# Final Deliverable Requirements

## Presentation:

**Content  
The presentation tells a cohesive story about their project, including the following:**

✓ Selected topic

✓ Reason why they selected their topic

✓ Description of their source of data

✓ Questions they hope to answer with the data

✓ Description of the data exploration phase of the project

✓ Description of the analysis phase of the project

✓ Technologies, languages, tools, and algorithms used throughout the project

✓ Result of analysis

✓ Recommendation for future analysis

✓ Anything the team would have done differently

**Slides Presentations are finalized in Google Slides.**

✓ Slides are primarily images or graphics (rather than primarily text)

✓ Images are clear, in high-definition, and directly illustrative of subject matter Live Presentation

✓ All team members present in equal proportions

✓ The team demonstrates interactivity of dashboard in real time

✓ The presentation falls within any time limits provided by instructor

✓ Submission includes speaker notes, flashcards, or a video of the presentation rehearsal

## GitHub

Main Branch  
All code in the main branch is production ready. All code is clean, commented, easy to read, and adheres to a coding standard (e.g., PEP8)

Main branch should include:

✓ All code necessary to perform exploratory analysis

✓ All code necessary to complete machine learning portion of project

✓ Any images that have been created (at least three)

✓ Requirements.txt file README.md

README.md must include:

✓ Cohesive, structured outline of the project (this may include images, but should be easy to follow and digest)

✓ Link to dashboard (or link to video of dashboard demo) ✓ Link to Google Slides presentation Note: The descriptions and explanations required in all other project deliverables should also be in your README.md as part of your outline, unless otherwise noted.

Individual Branches

✓ At least one branch for each team member

✓ Each team member has at least four commits for the duration of the final segment (16 total commits per person)

## Machine Learning Model

Team members submit the working code for their machine learning model, as well as the following:

✓ Description of data preprocessing

✓ Description of feature engineering and the feature selection, including the team's decision-making process

✓ Description of how data was split into training and testing sets

✓ Explanation of model choice, including limitations and benefits

✓ Explanation of changes in model choice (if changes occurred between the Segment 2 and Segment 3 deliverables)

✓ Description of how model was trained (or retrained, if they are using an existing model)

✓ Description and explanation of model’s confusion matrix, including final accuracy score. Additionally, the model obviously addresses the question or problem the team is solving. Note: If statistical analysis is not included as part of the current analysis, include a description of how it would be included in the next phases of the project.

## Database

Team members present a final project with a fully integrated database.

✓ Database stores static data for use during the project

✓ Database interfaces with the project in some format (e.g., scraping updates the database, or database connects to the model)

✓ Includes at least two tables (or collections, if using MongoDB)

✓ Includes at least one join using the database language (not including any joins in Pandas)

✓ Includes at least one connection string (using SQLAlchemy or PyMongo) Note: If you use a SQL database, you must provide your ERD with relationships.

## Dashboard

The dashboard presents a data story that is logical and easy to follow for someone unfamiliar with the topic. It includes all the following:

✓ Images from the initial analysis

✓ Data (images or report) from the machine learning task

✓ At least one interactive element

Either the dashboard is published, or the submission includes a screen capture video of it in action.