



PROJECT 3: BOARDGAMES AND VIDEOGAMES SUBREDDITS



AGENDA

INTRODUCTION

DATA EXPLORATION

EXPLAINING FINDINGS

Q&A





PROBLEM STATEMENT

This project is aimed at predicting the subreddit categories for different comments belonging to categories of boardgames and videogames.



DATA

EXPLORATION

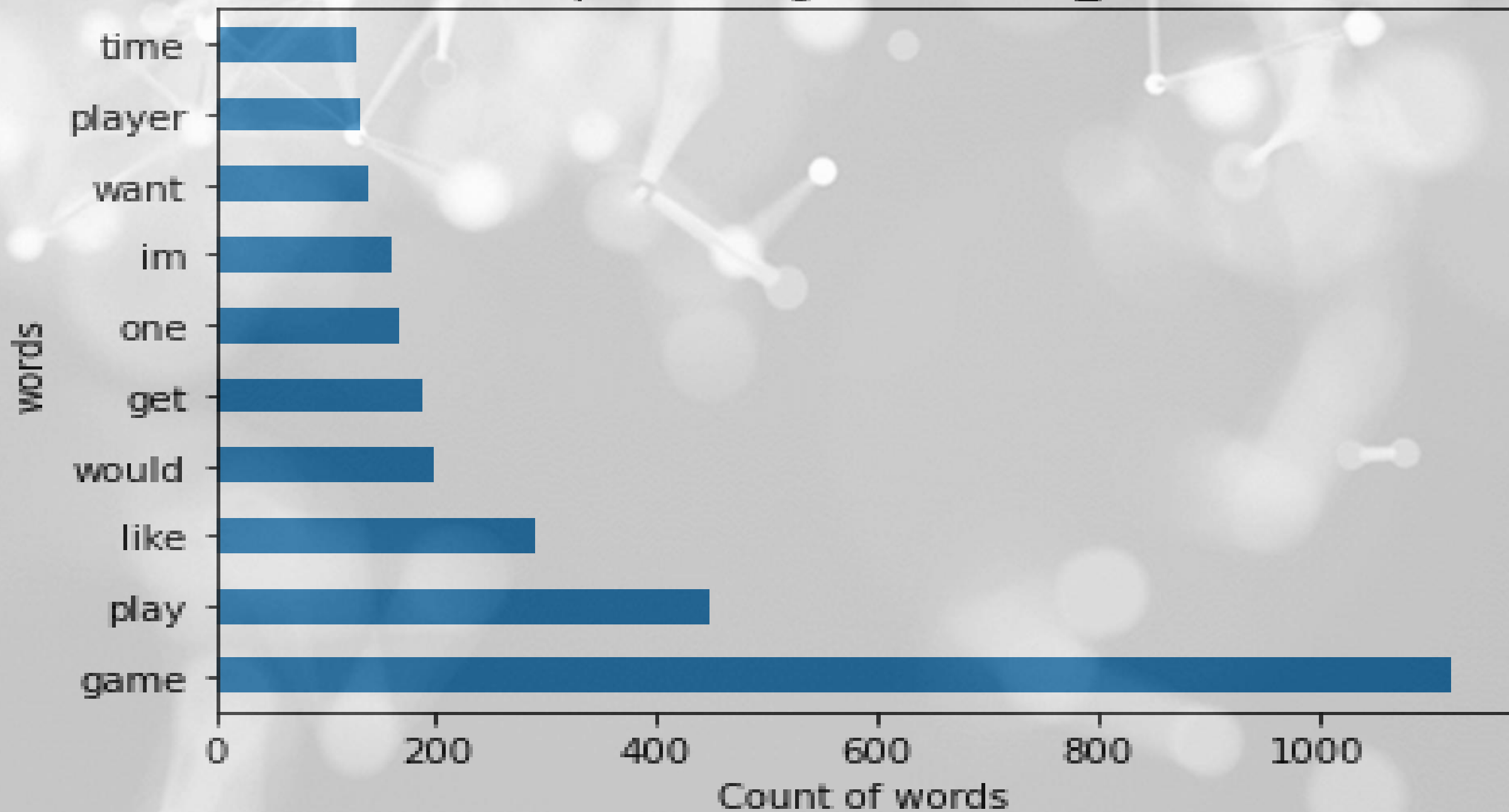
TABULAR REPRESENTATION OF BOARDGAMES SUBREDDIT

	selftext	subreddit	title
0	Basically as the title suggests. Me and my fri...	boardgames	What is a good game for those who like philoso...
1	For several months our research & developm...	boardgames	Drunk Donald - Make Drinking Great Again.
2	[My Shelf] (https://imgur.com/a/e2s8CfN)\n\nI k...	boardgames	[COMC] Running out of space on my tiny shelf
3	Looking for another medium-light weight game f...	boardgames	Medium-light weight recommendation
4	Thou shall forgive the analysis paralysis of o...	boardgames	Board Game Commandments
...
995	This may have been asked before, but does KoT:...	boardgames	King of Tokyo: Dark Edition; More Monsters?
996	The rulebook doesnt mention it.	boardgames	Unmatched: do the spaces you jump over with a ...
997	I have a choice between these two games.\n\nYe...	boardgames	Yedo or Rising Sun? Which one to choose?
998	[Their current Kickstarter for what seems like...	boardgames	Are Game Theory Tables trustworthy enough to s...
999	Hello r/boardgames!\n\nI'm looking for some bo...	boardgames	Looking for suggestions!

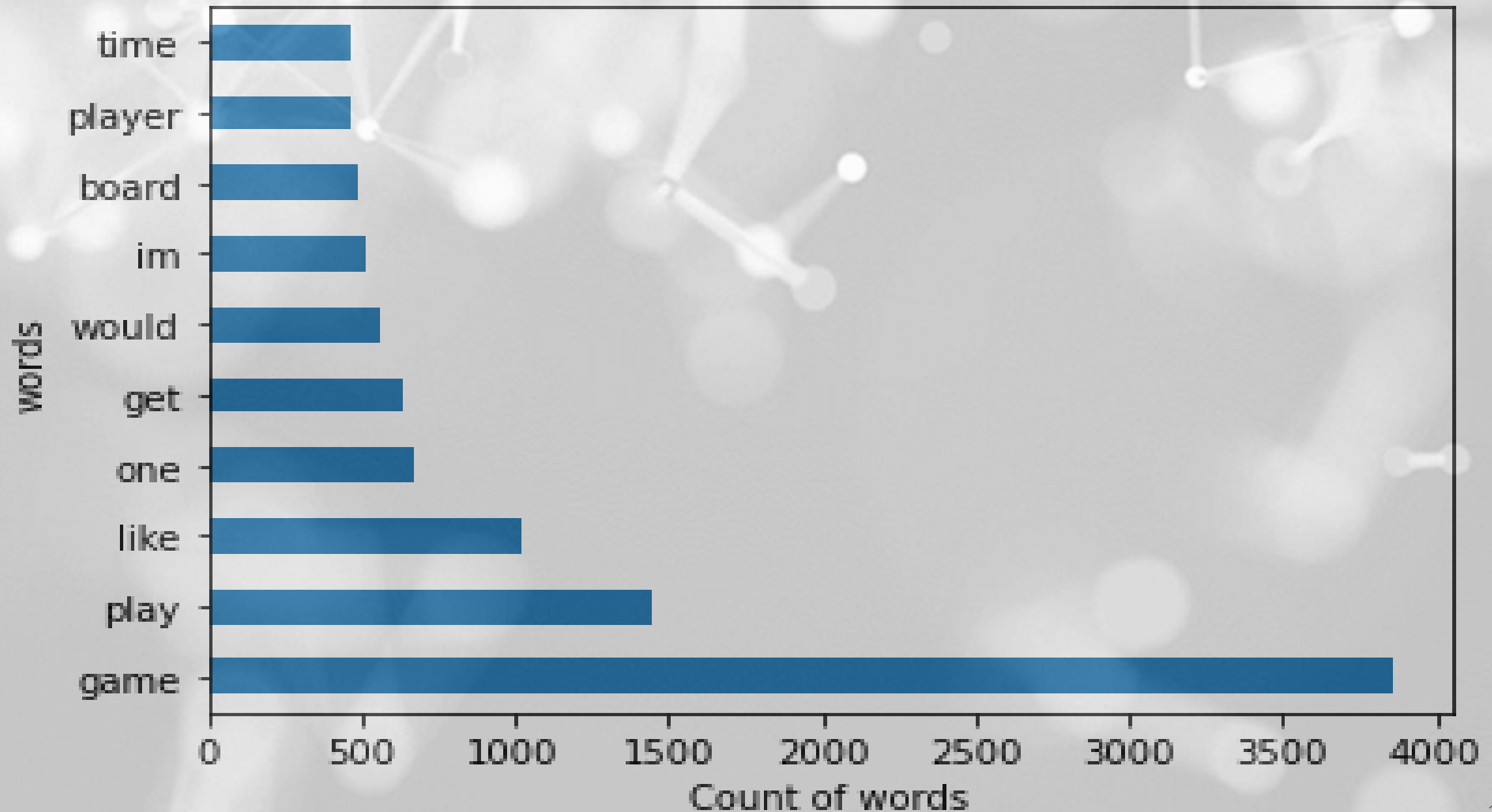
TABULAR REPRESENTATION OF VIDEOGAMES SUBREDDIT

	selftext	subreddit	title
0	​\n\nhttps://preview.redd.it/slk0k7...	videogames	Coco is great in the Crash Bandicoot N. Sane T...
1	Years ago I found a video game (I think ghost...	videogames	What if I find a video game in a shopping cart?
2	I already have the Elgato HD60 S Plus. Looking...	videogames	Looking for a good laptop for PS4/ps5 streaming
3	Does anyone know any ps4 horror games that'll ...	videogames	Horror Games
4	Your thoughts...?	videogames	What difference does facial expressions have o...
...
995	\n\nJust got a Switch. I have Mario Kart 8 Del...	videogames	What are some good Switch games that aren't th...
996	\n\n[View Poll](https://www.reddit.com/poll/kt...	videogames	Choose your favorite games (change flair if ne...
997	This might be a silly question. But I used to ...	videogames	Recommendations?
998	So I am looking for a new FPS game that looks ...	videogames	FPS game
999	So i like taking walks, I used to always play ...	videogames	Video games with a walking app (Specific request)

Top occurring words in X_train



Top occurring words in X_test

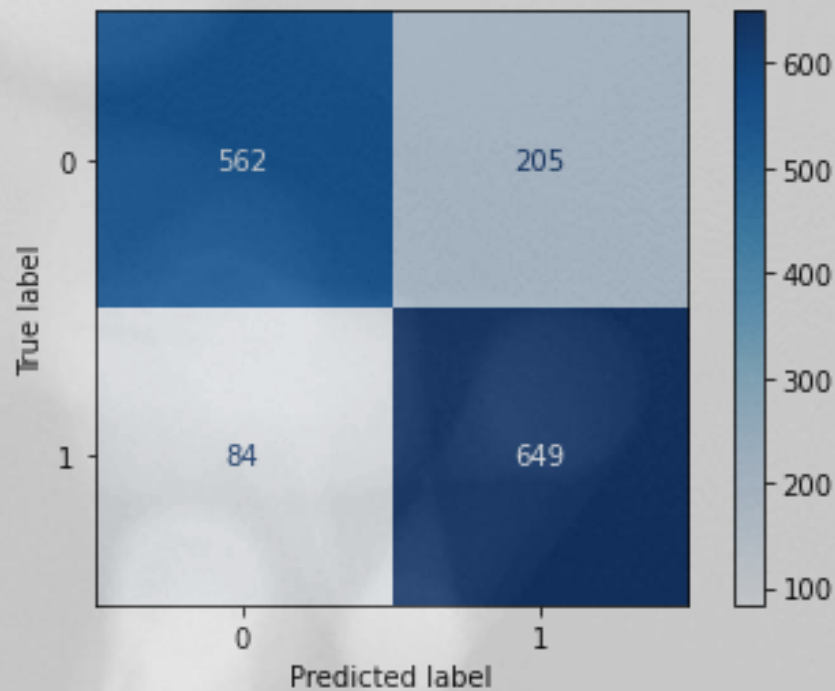




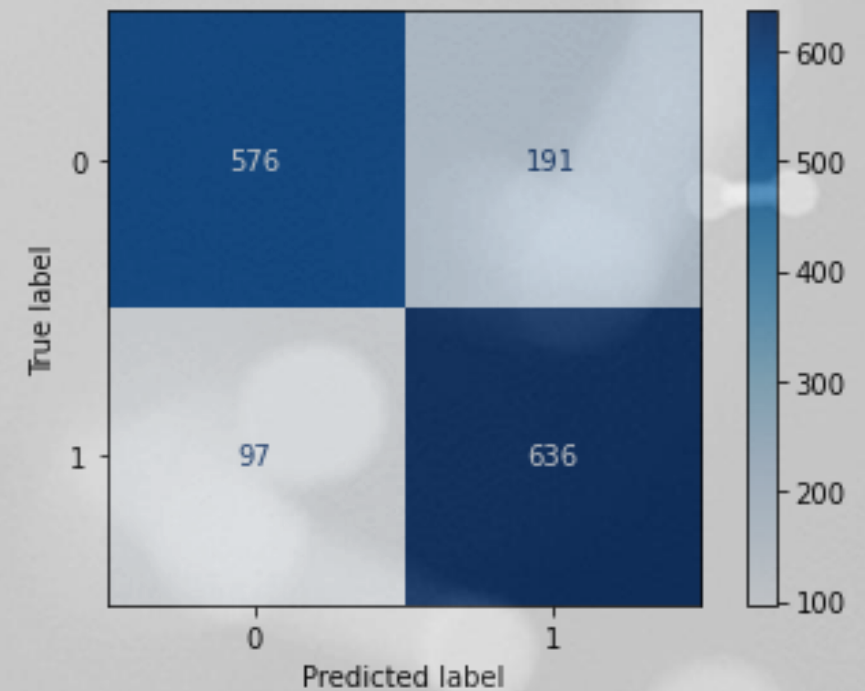
RESULTS AND ANALYSIS

Confusion matrix for Logistic Regression and Random Forest using CountVectorizer

Confusion matrix for Random Forest

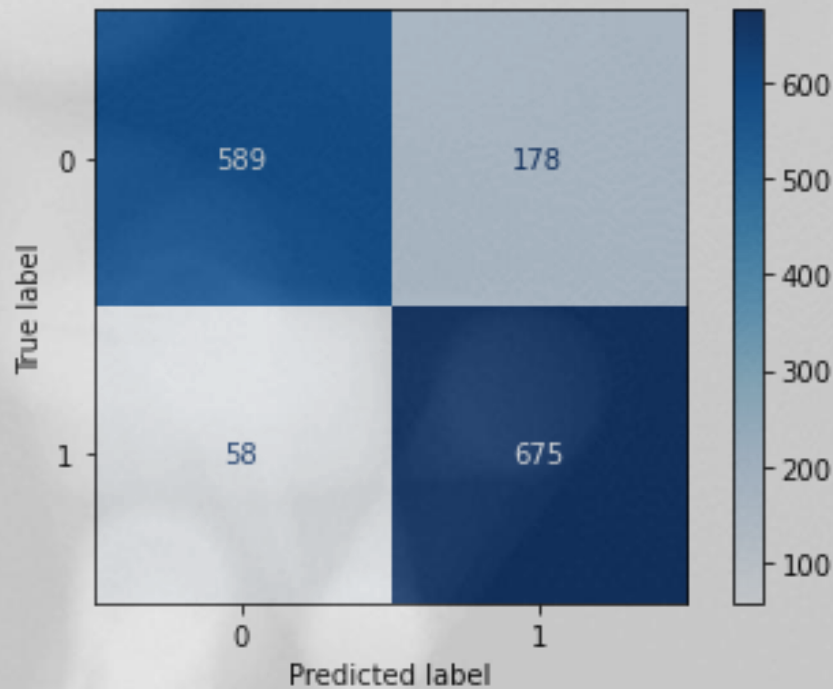


Confusion matrix for Logistic Regression

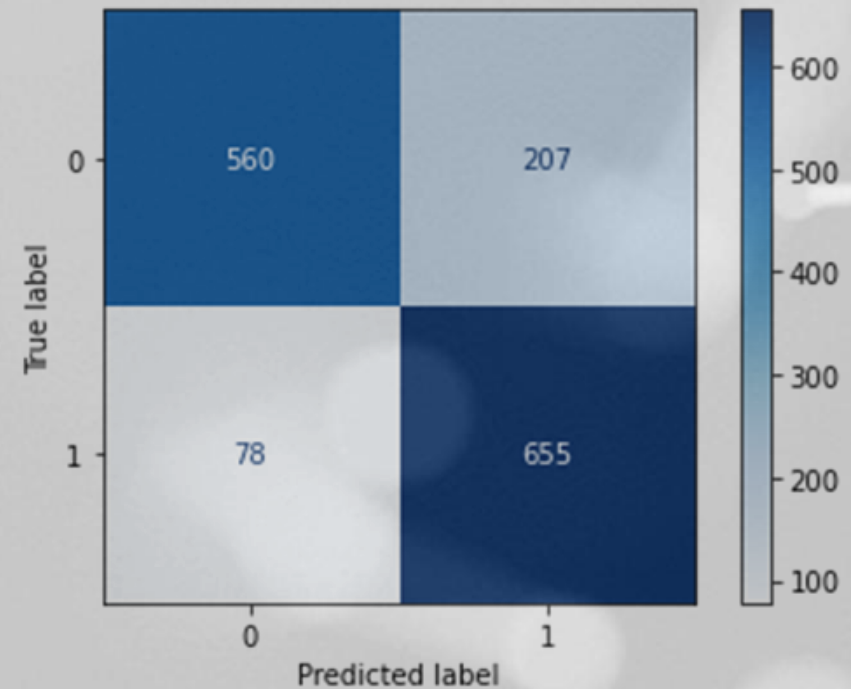


Confusion matrix for Logistic Regression and Random Forest using TfidfVectorizer

Confusion matrix for Logistic Regression



Confusion matrix for Random Forest



CONCLUSION/ RECOMMENDATIONS

- **Similar, overlapping subreddits chosen**
- **Logistic Regression performed the best on subreddit data**
- **High accuracy is achieved when classifying similar subreddits**
- **Recommend using Logistic Regression for classification of subreddit data having similar topics.**
- **Use Logistic Regression especially for classification of boardgames and videogames subreddits**



THANK YOU

Q&A