Capstone

Course: Gen10 Data Fundamentals 21-11

Deliverables	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
GitHub URL	GitHub repo URL is submitted properly.	Another source control tool is used.	No GitHub repo. No source control.	/ 2
Exploratory Questions	5-10 exploratory questions have been presented in a file named ExploratoryQuestions.pdf.	Less than 5 or more than 10 questions are presented. Exploratory questions are in a file not named properly.	No exploratory questions.	/ 2
Project Management Plan	A complete project management plan has been submitted in a file named ProjectManagementPlan.pdf	An incomplete project management plan has been submitted and/or the file is not named properly.	No project management plan.	/ 2
Napkin Drawings & Feedback for Visualizations	Napkin drawings and feedback for visualizations are included in a file named VisualizationsNapkinsAndFeedback.pdf	Napkin drawings for visualizations and/or feedback is missing. Napkin drawings and feedback for visualization are included but not named properly.	No napkin drawings and feedback for visualizations.	/ 2

Deliverables	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Napkin Drawings & Feedback for the Dashboard	Napkin drawings and feedback for the dashboard are included in a file named DashboardNapkinsAndFeedback.pdf	Napkin drawings for the dashboard and/or feedback are missing. Napkin drawings and feedback for the dashboard are included but not named properly.	No napkin drawings and feedback for the dashboard.	/ 2
Repeatable ETL Report	Repeatable ETL Report is included in a file named RepeatableETLReport.pdf	ETL report is not repeatable. ETL report is not named properly.	No Repeatable ETL report.	/ 2
Dashboard	A dashboard is created with Dash or a report in Power BI with Python. All code for the dashboard or report is included in a code folder in the repo.	A dashboard is created with a different technology. No code is stored in the code folder. Code may be stored in a folder not properly named.	No dashboard and no code for the dashboard.	/ 2
Project Executive Summary	The project executive summary is in a file named ProjectExecutiveSummary.pdf	The project executive summary is not named properly.	No project executive summary.	/ 2
Presentation Slides	Presentation slides are included in a file named CapstonePresentationSlides.pdf	Presentation slides are not included - only a URL is included. Presentation slides are in a file not properly named.	No presentation slides.	/ 2

GitHub Repo	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
README	GitHub repo contains a README that details the repo and makes it easy to navigate.	GitHub repo contains a README that has some information but leaves things out in terms of understanding the repo.	No README file in the repo.	/ 2
Organization	GitHub repo is well organized and easy to navigate.	GitHub repo is somewhat organized - has folders and files are named reasonably. Organization is clumsy.	No organization in the GitHub repo.	/ 2

Data	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Census Data	One of the provided Census dataset links was used.	Census data was used but it wasn't one of the provided Census dataset links.	No Census data.	/ 2

Tools	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Python	Python code is well-organized, readable, and completely functional.	Python code is not organized or somewhat unreadable. Python code may be partially functional or broken.	No Python used.	/ 2
pandas	pandas functions properly for ETL in Python.	pandas is used but is not functional.	No pandas used.	/ 2

Project Plan	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Task Division	All tasks look to be evenly split among team members.	Tasks are broken down but not granular enough to judge whether work is evenly split. Tasks are not evenly split among team members.	Tasks aren't broken down and assigned evenly to team members.	/ 2
Exploratory Questions	Project plan accounts for Exploratory Questions.	No halfway point.	Project plan does not include Exploratory Questions.	/ 2
Napkin Drawings & Feedback for Visualizations	Project plan accounts for napkin drawings of the visualizations and their feedback.	No halfway point.	Project plan does not include Napkin Drawings and Feedback for visualizations.	/ 2
Napkin Drawings + Feedback for the Dashboard	Project plan accounts for napkin drawings of the dashboard and their feedback.	No halfway point.	Project plan does not include Napkin Drawings and Feedback for the dashboard.	/ 2
Repeatable ETL Report	Project plan accounts for the repeatable ETL report.	No halfway point.	Project plan does not include creating the repeatable ETL report.	/ 2
Dashboard	Project plan accounts for building a dashboard in Dash or report in Power BI with Python.	No halfway point.	Project plan does not include building a dashboard in Dash or Power BI with Python.	/ 2

Project Plan	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Project Executive Summary	Project plan accounts for project executive summary.	No halfway point.	Project plan does not include the project executive summary.	/ 2
Presentation Slides	Project plan accounts for presentation slides.	No halfway point.	Project plan does not include presentation slides.	/ 2
Presentation Dry Run	Project plan accounts for presentation dry run.	No halfway point.	Project plan does not include presentation dry run.	/ 2

Napkin Drawings and Feedback for Visualizations	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Visualization Napkin Drawing Quality	Visualization napkin drawings are minimalist, little to no styling, and enough to get the point across on what is being represented.	Visualization napkin drawings have styles that make them closer to the finished product. Napkin drawings don't clearly convey their visualizations.	No visualization napkin drawings.	/ 2
Visualization Napkin Feedback	Visualization napkin feedback from at least 2 classmates in other groups has been documented.	Visualization napkin feedback from less than 2 classmates in other groups. Visualization napkin feedback was not documented clearly.	No visualization napkin feedback.	/ 2

Napkin Drawings and Feedback for Visualizations	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Visualization Napkin Feedback Consideration	Visualization napkin feedback has been incorporated into updated visualization napkin drawings.	Visualization napkin feedback has been acknowledged in feedback documentation but no updated visualization napkin drawings based on the feedback.	No visualization napkin feedback consideration.	/ 2

Napkin Drawings and Feedback for Dashboard	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Dashboard Napkin Drawing Quality	Dashboard napkin drawings are minimalist, little to no styling, and enough to get the point across on what is being represented.	Dashboard napkin drawings have styles that make them closer to the finished product. Dashboard napkin drawings don't clearly convey their messaging.	No dashboard napkin drawings.	/ 2
Dashboard Napkin Feedback	Dashboard napkin feedback from at least 2 classmates in other groups has been documented.	Dashboard napkin feedback from less than 2 classmates in other groups. Dashboard napkin feedback was not documented clearly.	No dashboard napkin feedback.	/ 2

Napkin Drawings and Feedback for Dashboard	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Dashboard Napkin Feedback Consideration	Dashboard napkin feedback has been incorporated into updated dashboard napkin drawings.	Dashboard napkin feedback has been acknowledged in feedback documentation but no updated dashboard napkin drawings based on the feedback.	No dashboard napkin feedback consideration.	/ 2

Kafka and Cloud ETL	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Kafka Producer Stream	Kafka Producer Stream is set up and working properly.	Kafka Producer Stream was attempted but isn't set up properly or isn't working.	No Kafka Producer Stream.	/ 2
Topics	Topics are set up and consumed properly.	Some topics are not set up or are not being consumed properly.	No topics are used.	/ 2
Databrick	Kafka Producer Stream is captured in a Databrick properly.	Kafka Producer Stream is captured in a Databrick but not in an expected way. An attempt was made but it isn't working.	No Databrick.	/ 2
Azure Data Lake	Data is migrated from Kafka into an Azure Data Lake.	Data isn't migrating properly from Kafka into the Azure Data Lake.	No Azure Data Lake.	/ 2

Kafka and Cloud ETL	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Azure Data Factory	Azure Data Factory is moving data successfully between Azure Data Lake and Azure SQL.	Some struggles using Azure Data Factory or migrating data between Azure Data Lake and Azure SQL.	No Azure Data Factory.	/ 2
Azure SQL	Azure SQL ERD and scripts work properly.	Missing ERD for Azure SQL. Scripts aren't working properly.	No Azure SQL.	/ 2
Cloud Diagram	Network diagram or service diagram for pipelines is built properly.	Network diagram or service diagram for pipelines is not logically built.	No network diagram or service diagram.	/ 2

Dashboard	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Dash or Power BI with Python	Dashboard uses Dash or report with Power BI with Python.	Dashboard or Report created with tools other than Dash or Power BI with Python.	No dashboard present.	/ 2
Messaging	Dashboard or report has clear messaging.	Dashboard or report messaging is unclear.	No dashboard or report messaging.	/ 2
Visualizations	Cohesive, properly labeled, visualizations are included on the dashboard. There are enough visualizations to support the project.	Too many visualizations or not enough visualizations. Visualizations aren't cohesive. Visualizations aren't properly labeled.	No visualizations on the dashboard.	/ 2

Machine Learning	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Machine Learning Algorithm Used	Machine learning algorithm implemented successfully.	Machine learning algorithm attempted with some struggles.	No machine learning algorithm attempted.	/ 2
Machine Learning Algorithm Tuned	Machine learning algorithm tuned for a higher accuracy.	Machine learning algorithm tuned but not optimal.	No machine learning algorithm tuning.	/ 2
Machine Learning Outcomes Explained	Machine learning outcomes explained clearly.	Machine learning outcomes explained but not clearly.	No machine learning outcomes explained.	/ 2

Project Executive Summary	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Introduction	Backstory and exploratory questions set the stage for the rest of the report clearly.	Introduction does not set clear expectations of the backstory and exploratory questions.	No introduction.	/ 2
Research Presentation	Research has been presented clearly.	Research has been presented but lacks clarity.	No research presented.	/ 2
Conclusion	Conclusion wraps up the research and ties back to the exploratory questions clearly. Recommendations are made.	Conclusion struggles to wrap up the research and does not tie back to the exploratory questions. Recommendations may not be made.	No conclusion.	/ 2

Presentation	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score

Presentation	Meets Expectations 2 points	Not Yet 1 point	No Attempt 0 points	Criterion Score
Introduction	Group and topic have been introduced.	Group wasn't introduced but topic was. Or group was introduced but topic wasn't.	Group and topic have not been introduced.	/ 2
Initial Questions	Initial questions were proposed.	No halfway point.	Initial questions were not proposed.	/ 2
Research Process	Research process was discussed clearly and showcased how they kept the initial questions in mind.	Research was discussed but the initial questions weren't kept in mind.	Research process was not described.	/ 2
Machine Learning	Machine learning was discussed clearly.	Machine learning was presented but not clearly discussed.	Machine learning was not described.	/ 2
Recommendations	Recommendations based on research are solid and well-defined.	Recommendations based on research are not clear.	Recommendations were not provided.	/ 2

Total	/ 100

Overall Score

Meets Expectation 80 points minimum	Not Yet 60 points minimum	Does Not Meet Expectations 40 points minimum	No Attempt 0 points minimum