Abstract for the Database Airbnb use case

Finalization Phase

1. Management functionality:

This database is designed for three different user groups: guests, hosts, and administrators. It is tailored to meet the needs for functioning in the Airbnb use case. Data is stored in 27 different tables each of which corresponds to a specific operation.

For guests, it is easily possible to search for a listing setting different filters. For example property type, size, or costs. This Database schema also allows one to make a reservation and money transactions supervised by the administrator user group.

Hots can update or create a new property listing with the necessary data and update its availability. They can also look up the personal information of a guest, make contact and see if there is a common language to communicate with. Property data stored in this schema include images, rules, costs, amenities, and more.

Administrators supervise the payment procedure and make payments to the host after the transaction from a guest to the site is completed.

2. Installation:

For the creation of this Database, I used MySQL Workbench Community Edition and I recommend using it for opening this database schema.

First, install MySQL Workbench Community Edition which is free to use.

You can find it on the website: https://dev.mysql.com/downloads/workbench/

After you are finished with the installation, download the datamart.sql FIL in the Development folder of this repository.

Open MySQL Workbench and click: File → Open SQL scripts → choose the datamart.sql file

3. Metadata:

The following picture shows the schema details.

Table Name	Table Rows	Avg row length	Data length	Index length
administrators	21	780	16384	0
administrators_has_languages	42	390	16384	32768
amenities	25	655	16384	0
beds	5	3276	16384	0
booking	35	468	16384	32768
city	48	341	16384	0
costs	20	819	16384	16384
country	23	712	16384	0
e_mail	69	237	16384	49152
guest_adress	20	819	16384	49152
guest_review	25	655	16384	32768
guests	23	712	16384	0
guests_has_languages	42	390	16384	32768
hosts	20	819	16384	0
hosts_has_languages	20	819	16384	32768
languages	22	744	16384	0
payment	35	468	16384	98304
payment_information	46	356	16384	32768
properties	20	819	16384	49152
properties_has_beds	35	468	16384	32768
property_adress	20	819	16384	32768
property_availability	40	409	16384	16384
property_has_amenities	76	215	16384	32768
property_images	54	303	16384	16384
property_review	36	455	16384	32768
property_rules	20	819	16384	0
telephone_numbers	72	227	16384	49152

Project Github repository: https://github.com/StefanStricker/Airbnb_Datamart