

# Predicting Stock Price Changes Using Public Sentiment - Case Study Rubric

**How will I know I have succeeded?** You will meet expectations on this case study when you follow the criteria in the rubric below.

Formatting	<ul style="list-style-type: none"><li>• One GitHub Repository (submitted via link on canvas)<ul style="list-style-type: none"><li>• A README.md file</li><li>• A LICENSE.md file</li><li>• A SCRIPTS folder</li><li>• A DATA folder</li><li>• AN OUTPUT folder</li></ul></li><li>• One .pdf presentation containing your final results (5 slides)<ul style="list-style-type: none"><li>• Introduction and stocks chosen.</li><li>• One notable difference between stock price and sentiment</li><li>• One notable alignment between stock price and sentiment</li><li>• Final net gain/loss</li><li>• References/conclusion</li></ul></li></ul>
README.md	<ul style="list-style-type: none"><li>• <u>Goal</u>: Help people to understand the project and the data used</li><li>• Use a header to give the readme an appropriate title.</li><li>• Section 1: Data<ul style="list-style-type: none"><li>◦ Explain what stocks you chose and where you got the data. Anyone looking to do the same project should be able to find the same data from this description.</li></ul></li><li>• Section 2: Map of Your Documentation<ul style="list-style-type: none"><li>◦ Create a documentation tree that explains the contents of each of the required folders.</li></ul></li></ul>
LICENSE.md	<ul style="list-style-type: none"><li>• <u>Goal</u>: Update the license</li><li>• Use the MIT license</li></ul>
SCRIPTS folder	<ul style="list-style-type: none"><li>• <u>Goal</u>: Give viewers access to the code</li><li>• Put all code files in this folder.</li><li>• <i>For this case study, scripts are provided and will only need to be edited to match with your data.</i> However, you still need to include all final scripts that are used to obtain the results.</li></ul>
DATA folder	<ul style="list-style-type: none"><li>• <u>Goal</u>: Give viewers all necessary data.</li><li>• You should include the initial data in your GitHub</li></ul>

	<ul style="list-style-type: none"> <li>○ This will be the stock price data and the sentiment data.</li> <li>○ It is best but not necessary to use data from Yahoo finance and databar as described in the introduction document.</li> </ul>
OUTPUT folder	<ul style="list-style-type: none"> <li>• <u>Goal</u>: This has all outputs from the project</li> <li>• This folder will contain the final sentiment scores and their comparison to the actual price changes.</li> <li>• Any images that are used in your presentation.</li> <li>• The final presentation</li> </ul>
References	<ul style="list-style-type: none"> <li>• All references in one .pdf document in MLA form.</li> </ul>
PRESENTATION	<ul style="list-style-type: none"> <li>• <u>Goal</u>: Create a comprehensive slide deck that presents the results of this case study</li> <li>• Follow the formatting guidelines from the <u>formatting</u> section. <ul style="list-style-type: none"> <li>○ Introduction/Stocks chosen. <ul style="list-style-type: none"> <li>▪ One slide that is the introduction to the audience of what the case study asked as well as the stocks chosen. Also includes rationale for why you chose the stocks you did.</li> </ul> </li> <li>○ Notable difference/alignment <ul style="list-style-type: none"> <li>▪ For each of these two (2) slides you will identify one stock that lined up well with the sentiment score and one that did not. Consider why this might have been the case for each. Was there an issue with the data? Did the stock follow a unique price pattern? Consider these and other questions in these slides.</li> </ul> </li> <li>○ Final net/gain loss <ul style="list-style-type: none"> <li>▪ This is your chance to show how the model did. Make the slide fun whether there was a net gain or not.</li> </ul> </li> <li>○ Reference/Conclusion <ul style="list-style-type: none"> <li>▪ Conclude the presentation and include any references used.</li> </ul> </li> </ul> </li> </ul>

Acknowledgements: Special thanks to Jess Taggart from UVA CTE for coaching on making this rubric. This structure is pulled from [Streifer & Palmer \(2020\)](#). Some elements of this rubric were inspired by the DS4002 MI3 rubric.