

Data Science Online Data Science Bootcamp

Module 4 Final Project Review

Technical Notebook

Project Specifications	Metric for success	Developing	Accomplished	Exemplary (X-Factor)	Notes
README.md	Student has a clear README, highlighting important aspects of the project.	Student does not have a readme, or has a readme that is just a copy of the notebook.	<input type="checkbox"/> Student has a readme with a clear and well organized outline, conclusion and recommendation section. Visualizations are present.	<input type="checkbox"/> Student has a readme with a clear and well organized outline, conclusion and recommendation section. Visualizations are present. Language and markdowns lend themselves to succinctness.	<input checked="" type="checkbox"/>
Pick a novel interesting problem at the appropriate challenge level.	The chosen dataset was relevant to Machine Learning, Deep Learning or Time Series Analysis	Business case not clearly articulated. Answered an obvious business question.	<input type="checkbox"/> Business case constructed clearly. And answered an obvious question, like clearly articulated the business stakeholder requirements that the project aims to accomplish. Business case constructed clearly and answered in notebook. Contained 1 or 2 business recommendations that are supported by analysis.	<input type="checkbox"/> Created original and meaningful work - Created a unique business case for the chosen dataset. Business case constructed clearly and notebook contains 3 or more business recommendations that are supported by analysis.	<input checked="" type="checkbox"/>
Preprocess data	Import the data and preprocess the data that includes cleaning, scrubbing, handling missing values, etc.	Data not fully ready for later analysis. 100% correctly structured data. Handled missing values.	<input type="checkbox"/> Explored different methods.	<input type="checkbox"/> Handled especially tricky issues. Explored different methods with benchmarking.	<input checked="" type="checkbox"/>
Describe data	Use EDA to create meaningful visualizations that describe your data. Plotting words to show cosine similarity, showing plots for class imbalance, etc.	No visualizations are present in the notebook	<input type="checkbox"/> 1 or 2 visualizations are present in the notebook and visualizations are relevant to the project in a technical or business sense.	<input type="checkbox"/> 3 or more visualizations are present in the notebook and visualizations are relevant to the project in a technical or business sense.	<input checked="" type="checkbox"/>
Fit models/Hypothesis testing	Fit at least one model. Summarize model impact and meaning.	Attempted basic model fitting (or forgot to model fit). Incorrect application. Misinterpreted results.	<input type="checkbox"/> Correctly fit a single model. Correctly interpreted model results. Summarized model meaning & impact.	<input type="checkbox"/> Compared multiple models. Fit models outside of class materials. Detailed numerical and visual analysis of models.	<input checked="" type="checkbox"/>

Present to technical audience	Present work done to a technical audience with code, insights, summary, future work, and even a live demo (for extra credit).	Unintelligible, hard to follow. Unclear. Incomplete.	<input type="checkbox"/>	Engaging talk with insights & lessons. Explained code examples.	<input type="checkbox"/>	Live demo! Ran code and changed parameter values.	<input checked="" type="checkbox"/>	
Write quality code	Code is non-repetitive and uses OOP when necessary to avoid repetition. Custom methods/classes contain docstrings to help the reader understand what is happening. Variables have names that are relevant to what they represent.	Code is unorganized, lacks docstrings, variables are not named intentionally, and code repeats itself.	<input type="checkbox"/>	Code lacks docstrings, but does not repeat itself and uses custom methods to do repetitive tasks. Code follows pep-8 standards.	<input type="checkbox"/>	Code follows pep-8 standards, contains docstrings/comments, does not repeat itself and uses custom classes methods for tasks.	<input checked="" type="checkbox"/>	I loved the efforts you put into the master function. Keep working!
Conclusion	Notebook contains a conclusion with business recommendations that are driven by analysis.	No conclusion present.	<input type="checkbox"/>	Conclusion present but only states findings and contains 1 or 2 relevant business recommendations.	<input type="checkbox"/>	Conclusion is present and contains at least 3 recommendations that are business relevant.	<input checked="" type="checkbox"/>	
X - factor: Did something out of the box	Went above and beyond to research some additional topic, concept, Python package(s).	Routine project. Repeated analysis covered in class/sections of the module.	<input type="checkbox"/>	Showed creativity.	<input type="checkbox"/>	Ground breaking.	<input checked="" type="checkbox"/>	

Non-Technical Presentation

Project Specifications	Metric for success	Developing	Accomplished		Exemplary (X-Factor)		Notes	
Present to non-technical audience	Present work done to a non-technical (business focused) audience with problem statement, business value, methodology explained simply, business recommendations, summary, and future work.	Unintelligible, hard to follow. Unclear. Incomplete. Slides are too verbose, slide notes non existent.	<input type="checkbox"/>	Engaging talk with insights & lessons. Explained methodology. Slides have images, less text, slide notes present on slide that mirror the script of the presenter. One slide for each of the following - Problem statement, business value, methodology, business recommendations (each recommendation on a separate slide), future work/next steps.	<input type="checkbox"/>	Additional slides like findings, or use of engaging images, graphics, material showing expertise in communicating to business stakeholders.	<input checked="" type="checkbox"/>	
Slide Quality	Slides are light on text, engaging and tell a story.	Slides are very text heavy or highly unorganized and all over the place.	<input type="checkbox"/>	Slides are organized and tell a story, but contain too much text at times, especially when a visualization will suffice.	<input type="checkbox"/>	Slides are organized, contain visualizations that relay information and slides tell a story.	<input checked="" type="checkbox"/>	
Duration	Your presentation should be between 5 and 8 minutes.	Presentation is over 10 minutes or under 3 minutes.	<input type="checkbox"/>	Presentation is over 8 minutes or under 5 minutes.	<input type="checkbox"/>	Presentation is between 5 and 8 minutes.	<input checked="" type="checkbox"/>	

Non Technical	Presentation contains great data science that is delivered using non technical language.	Presentation uses technical terms without succinct explanations more than 3 times.	<input type="checkbox"/>	Presentation uses technical terms without succinct explanations once or twice.	<input type="checkbox"/>	Presentation does not use technical terms or provides succinct explanations when using them.	<input checked="" type="checkbox"/>	
Test Results	Modeling results are shown	No tests are shown or tests shown do not relate to business.	<input type="checkbox"/>	Test results are shown and made clear to business case.	<input type="checkbox"/>	Test results are shown, made relevant to business case and also highlight deeper insights into the business.	<input checked="" type="checkbox"/>	
Visualizations	Slides contain visualizations that take the place of text and give the viewer insight.	Slides do not contain visualizations or the visualizations present are not relevant to the story.	<input type="checkbox"/>	Slides contain visualizations that are relevant to the story but hard to interpret.	<input type="checkbox"/>	Slides contain visualizations that are relevant and easy to understand.	<input checked="" type="checkbox"/>	Not sure if a stacked bar chart is the best visualization there. A simple bar chart could be better maybe
Recommendations	A great presentation contains business recommendations and steps moving forward.	No recommendations are made	<input type="checkbox"/>	At least 3 recommendations are made, but are not driven by data analysis or model.	<input type="checkbox"/>	At least 3 recommendations are made and are driven by analysis and model.	<input checked="" type="checkbox"/>	
Future Work	A data scientist will never have enough time to explore all aspects of dataset. If you had more time, what other aspects of the dataset would you explore?	No slide on Future work.	<input type="checkbox"/>	Future work slide content not well defined and/or articulated.	<input type="checkbox"/>	Future work clearly articulated, explored, and its potential business impact (s) described.	<input checked="" type="checkbox"/>	
Thank You Slide	Thank your audience for their time, it's a great practice.	Thank You Slide is not present.	<input type="checkbox"/>		<input type="checkbox"/>	Thank You Slide is present. Appendix includes additional work.	<input checked="" type="checkbox"/>	

Qualitative Assessment

1. Problem Statement - how well was it defined for this project

The problem statement was defined really well in the readme.You could also include a short table of your results

2. Things you did well:

The modelling was really great as were the visualizations

3. Things to work on/ consider :

You have come a long way with the functions! Great job!

4. Action items:

None!