Milestone 1 Weight distribution and marking rubric

Weight Distribution of the tasks:

EDA (15%) -

| Task | % |
|-------------------------------|----|
| Loading and basic exploration | 20 |
| Variety and complexity | 30 |
| Proper visualisation | 50 |

Cleaning(35%)

| Task | % |
|------------------------------------|----|
| Detection and tidying column names | 30 |
| Handling | 40 |
| Checking and observing | 30 |

Transformation(20%)

| Task | % |
|------------------------|----|
| Discretisation | 25 |
| Encoding | 40 |
| Scaling/Transformation | 15 |
| Feature engineering | 20 |

Lookup table - 10%

Adding GPS coordinates - 10%

Code quality and overall notebook quality - 10%

Marking Rubric -

| Task/Mark | 0-20% | 20-50% | 50-75% | 75-90% | 90-100% |
|--|---|---|--|---|---|
| Loading and basic exploration | Csv file not loading properly, data is not observed or explored at all. | Csv file loads properly but without proper indexing, data is not observed or explored at all. | Csv loads properly and indexed properly. Only 1 basic observation was made about the dataset. | Csv loads properly and indexed properly. Few methods used to explore and make multiple observations about the data. | Csv loads properly and indexed properly. Multiple methods used to explore and make multiple observations about the data. |
| Variety, complexity and accuracy of the insights found. | No/1 question was asked to give further insight into the data. | Questions were asked but with little to no variety(i.e exploring just the distribution) and gave incorrect insights. | Type of Questions varied more and gave the correct insight. All questions were very basic and did not lead to deeper insight into the data | Questions varied and had 1 or 2 relatively complex questions that gave a deeper insight into the data. | Questions varied and had multiple relatively complex questions that gave a deeper insight into the data. |

| Proper and clear visual rep. and comments about the insights found. | No visual representation and no comments made about the insights. | Misrepresentation of the insights. No comments made. | Misrepresen tation of the insights (i.e the graphs used did not best represent your insights). Comments made on few of the insights. | Graphs were represented properly however they were not properly labelled. Comments made on most of the insights. | Graphs were represented clearly and were able to effectively communicate the insights found. Comments made on all insights. |
|---|---|---|---|--|---|
| Detecting and observing unclean data | No detection of unclean data. | Unclean data were detected using 1 method only. No comments made about your findings. | Unclean data were detected/obs erved using 1 method only. Comments were made on some of your findings. | Unclean data were detected/Obs erved using multiple methods. Comments were made on some of your findings. | Unclean data were detected/Obser ved using multiple methods. Comments were made about all your findings. |
| Handling unclean data | Data was not cleaned. | Data was handled improperly. No justification of the technique used to handle the unclean data. | Data was handled properly. Justification made on the technique used to handle the unclean data. | Data Handled properly and justified. Multiple techniques were proposed for some of the unclean data. | Data Handled properly and justified. Multiple techniques were proposed for all types of unclean data handled. |

| Observing changes and checking data is cleaned | Did not check the data was cleaned. No observations made after handling the unclean data. | Did check the data was cleaned. Few observations made after handling the unclean data. No comments made on the observations/f indings. | Did check the data was cleaned. Few observations made after handling the unclean data. Few comments made on the observations/ findings. | Did check the data was cleaned. Multiple observations made after handling the unclean data. Few comments made on the observations/ findings. | Did check the data was cleaned. Multiple observations made after handling the unclean data. Comments were made on each observation/findings. |
|--|--|--|--|---|---|
| Discretisat-i on | Dates not discretized. | Dates discretized improperly. | Dates were binned properly but with incorrect labels. | Dates were binned properly with correct labels. | Dates were binned properly with correct labels.Commen ts/observation s made about the discretized dates. |
| Encoding | No encoding done. | Encoding was performed with improper techniques and no justification. | Encoding was performed with proper techniques and justification. | Different encoding techniques were introduced. Proper justification of the method chosen to encode. | Same as the 75-90 range + Observations and comments were made on the dataset after the encoding was performed(i.e how has it changed). |
| Scaling and/or Normalisati on | No justification as to why you normalised or not. | Incorrect features were chosen to scale/norm. | | Proper justification as to which features were normalized and how. | Same as the 75-90 range + Observations and comments were made on the dataset after the normalisation/sc aliing was performed(i.e how has it changed). |

| Feature engineering | No additional features created. | 1 additional feature created improperly. | 1 additional feature created properly. | 2 additional features created. 1 properly and 1 improperly. | 2 additional features created properly. |
|-----------------------------------|--|---|--|--|---|
| Lookup table | No lookup table | Lookup table with values for 1 feature | Lookup table with values for multiple features | Lookup table with all values for all features, however improper format, difficult to map afterward | Lookup table with all values for all features with proper format. |
| Add GPS coordinates | No gps coordinates | Incorrect coordinates | Correct coordinates, however they were collected inefficiently. | | Correct coordinates, collected efficiently. |
| Load into new csv file | Data not loaded back into a csv file. | | | Data loaded properly but with improper naming. | Data loaded properly with proper naming. |
| Code and overall notebook quality | Hard-coded and difficult to read/understand. | Hard-coded. Code could be understood but with improper variable naming. | Code is generic and could be easily used for various datasets.Eas y to understand.H owever, much of the code was repeated. | Code is generic and could be easily used for various datasets. Eas y to understand. Functions were created for common tasks to avoid repeating writing the code for each task. | Same as 75-90 + Notebook is structured nicely and has a clear and nice flow to it. |