Phase 1 Project Checklist (Evan Jakub Ted [5 mins 51 sec])

Presentation Content

This element assesses the content of the non-technical presentation of a student's project. Presentations are evaluated based on how clearly they demonstrate the value of the project to the business stakeholders.

- The intended audience is the project's business stakeholders, not the class or teacher
- Presentations should aim to persuade stakeholders to value the project, not just describe it
- This element assesses **the content of** a presentation, not the delivery of it

  - **Content** refers to the words and pictures describing the project
  - Delivery refers to the manner in which those words and pictures are conveyed to an audience

- This element assesses **the demonstration of** a project's value, not the value itself

Complete	**Presentation describes the project goals, data, methods, and results.** Presentation may or may not clearly convey the value of the project to the business stakeholders. This includes presentations that are somewhat confusing, include irrelevant information, or omit evidence-based recommendations Your approach to success and methods were banger. Slides were easy to understand and audience appropriate your intro and conclusion was fantastic
Incomplete	**Presentation does not describe the project goals, data, methods, or results.** This includes presentations that omit critical information, have substantial errors, or that are too confusing for stakeholders to follow.

☑ **Presentation Content:** Presentation clearly demonstrates the value of the project to stakeholders by…

  ☑ Using plain language and clear visuals accessible to non-technical stakeholders
  ☑ Describing the project goals, data, methods, and results
  ☑ Explicitly connecting the descriptions of the project to stakeholder needs
  ☑ Having a distinct introduction and conclusion

Slide Style

This element assesses the style of a student's slides. Slides are evaluated based on how well the style enables the presenter to communicate with an audience and the audience to access the content.

- Style includes all visual elements, such as layout, colors, and fonts
- Style should match the expectations of a professional business presentation

Complete	Most slides include most items from the checklist (3 or more out of 5) Awesome, for comparing two visuals be sure to not duplicate they-axis labels to give yourselves more real estate on the page, watch out for too large of font on slide titles , great job having transition slides for the audience to follow your presentation
Incomplete	Most slides do not include most items from the checklist (0-2 out of 5)

☑ **Slide Style:** Slides have a professional style, such that...

    ☑ Slides use a professional template

    ☑ Slides are not cluttered

    ☑ Slides are light on text

    ☑ Slide text is easily readable

    ☑ Visuals are easy to understand

Presentation Delivery and Answers to Questions

This element assesses the delivery of the non-technical presentation of a student's project, including how well students respond to questions. Presentations are evaluated based on how well the delivery of the presentation engaged the project's business stakeholders in understanding the content, and on the clarity and appropriateness of answers to questions.

- Presentations should engage stakeholders by talking about the project's value to them
- The intended audience is the project's business stakeholders, not the class or teacher
- This element assesses *the delivery of* a presentation, not the content of it
    - Content refers to the words and pictures describing the project
    - *Delivery* refers to the manner in which those words and pictures are conveyed to an audience
- An answer is *clear* if it addresses the question directly, concisely, and in plain language
- An answer is *appropriate* if it accurately represents the project, resolves the question, and is sensitive to the audience.

Complete	**Presentation conveys the intended content, and most answers to questions are at least somewhat clear and appropriate**. Presentation may or may not be consistently clear and engaging to stakeholders. This includes presentations that are delivered too fast, explained in a confusing manner, too long, or recited monotonously. This also includes answers to questions that are long, jargon-heavy, only answer part of the question, or are not sensitive to the asker's knowledge, so long as they represent the project accurately and address the question being asked Everyone was a strong presenter. Awesome delivery...Ted nice job switching up how you phrased partnering up with a studio versus acquiring (nice job thinking on your feet), great future insights
Incomplete	**Presentation does not convey the intended content, or most answers to questions are unclear or inappropriate**. This includes presentations that are not comprehensible or that skip intended content, as well as non-responses, incorrect responses, or responses that don't resolve the question

☑ **Presentation Delivery and Answers to Questions:** Deliver your presentation clearly and engagingly by...
- ☑ Describing your project simply and succinctly in about 5 minutes
- ☑ Using pauses and emphasis while speaking at a moderate volume and pace
- ☑ Being sensitive to the knowledge level of your audience, using plain language where possible
- ☑ Directly addressing all aspects of any questions that were asked, including explaining any reasons why you cannot fully answer a question
- ☑ Answering questions accurately and succinctly

Business Understanding

This element assesses how well students explain the value of their projects. We frame value in terms of the problems and stakeholders that are the focus of the project.

- Students must explain how their projects address a ***real-world problem***
    - In Phase 1, the problem basics are provided in the project description
- A ***real-world problem*** is an actual problem faced by an actual ***stakeholder***
    - A ***stakeholder*** is a specific individual, group of people, or organization
    - A ***problem*** is a challenge faced by a stakeholder in pursuit of some goal
    - A ***real-world problem*** is one that exists in reality, i.e. students could present the project to an actual human being and they could actually find value in it.
- This element assesses ***the explanation of*** a project's value, not the value itself

Complete	**The notebook's explanation of a project's value is present, accurate, and understandable.** Notebook may or may not clearly identify how the project can help a specific stakeholder solve a real-world problem. This includes notebooks with a vague or general explanation. You need the overview at the tippy top of your notebook (no block of code should come before that), you never mention your stakeholder (Microsoft) in your overview, great job keeping conclusion succinct and listing out the recommendations instead of writing long paragraphs
Incomplete	**The notebook's explanation of a project's value is missing, inaccurate, or difficult to understand.** This includes projects that do not actually have value for any real-world problem/stakeholder.

- ☑ **Business Understanding:** Notebook clearly explains the project's value for helping a specific stakeholder solve a real-world problem.
    - ☑ Introduction explains the real-world problem the project aims to solve
    - ☐ Introduction identifies stakeholders who could use the project and how they would use it
    - ☑ Conclusion summarizes implications of the project for the real-world problem and stakeholders

Data Understanding

This element assesses how well students demonstrate the utility of their data for helping solve a business problem. We frame utility in terms of the properties, source, and business relevance of the data.

- Students must show how the data are useful for addressing a **_real-world problem_**
    - In Phase 1, the problem basics are provided in the project description
- A **_real-world problem_** is an actual problem faced by an actual **_stakeholder_**
    - A **_stakeholder_** is a specific individual, group of people, or organization
    - A **_problem_** is a challenge faced by a stakeholder in pursuit of some goal
    - A **_real-world problem_** is one that exists in reality, i.e. students could present the project to an actual human being and they could actually find value in it
- This element assesses **_the demonstration of_** the data's utility, not the utility itself

Complete	**The data's source and properties are described in the notebook and are potentially relevant to the real-world problem of interest.** This includes exploratory analyses that reveal properties of data but that does not go further to explain what those properties imply about the potential value of the data for addressing the real-world problem. It also includes notebooks that clearly address how well-suited the data are for addressing the real-world problem. Great job adding in a profitability formula VERY SMART, great job explaining sub-genre specificity, highlight limitations (old data, more data, etc etc.)
Incomplete	**The notebook's description of the data's source or properties is missing, inaccurate, difficult to understand, or irrelevant to the real-world problem of interest.** This includes projects using data that are not appropriate for solving the chosen real-world problem.

☑ **Data Understanding:** Notebook clearly describes the source and properties of the data to show how useful the data are for solving the problem of interest.

  ☑ Describe the data sources and explain why the data are suitable for the project
  ☑ Present the size of the dataset and descriptive statistics for all features used in the analysis
  ☑ Justify the inclusion of features based on their properties and relevance for the project
  ☐ Identify any limitations of the data that have implications for the project

Data Preparation

This element assesses how well students prepare their data for analysis. Good data preparation is reproducible, well-documented, and justified.

- Data preparation is ***reproducible*** if a third party with the same data access could create the same analytic dataset just by using the files and instructions provided in the repository
- A data preparation step is ***justifiable*** if there could be a valid rationale for how that step makes the data better suited for analyses that will address the real-world problem
- Data preparation is ***well-documented*** if it includes enough code comments and explanatory text for a third party to easily understand the steps that were taken and their ***justifications***

Complete	Data preparation is fully reproducible using instructions and code that is contained in, imported by, or referenced by the demonstration notebook. AND Preparation steps could have valid rationales for why they will help with solving the real-world problem addressed by the project. The steps taken or rationales may or may not be clearly documented using code comments and explanatory text. Great use of doctrings and comments, great feature engineering section, easy to follow great job outlining the steps in bullet point format
Incomplete	Data preparation is not fully reproducible using instructions and code that is contained in, imported by, or referenced by the demonstration notebook. OR Preparation steps could not have valid rationales for why they will help with solving the real-world problem addressed by the project.

☑ **Data Preparation:** Notebook shows how you prepare your data and explains why by including…

   ☑ Instructions or code needed to get and prepare the raw data for analysis
   ☑ Code comments and text to explain what your data preparation code does
   ☑ Valid justifications for why the steps you took are appropriate for the problem you are solving

Data Analysis

This element assesses how well students analyze their data to produce useful findings from the Phase 1 Project. Findings are useful if they inform recommendations that solve business problems.

- Data analyses should yield relevant **findings** to support **relevant recommendations**
  - A **finding** is a result produced by an analysis (e.g. a summary statistic)
  - A **recommendation** proposes a specific course of action for a stakeholder to take
  - A recommendation is **relevant** if it would address the problem the project aims to solve
- This element assesses the **usefulness of findings for supporting recommendations** that could conceivably address the business problem, not the feasibility of the recommendations themselves.

Complete	**Analyses in the notebook produce three findings and three recommendations that are related to the problem of interest**, but these findings and recommendations may or may not be clearly connected to each other. This includes projects that omit arguments for why the findings support the recommendations or make recommendations that are not relevant to the problem of interest. Great if you type out "Recommendation #1" as markdown text in the notebook itself besides waiting until the conclusion (say it both in the notebook and in the conclusion section), great job adding metrics to your recommendations (Wan)
Incomplete	**Analyses in the notebook do not produce three findings that are related to the problem of interest**. This includes projects that produce fewer than three findings, erroneous findings, or findings that are not helpful for solving the problem of interest.

- ☑ ~~**Data Analysis:** Notebook promotes three recommendations for choosing films to produce.~~
  - ☑ ~~Uses three or more findings from data analyses to support recommendations~~
  - ☑ ~~Explains why the findings support the recommendations~~
  - ☑ ~~Explains how the recommendations would help the new movie studio succeed~~

Visualization

This element assesses how well students create visualizations of important project findings. We frame visualization quality in terms of relevance and interpretability using visual design principles.

- Visualizations must be *relevant* to the problem that the project aims to address
  - To be *relevant*, the visualization must help communicate a specific point to the project stakeholder that would help them understand the value of the project
- Visualizations should be *polished* to help make them easily *interpretable*
  - *Polishing* is supported by a checklist of visual elements that students should attend to
  - A visualization is *interpretable* in the context of a document if the stakeholder could get the relevant information from it based on what they've seen so far in the document
- This element doesn't assess messy visualizations created only for students' personal use (e.g. EDA)

Complete	**The notebook contains at least three relevant and interpretable visualizations.** These visualizations may or may not achieve all of the sub-items of the checklist No need for ombre colored bars unless there is a PURPOSE, good use of call out boxes, visuals were overall clean, be mindful of different forms of colorblindness, a visual can span the entire slide
Incomplete	**The notebook contains fewer than three relevant and interpretable visualizations**

☑ **Visualization:** ~~Notebook includes three relevant and polished visualizations of findings that…~~

- ☑ ~~Help the project stakeholder understand the value or success of the project~~
- ☑ ~~Have text and marks to aid reader interpretation, such as graph and axis titles, axis ticks and labels, or legend (varies by visualization type)~~
- ☐ Use color, size, and/or location to appropriately facilitate comparisons
- ☑ ~~Are not cluttered, dense, or illegible~~

Code Quality

This element assesses the quality of code that students use in their project. Quality is assessed based on readability, repetitiveness, and citation.

- **Readability** is the ability for a newcomer to look at code and quickly understand what it does
  - Use professional coding conventions to evaluate this (e.g. PEP 8)
- **Repetitiveness** is the unnecessary use of similar code multiple times in one project
  - Can be avoided in many ways, such as with loops, functions, or classes
  - In other words, code should be DRY
- All code adapted from others must have proper **citation**
  - At a minimum, citations should include the authors' names and location of the cited material
  - Refer to the "Plagiarism Policy" section of the Flatiron School Catalog for definitions, policies, and procedures related to plagiarism and unauthorized assistance

Complete	**Code is mostly runnable, easy to read, non-repetitive, and properly cited.** Code may or may not have some substantial room for improvement. For Phase 1, this includes projects that have lots of unnecessary comments or code that is not used or needed. Great balance of markdown vs. code cells very easy to follow, nice job adding docstrings to your defined functions
Incomplete	**Code is mostly not runnable, difficult to read, repetitive, or improperly cited.**

- ☑ **Code Quality:** ~~Code in notebook and related files meets professional standards (e.g. PEP 8)~~
  - ☑ ~~Code is easy to read, using comments, spacing, variable names, and function docstrings~~
  - ☑ ~~All code runs and no code or comments are included that are not needed for the project~~
  - ☑ ~~Code minimizes repetition, using loops, functions, and classes~~
  - ☑ ~~Code adapted from others is properly cited with author names and location of the cited material~~

GitHub Repository

This element assesses the understandability of the GitHub repository that houses a student's project. Understandability is evaluated based on the README, folder structure, and commit history of the repository.

- The README should provide an overview of the project and repository structure
- Files and folders should be organized to make it easy to find any necessary files
- Commit history should reflect the project's development history

Complete	**Repository includes most items from the checklist** (4 or more out of 7) Needs PDF of Powerpoint that is visible to all, clean structure, name your jupyternotebooks as the title of your analysis (movie analysis for microsoft), your readme title needs to be descriptive, no links to your presentation were given in your readme, missing your gitignore (you deleted it and forgot to put it back in), extra files that does not need to be there (data>readme), work on descriptive commits
Incomplete	**Repository does not include most items from the checklist** (0-3 out of 7)

☐ **GitHub Repository:** Project repository demonstrates professional "best practices":
  - ☐ README.md includes concise summary of project with all data science steps
  - ☐ README.md links to presentation and sources
  - ☐ README.md includes instructions for navigating the repository
  - ☑ ~~Files and folders are named briefly and descriptively, with consistent naming conventions~~
  - ☑ ~~Files and folders are organized logically and consistently~~
  - ☐ Commit history includes regular commits with informative commit messages
  - ☐ Large or sensitive files are listed in .gitignore and not pushed to GitHub