

## Assignment 1 Tutor Feedback [Dr Nadeem Qazi]

Thank you for submitting the group report. based on your submitted Assignment report task here is the distribution of your marks. In this Assignment you were supposed to perform three task including Business analytic questions, This assignment is aimed at assessing your ability to pose interesting questions relevant to Airbnb business, process the data using the key steps of big data analytics, such as, data pre-processing, analysing, and eventually preparing an analytical report.

### TASK 1 (Business analytic question)

Propose an interesting business analytic question that can be answered using the given Airbnb dataset. The proposed question should be useful for Airbnb. An example question could be: is there any noticeable difference in bookings among different areas and what could be the reasons for it?

### TASK 2 (Data analysis)

In this task, use your data analytics skills to answer the question posed in Task 1. Depending upon your chosen question, you will typically have to perform Exploratory Data Analysis (EDA), data pre-processing, statistics-based data analysis, data visualisation and use unsupervised machine learning algorithms (e.g., clustering).

### TASK 3 (Analytical report)

In this task, you are expected to prepare an analytical report, which can easily be interpreted by the executive board members of Airbnb. There is no fixed specification for this report but in general, it must contain an adequate number of visualisation charts/graphs with a lucid description. The total number of pages of the analytical report must not exceed beyond 2 pages (1000 words equivalent).

#### **Substantive question      5% (Knowledge and Understanding)**

The report does clearly highlight the multiple business questions regarding the Task1 aiming to answer it with data visualisation. You also explained and performed EDA **5/5**

#### **Rational/arguments presented for the business question      5% (Criticality)**

The students explained well the pose questions with the domain knowledge. However some of the points are not clear with given visualisation **4/5**

#### **Expected business impact      5% (Application of Knowledge and Understanding)**

A good attempt is demonstrated to implement the visual analytics and justify its impact on the business, though the report does not fully focus on the business impact of this analysis. **4/5**

**Methodology (EDA, data pre-processing, data analysis & machine learning)**  
**40% (Knowledge and Understanding – 10%, Application of Knowledge and Understanding – 10%, Criticality – 20%)**

The EDA presented in this report demonstrates very good knowledge of data pre-processing, data analysis and machine learning with an attempt of data cleaning and statistical analysis using visualisation. The report also shows use of clustering for the grouping of four clusters are mentioned using the k-mean clustering without any explanation of the number of clusters.

**34/40**

**Visualisations of results 40% (Knowledge and Understanding – 10%, Application of Knowledge and Understanding – 10%, Structure and Presentation – 20%)**

The report is well structured presenting the visualisation artefacts such as cluster visualisations, box plots, however no correlations are mentioned in any of the EDA variables. But more visualisation is available in the provided code **32/40**

**Overall presentation style 5%**

Overall a well structured, detailed documents report, clearly mentioning the business question, incorporating the references, tables and figures. A decent attempt is made to present the work. **4/5**

**Total: 5+4+4+34+32+4=85**