PREDICTION OF SEARCH QUERIES USING VIDEO COMMENTS

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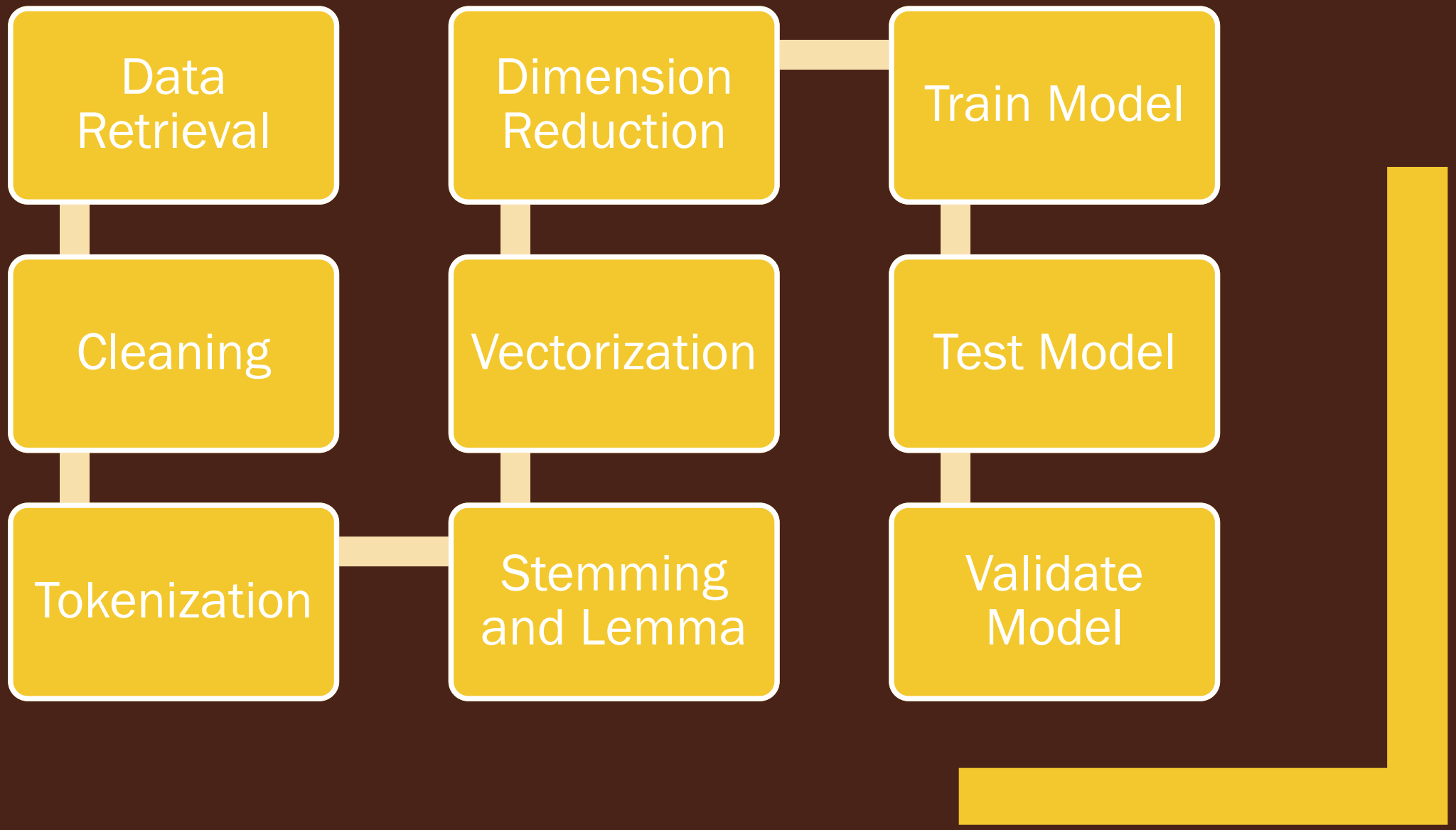
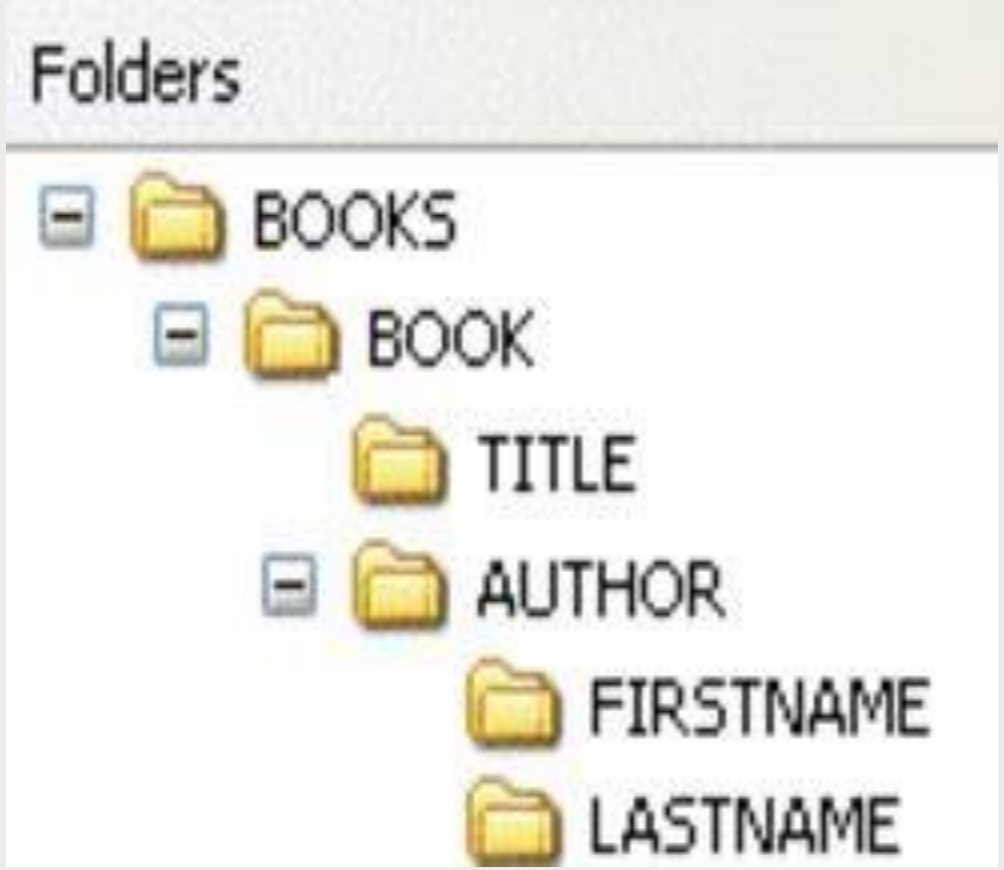
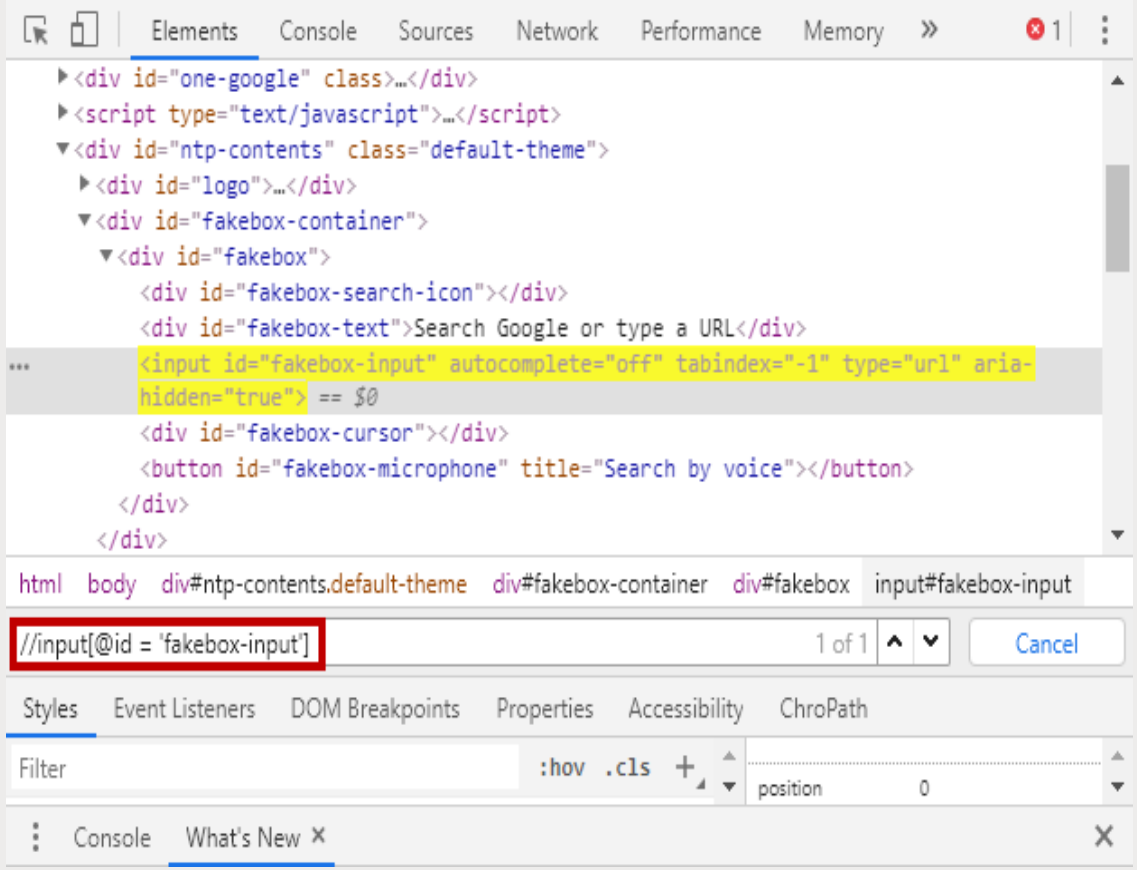
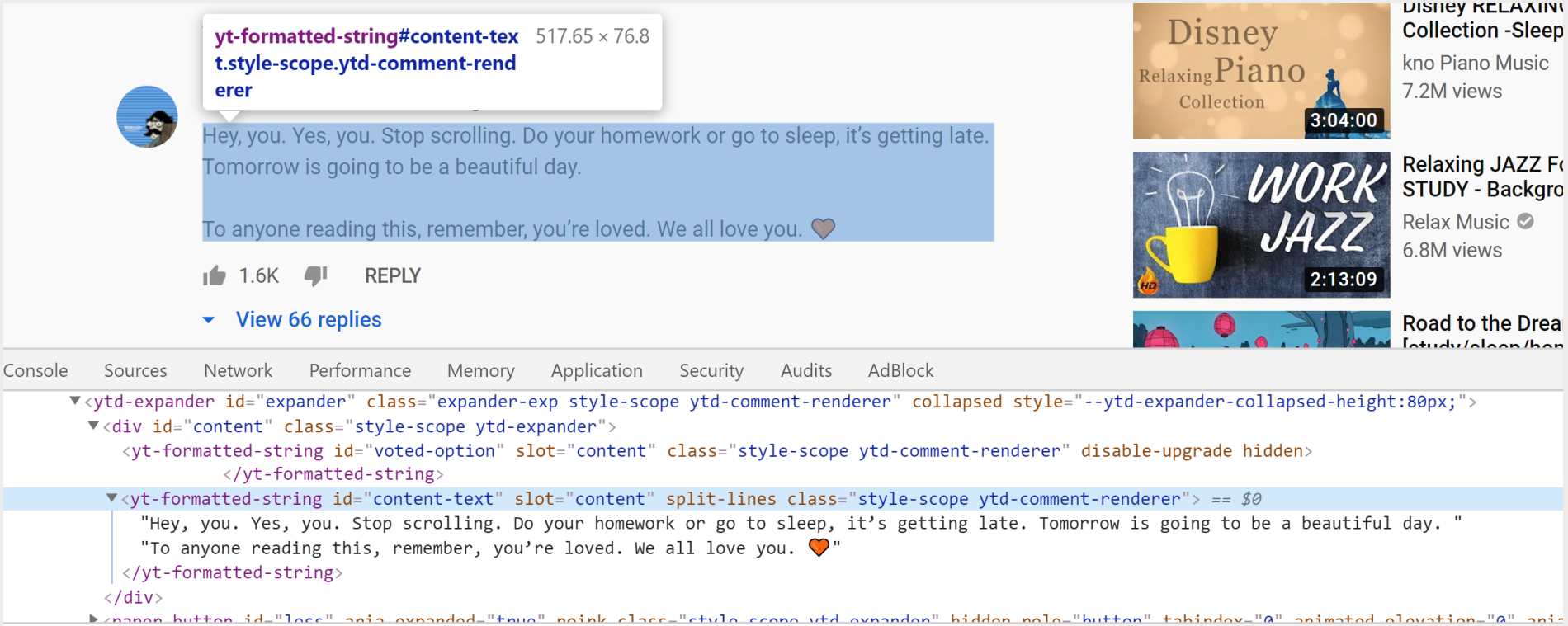

Data Retrieval
Cleaning
Tokenization
Stemming and Lemma
Vectorization
Dimension Reduction
Train Model
Test Model
Validate Model

xpaths in HTML code





Data collection through selenium



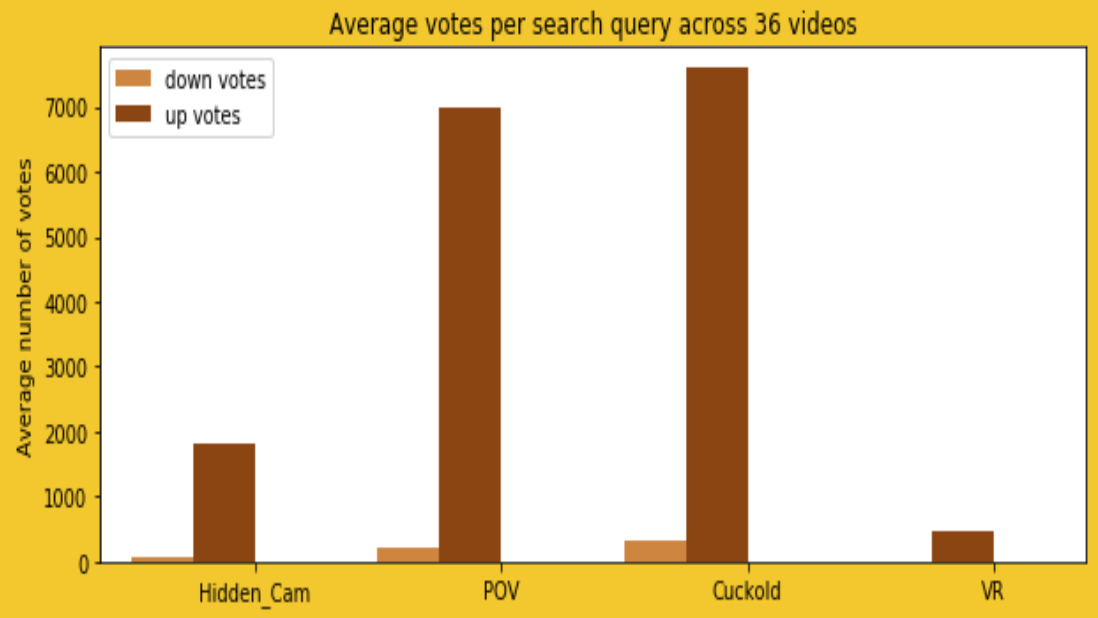

```
self.driver = webdriver.Chrome(chrome_options = Options().add_argument("--headless"))
self.driver.get("https://www.youtube.com/")
comment = self.driver.find_element(s)_by_xpath('//*[@id="content-text"]')
text = comment.text
slot_name = comment.get_attribute("slot")
```

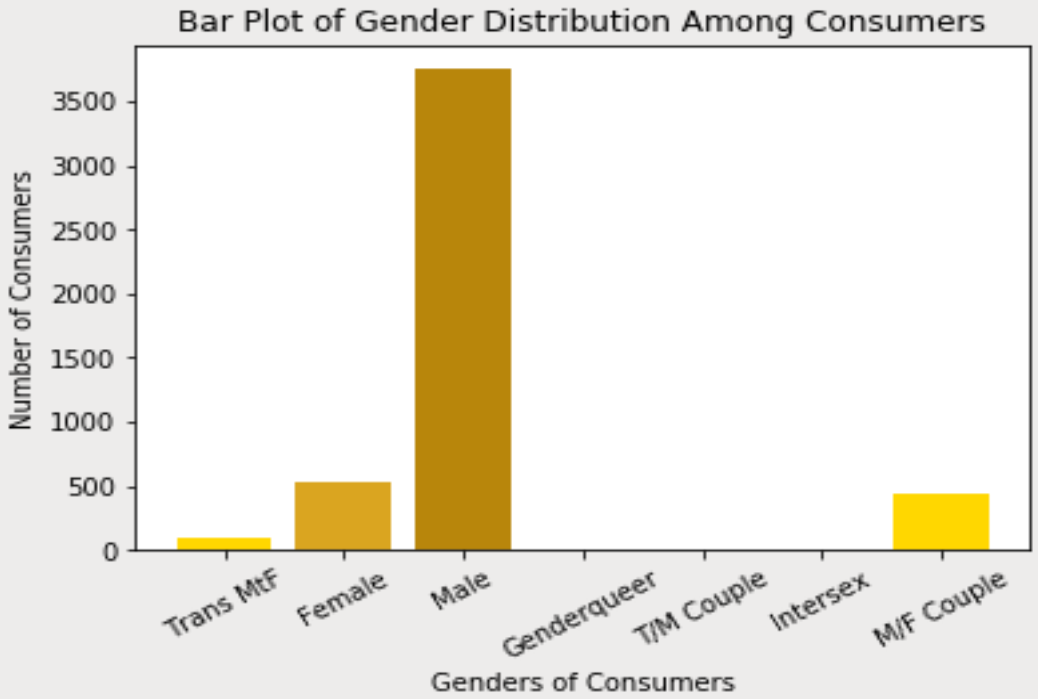
VARIABLES EXTRACTED INTO DATA FRAME

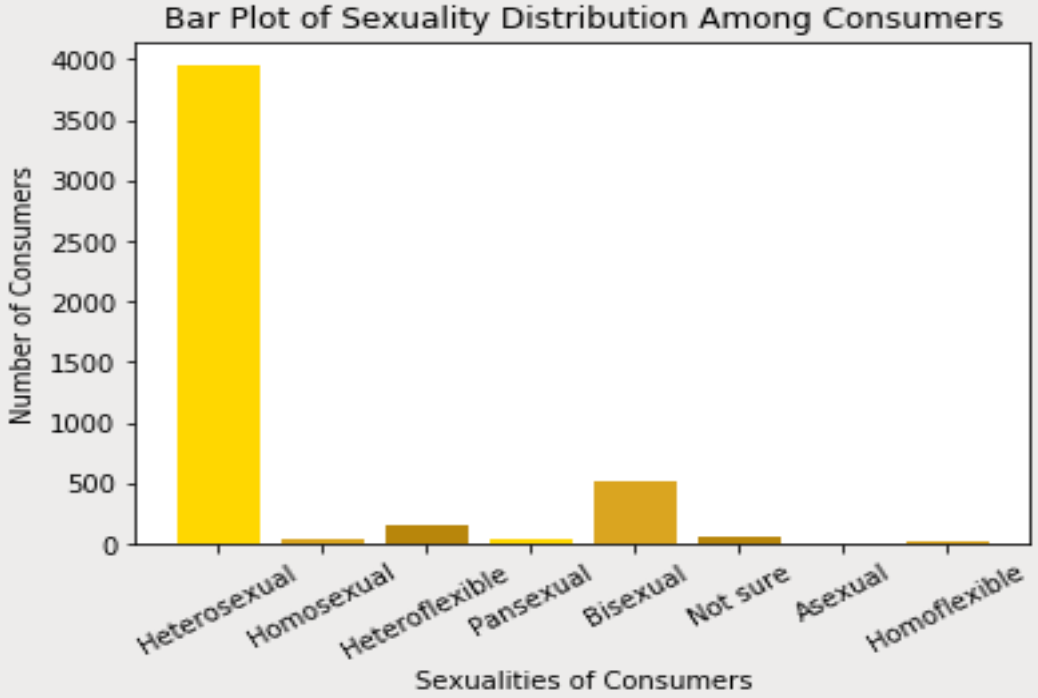
- Query string used to search for videos
- Link to video (36 per query)
- Number of upvotes and number of downvotes per video
- Number of views per video
- Raw comments + cleaned + lemmatized + stemmed
- Gender and sexuality of commenter
- Link to user profile of commenter
- Date of comment posted in UTC

Description of the variables

Graphics were produced using the matplotlib package.







Data Collection:	Selenium (Chrome driver)
Cleaning:	re
Vectorization:	tfidfVectorizer
Tokenization:	NLTK
Stemming/Lemma:	sklearn
Dimensionality Reduction:	PCA
Grid Search:	sklearn
Classifier:	RandomForrestClassifier

Validation in progress!

CONCLUSION

- This was really fun!
- Can potentially use this data for thesis
- Learned to develop class objects and call them from a top file
- Tackled plenty of bugs and glitches
- Played with a new package and some HTML with selenium
- Need to work on developing classification models
- Want to learn more about (un)supervised learning
- Unsure how to label data without expert labeling

ANY QUESTIONS?