**Report of Resources**

**1. Libraries and Tools Used**

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| Library/Tool | Description | Link |
| Python | The primary programming language used for the project. | [Python](https://www.python.org/) |
| pandas | A data manipulation library used for loading, processing, and analyzing data. | pandas Documentation |
| numpy | A library for numerical operations used in data manipulation and analysis. | [numpy Documentation](https://numpy.org/) |
| matplotlib | A plotting library used for visualizing data and model performance metrics. | [matplotlib Documentation](https://matplotlib.org/) |
| seaborn | A data visualization library based on Matplotlib, used for creating attractive and informative statistical graphics. | seaborn Documentation |
| NLTK (Natural Language Toolkit) | A suite of libraries and programs for natural language processing, used for text preprocessing, tokenization, lemmatization, and stop words removal. | [NLTK Documentation](https://www.nltk.org/) |
| scikit-learn | A machine learning library used for model development, tuning, and evaluation. | [scikit-learn Documentation](https://scikit-learn.org/) |
| GridSearchCV | A module in scikit-learn used for hyperparameter tuning of machine learning models. | GridSearchCV Documentation |
| TF-IDF Vectorizer | A tool in scikit-learn for transforming text data into feature vectors. | TF-IDF Vectorizer Documentation |

**2. External Resources**

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| Resource | Description | Link |
| Dataset | IMDB Movie Ratings Sentiment Analysis dataset, which includes movie reviews and corresponding sentiment labels. | [Kaggle Dataset](https://www.kaggle.com/datasets/yasserh/imdb-movie-ratings-sentiment-analysis) |
| NLTK Stop Words List | A list of common stop words used for text preprocessing and removing irrelevant words from the dataset. | NLTK Stop Words List |