**PRESENTATION**

**Segment 1: Points 30**

**Content**

Team members have drafted 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

Note: The content does not yet need to be in the form of a presentation; text in the README.md works as well.

**Segment 2: Points 15**

**Content**

The presentation outlines the 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

**Slides**

Presentations are drafted in Google Slides.

**Segment 3: Points 15**

**Content**

The presentation tells a 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

**Slides**

Presentations are drafted in Google Slides.

**Segment 4: Points 25**

**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**

**Segment 1: Points 10**

**Main Branch**

✓ Includes a README.md

**README.md**

README.md must include:

✓ Description of the communication protocols

**Individual Branches**

✓ At least one branch for each team member

✓ Each team member has at least four commits from the duration of the first segment

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.

**Segment 2: Points 10**

**Main Branch**

All code in the main branch is production-ready.

The main branch should include:

✓ All code necessary to perform exploratory analysis

✓ Some code necessary to complete the machine learning portion of the project

**README.md**

README.md must include:

✓ Description of the communication protocols

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

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 second segment (eight total commits per person)

**Segment 3: Points 10**

**Main Branch**

All code in the main branch is production-ready.

Main branch should include:

✓ All code necessary to perform exploratory analysis

✓ Most code necessary to complete the machine learning portion of the project

**README.md**

README.md must include:

✓ Description of the communication protocols has been removed

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

✓ Link to Google Slides draft 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 third segment (12 total commits per person)

**Segment 4: Points 10**

**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**

**Segment 1: Points 35**

Team members present a provisional machine learning model that stands in for the final machine learning model and accomplishes the following:

✓ Takes in data in from the provisional database

✓ Outputs label(s) for input data

**Segment 2: Points 30**

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

✓ Description of preliminary data preprocessing

✓ Description of preliminary feature engineering and preliminary feature selection, including their decision-making process

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

✓ Explanation of model choice, including limitations and benefits

**Segment 3: Points 45**

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 their 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 they have trained the model thus far, and any additional training that will take place

✓ Description of current accuracy score

Additionally, the model obviously addresses the question or problem the team is solving.

**Segment 4: Points 25**

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**

**Segment 1: Points 25**

Team members present a provisional database that stands in for the final database and accomplishes the

following:

✓ Sample data that mimics the expected final database structure or schema

✓ Draft machine learning module is connected to the provisional database

**Segment 2: Points 30**

Team members present 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.

**Segment 3: Points 0**

na

**Segment 4: Points 25**

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**

**Segment 1: Points 0**

na

**Segment 2: Points 15**

A blueprint for the dashboard is created and includes all of the following:

✓ Storyboard on Google Slide(s)

✓ Description of the tool(s) that will be used to create final dashboard

✓ Description of interactive element(s)

**Segment 3: Points 30**

The dashboard presents a data story that is logical and easy to follow for someone

unfamiliar with the topic. It includes all of the following:

✓ Images from the initial analysis

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

✓ At least one interactive element

**Segment 4: Points 15**

The dashboard presents a data story that is logical and easy to follow for someone

unfamiliar with the topic. It includes all of 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.