Database ER Diagram of HERMES Listing application.

Tsantoulis Anastasios 164762.

tasostsant98@hotmail.gr

Our database is going to consist of 10 tables.

Firstly there is going to be the User_Data table which is holding every information needed about our users.

Columns of **User_Data** table are:

- *userID* int PK: a unique number which servers as an ID.
- *username* varchar: The username of the user.
- *password* varchar: The password of the user.
- *name* varchar: The real name of the user.
- *surname* varchar: The surname of the user.
- *address* varchar: The user's address.
- *email* varchar: The user's email address, going to be used as the primary communication method.
- *telephone* int: The user's telephone which can be null if the user doesn't want to be known. This is going to help for validation reasons (if a listing is made by a real user or a fake profile).

Listings table is holding info about the listings.

Columns of the **Listing** table are:

- *listingID* int PK: a unique number identifying the listing.
- *listingName* varchar: The name of the listing user set during the creation of the listing.
- *listingDescription* longtext: The listing description user set during the creation of the listing.
- *listingPicture* blob: The collection of pictures of the listing.
- *activeListing* Boolean: Active listing field identify if a listing is still active or was set inactive (complete) by the owner of the listing. No listings are getting deleted and they are publicly available every time in a different section.
- *listingRegion* FK id: A unique id which is correspond to listing's region (ex: Thessaloniki, Athens, etc).
- *listViews* int: Number of list's views.
- *subCategoryListing* int FK: An id which corresponds to a sub category letting us know what is this listing for (example of a subCategoryListing is bmw where the greater category is car).

Then we have minor tables like:

User_Tracking tracking which holds users activity data.

Columns of **User_Tracking** table are:

- *userID* FK to *userID* of thable User_Data.

- *lastLogin* Date: Holds the last time the user logged in.
- *lastPasswordChange* Date: Holds the last time the user changed his password in order to force them to change it every x times for security reasons.

View_history table holds which user has viewed which listing for recommendation purposes.

- *listinID* FK to *listingID* of table **Listings**.
- *userID* FK to *userID* of table **User_data.**

User_Favorite table holds user's favourites listing so he can come back later and find them more easily.

- *listinID* FK to *listingID* of table **Listings**.
- *userID* FK to *userID* of table **User_data**.

Owners_Listings table holds user's listings.

- *listinID* FK to *listingID* of table **Listings**.
- *userID* FK to *userID* of table **User_data**.

User_Preferences table holds user's preferences about the app.

- *userID* FK to *userID* of table **User_Data**.
- *emailNotifications* Boolean: If user has opted for email notifications.
- #more fields can be added here during the development of the app.

Location_List table holds a pre-set locations of areas where listings can be from.

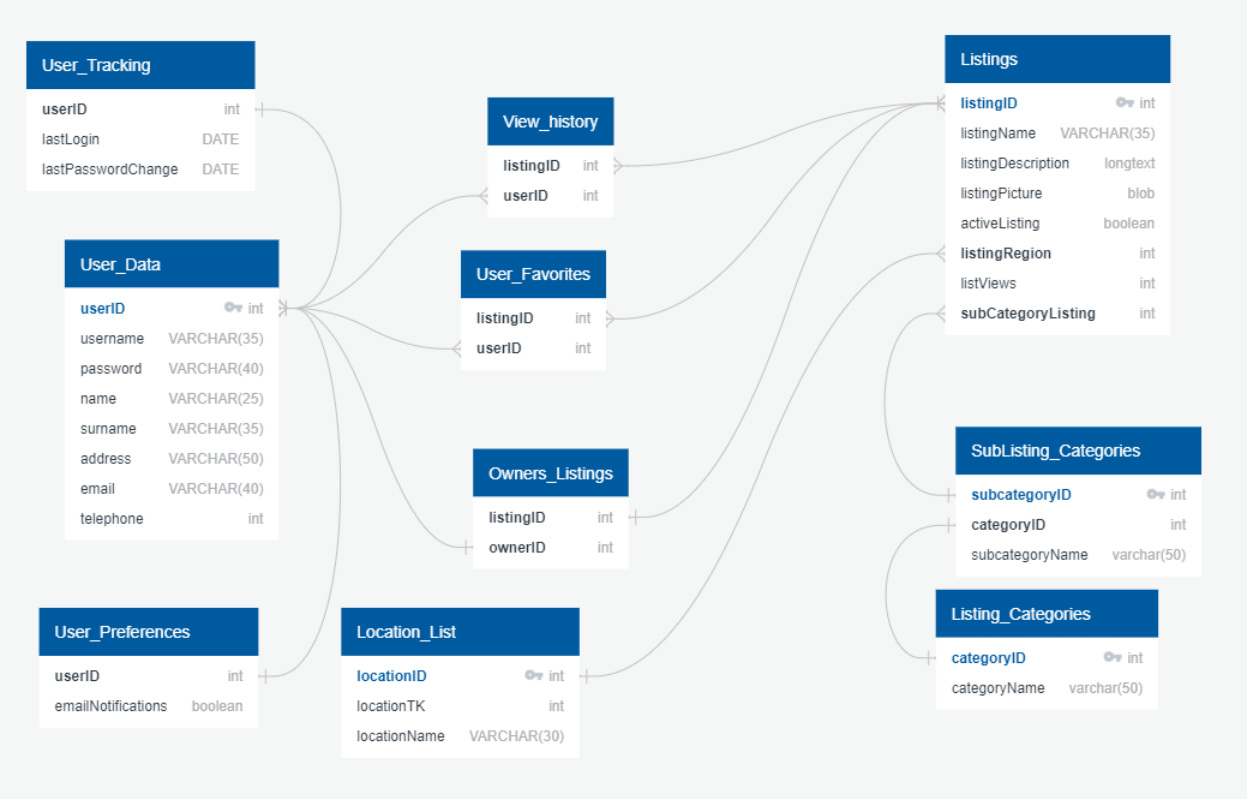
- *locationID* int PK: A unique id for the location.
- *locationPC* int: The postcode of the location.
- *locationName* VARCHAR: The location's name.

Listing_Categories table holds the information about the listing's categories (example: Home, car, electronics ect).

- *categoryID* int PK: A unique id for the categories.
- *categoryName* varchar(50): The name of the category.

SubListing_Categories table has data about about the sub categories of the greatest for easier search purposes and better categorization.

- *subCategoryID* int PK: The sub category ID.
- *categoryID* int FK on **Listing_Categories**: The main category ID.
- *subcateogryName* VARCHAR: The sub category name.



ER diagram

The ER diagram is subject to change as the app keeps evolving more and more especially during the early stages of development. Changes also can be made for boosting performance.