Project 3

| | SongYi |
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| Problem Statement | 2.3 |
| Is it clear what the student plans to do? | 2.0 |
| What type of model will be developed? | 2.5 |
| How will success be evaluated? | 2.0 |
| Is the scope of the project appropriate? | 3.0 |
| Is it clear who cares about this or why this is important to investigate? | 2.0 |
| Does the student consider the audience and the primary and secondary stakeholders? | 2.0 |
| Data Collection | 2.6 |
| Was enough data gathered to generate a significant result? | 3.0 |
| Was data collected that was useful and relevant to the project? | 3.0 |
| Was data collection and storage optimized through custom functions, pipelines, and/or automation? | 2.5 |
| Was thought given to the server receiving the requests such as considering number of requests per second? | 2.0 |
| Data Cleaning and EDA | 2.3 |
| Are missing values imputed/handled appropriately? | 2.5 |
| Are distributions examined and described? | 2.5 |
| Are outliers identified and addressed? | 2.0 |
| Are appropriate summary statistics provided? | 2.0 |
| Are steps taken during data cleaning and EDA framed appropriately? | 2.0 |
| Does the student address whether or not they are likely to be able to answer their problem statement with the | |
| provided data given what they've discovered during EDA? | 2.5 |
| Preprocessing and Modeling | 2.6 |
| Is text data successfully converted to a matrix representation? | 3.0 |
| Are methods such as stop words, stemming, and lemmatization explored? | 3.0 |
| Does the student properly split and/or sample the data for validation/training purposes? | 3.0 |
| Does the student test and evaluate a variety of models to identify a production algorithm (AT MINIMUM: Random | |
| Forest and one other model)? | 3.0 |
| Does the student defend their choice of production model relevant to the data at hand and the problem? | 2.0 |
| Does the student explain how the model works and evaluate its performance successes/downfalls? | 1.5 |
| Evaluation and Conceptual Understanding | 1.7 |
| Does the student accurately identify and explain the baseline score? | 1.0 |
| Does the student select and use metrics relevant to the problem objective? | 1.5 |
| Does the student interpret the results of their model for purposes of inference? | 2.5 |
| Is domain knowledge demonstrated when interpreting results? | 2.0 |
| Does the student provide appropriate interpretation with regards to descriptive and inferential statistics? | 1.5 |
| Conclusion and Recommendations | 2.2 |
| Does the student provide appropriate context to connect individual steps back to the overall project? | 2.5 |
| Is it clear how the final recommendations were reached? | 2.0 |
| Are the conclusions/recommendations clearly stated? | 2.0 |
| Does the conclusion answer the original problem statement? | 2.0 |
| Does the student address how findings of this research can be applied for the benefit of stakeholders? | 2.0 |
| Are future steps to move the project forward identified? | 2.5 |
| Organization and Professionalism | |
| Project Organization | |
| **Project Organization** | 2.5 |
| Are modules imported correctly (using appropriate aliases)? | 3.0 |
| Are data imported/saved using relative paths? | 3.0 |
| Does the README provide a good executive summary of the project? | 2.0 |

| Is markdown formatting used appropriately to structure notebooks? | 2.0 |
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| Are there an appropriate amount of comments to support the code? | 2.0 |
| Are files & directories organized correctly? | 3.0 |
| Are there unnecessary files included? | 3.0 |
| Do files and directories have well-structured, appropriate, consistent names? | 2.0 |
| **Python Syntax and Control Flow** | 2.8 |
| Is care taken to write human readable code? | 2.5 |
| Is the code syntactically correct (no runtime errors)? | 3.0 |
| Does the code generate desired results (logically correct)? | 3.0 |
| Does the code follows general best practices and style guidelines? | 2.5 |
| Are Pandas functions used appropriately? | 3.0 |
| Are sklearn and NLTK methods used appropriately? | 3.0 |
| **Visualizations** | 2.4 |
| Are sufficient visualizations provided? | 2.5 |
| Do plots accurately demonstrate valid relationships? | 2.0 |
| Are plots labeled properly? | 2.5 |
| Are plots interpreted appropriately? | 2.0 |
| Are plots formatted and scaled appropriately for inclusion in a notebook-based technical report? | 3.0 |
| **Presentation** | 2.1 |
| Is the problem statement clearly presented? | 2.0 |
| Does a strong narrative run through the presentation building toward a final conclusion? | 1.8 |
| Are the conclusions/recommendations clearly stated? | 2.2 |
| Is the level of technicality appropriate for the intended audience? | 2.3 |
| Is the student substantially over or under time? | 2.2 |
| Does the student appropriately pace their presentation? | 2.0 |
| Does the student deliver their message with clarity and volume? | 1.8 |
| Are appropriate visualizations generated for the intended audience? | 2.3 |
| Are visualizations necessary and useful for supporting conclusions/explaining findings? | 2.0 |
| Overall | 21.1 |