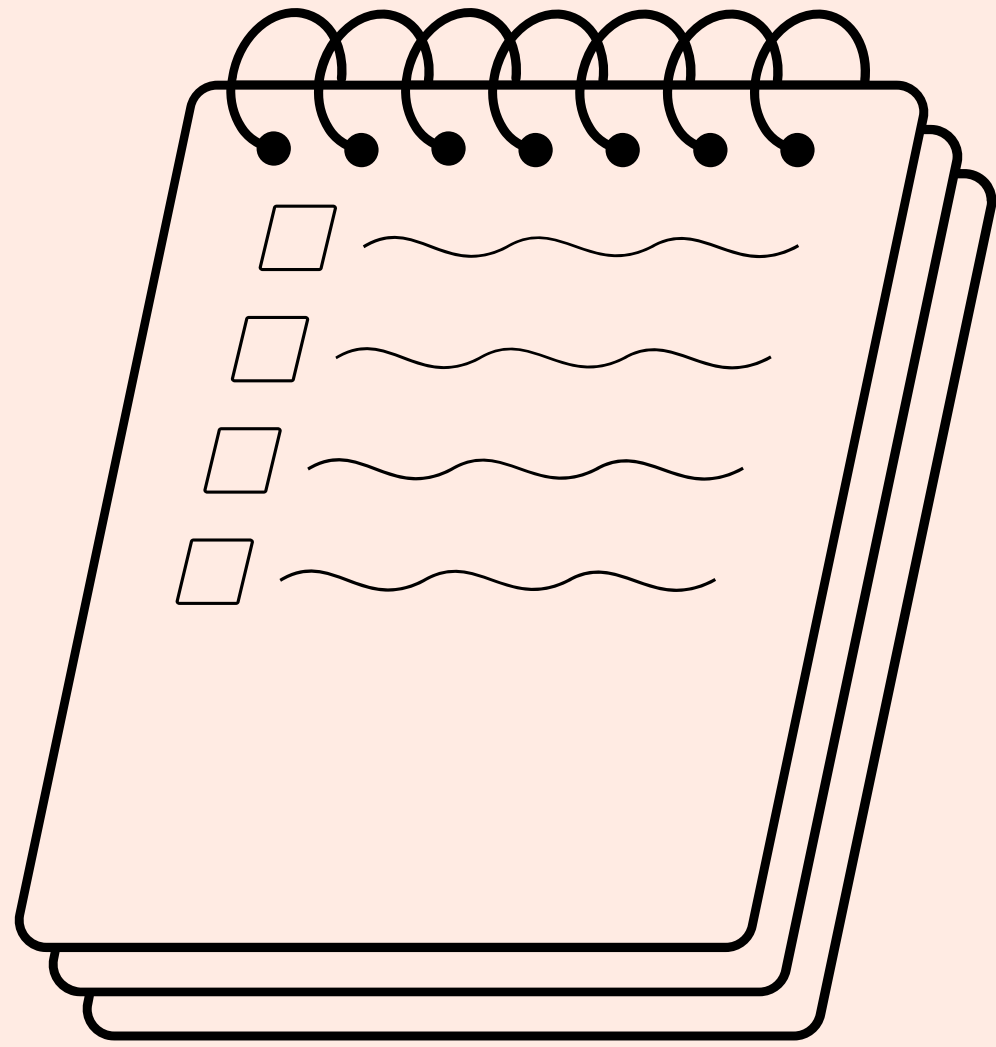
Final
Jeopardy
Questions

CLUE VALUE COUNTS



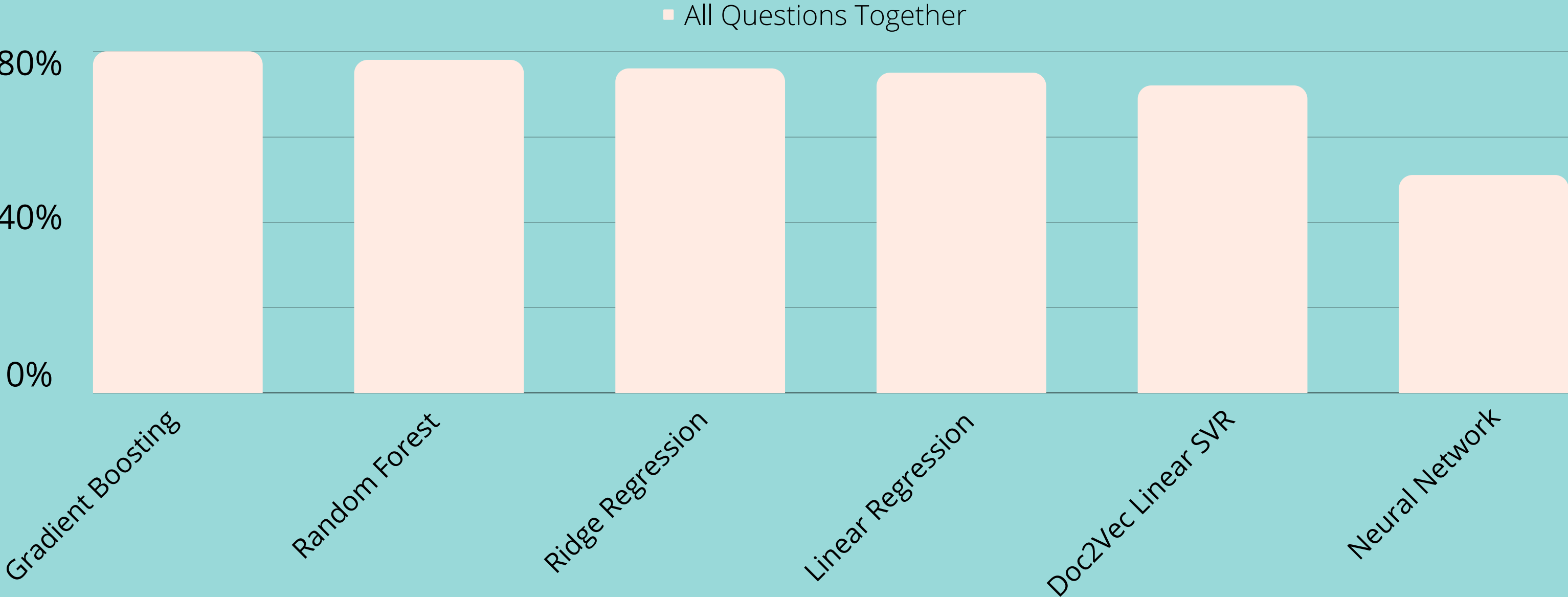
MODELING

Regression



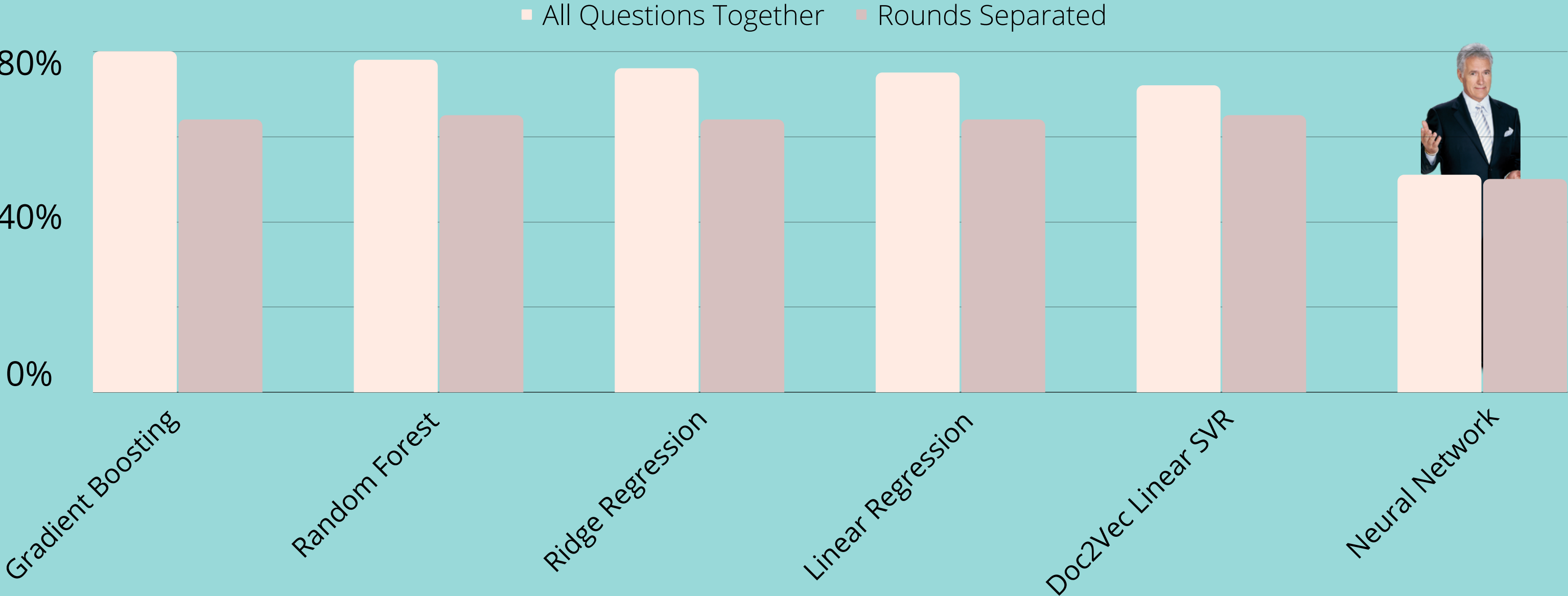
MODELS

Mean Absolute Percentage Error



MODELS

Mean Absolute Percentage Error





BEST MODEL

Neural Network

Separate Rounds:

Round 1 Validation Data: 50%

Round 1 Test Data: 50.8%

Round 2 Validation Data: 50.1%

Round 2 Test Data: 53.1%

RECOMMENDATIONS

**Examine data about questions that contestants missed:
the "triple stumpers"**

**Use topic modeling to sort questions into different categories
to examine if domain is linked to difficulty level**

**Compare other types of questions that assess skills other than
memory recall (applying/evaluating information)**

