**Airbnb Project in Power BI**

1. **Data Preparation – Fact\_listings**
2. Get data from the PostgreSQL database using DirectQuery.
3. Change the storage mode from DirectQuery to ‘import’ mode.
4. Change the table name to ‘Fact\_listings.’
5. The id column seems corrupted. Extract the id from the ‘listing\_url’ column using the delimiter ‘rooms/’ and rename the column as ‘listing\_id’.

A screenshot of a computer

Description automatically generated

1. Change the data type to the correct format.
2. Unfiltered null data in the ‘first\_review’ column.
3. **Data Preparation –Fact\_reviews**
4. **Import data source from reviews\_WA, reviews\_Brisbane, reviews\_Melbourne, reviews\_Sydney**
5. **Append the above queries into a Fact\_reviews table**
6. Merge the Fact\_reviews table (many) with the Fact\_listings table (one) and create a many-to-one relationship
7. Remove null in the listing\_id column of the Fact\_reviews table (This is caused by previous data cleaning process; some rows were remove so that some reviews cannot link to the listings.)

**Data Modelling**

1. **Normalise the fact table and create the Dim\_host table**
2. **Duplicate the fact table.**
3. **Select host\_id, host\_name, and host\_since and remove other columns.**
4. **Remove duplicates in the host\_id column**

**A screen shot of a graph

Description automatically generated**

1. **Merge the fact table with Dim\_host to create many-to-one relationships**
2. **Normalise the fact table and create the Dim\_location table**
3. **Duplicate the fact table.**
4. **Select state and suburb and remove other columns.**
5. **Remove duplicates in both column**
6. **Add an index column and rename it as lication\_id**

**A screenshot of a computer

Description automatically generated**

1. **Merge the fact table with Dim\_location to create many-to-one relationships**
2. **Normalise the ‘property\_type’ column**
3. **Clean the data (resolve upper/lower case duplicate issue) and replace unnecessary characters in the fact table.**
4. **Duplicate the fact table and change the table name to Dim\_property\_type.**
5. **Remove duplicates. Add an index column and rename it as propery\_type\_id**
6. **Normalise the ‘room\_type’ column**
7. **Duplicate the fact table and change the table name to Dim\_room\_type.**
8. **Remove duplicates. Add an index column and rename it as room\_type\_id**
9. **Hide all the foreign keys in the fact table so that they are not shown in the report view.**
10. **Create a Calendar table based on the review data**