1. **Data Definitions V2**

This section does describe terms, which will be used in the further development process of project *fuldaflats.de.* These terms will be extended with more implementation details as the development goes on. Furthermore, the structure of the database with its tables is described in this section and a high-level UML diagram of the database is shown.

**Data Glossary**

Name: **User**

Meaning: A user is a human, which interacts with this application.

Usage: The user will be used with many other terms. Like the apartment, the user can be the new owner or the seller of it.

Name: **User Details**

Meaning: This term is needed to describe a user.

Usage: This term describes properties of a user. A property is e.g. the name or the E-Mail address of the user.

Name: **MediaObjects**

Meaning: A user should be able to make a better idea of the apartment.

Usage: A MediaObject is attached to the offer and can be an image of the apartment or a building plan.

Name: **Review**

Meaning: To ease a user’s decision, there should be a reviewing process.

Usage: Every user can rate the owner of the apartment with up to 5 stars. A user can also leave a comment about the rating. Reviews are accumulated to from an overall user rating.

Name: **Offer**

Meaning: The main object of this application (the apartment), attachments, comments, rating and the owner should be grouped into one object.

Usage: An offer gets one page, which will be used to display the above-mentioned objects.

Name: **Tag**

Meaning: Offers can be categorized using predefined tags.

Usage: Tags indicate interests, nationalities, spoken languages, faculties and more of flat shares and neighborhoods.

Name: **Favorite**

Meaning: List of a user’s favorite offers.

Usage: Authenticated users can mark offers as favorite, which will add them to a list that users can view in their user profiles.

Name: **Session**

Meaning: A browser session, used to track authentication.

Usage: Browser sessions are used to track authentication and authorization; they are implemented by utilizing browser cookies.

Name: **Statistics**

Meaning: Tracking of offer views, comments and more.

Usage: Some data (e.g. number of views of an offer) is collected to give landlords some statistical information about their offers.

Name: **Landlord**

Meaning: describes the user which owns an apartment and offers it

Usage: A trade will be made between a landlord and a prospective customer.

Name: **Account**

Meaning: The application needs an authorization process verify the users

Usage: A user creates an account with his E-Mail Address and a password. The user should verify himself with the password as he wants to login into his account.

**Table Definitions**

**Table 1: User**

|  |  |
| --- | --- |
| Column name | Description |
| User ID | Unique identifier of the user |
| Email-Address | User signs in with the E-Mail Address |
| Type | Whether the user is a normal or landlord user |
| Password | The hash of the password, which the user signs in with |
| First Name | First name of the user |
| Last Name | Last name of the user |
| Birthday | Date of the user’s birthday |
| Upgrade Date | Date of the upgrade to a landlord user |
| Creation Date | Date of user creation |
| Phone Number | A phone number which can be used to contact the user |
| ZIP Code | The ZIP code of the current user address |
| City | The city name of the current user address |
| Street | The street name of the current user address |
| House number | The house number of the current user address |
| Gender | The gender of the user |
| Office address | Current office address of the landlord |
| Average rating | The average rating of the review ratings |
| Offers | List of offer-IDs, which the user created |
| Profile Picture | MediaObject-ID of the user’s profile picture |
| Favorites | List of the offer-IDs, which the user favorites |
| Sessions | List of the session-IDs, which the user is associated with |

**Table 2: Offer**

|  |  |
| --- | --- |
| Column name | Description |
| Offer ID | Unique identifier of the offer |
| Title | Title of the offer |
| Offer type | Whether the offer is about an apartment, sublet, intermediate-rent, couch surfing or party-sleepover |
| Description | Contains a description of the offer |
| Rent | The price in euros to rent the offer |
| Rent type | Whether the rent includes warm water/heating |
| Rooms | Amount of available rooms. |
| Side costs | Costs which have to be paid additional to the rent |
| Price type | Whether the payment is monthly, daily or per semester |
| Street | The street name of the apartments address |
| ZIP code | The ZIP code of the apartments address |
| House number | The house number of the apartments address |
| City | The City in which the offer is located |
| Floor | The floor number of the apartments address |
| Size | The size of the apartment in quadrat meters |
| Furnished | Whether the apartment has already furniture ready to use |
| Pets | Whether pets are allowed in the apartment |
| Bathroom Number | Number of bathrooms in the apartment |
| Bathroom Description | Description of the bathrooms in the apartment |
| Kitchen Description | Description of the kitchen in the apartment |
| Cellar | Whether the offer includes access to a cellar |
| Parking | Whether the offer includes access to one or more parking slots |
| Elevator | Whether the building of the apartment has an elevator |
| Accessibility | Whether the apartment is disability-friendly |
| WLAN | Whether the offer includes access to the internet via WLAN/Wi-Fi |
| LAN | Whether the offer includes access to the internet via a wire |
| Internet speed | The possible maximum internet bandwidth that the offer includes |
| Heating Description | Description of the heating system of the apartment |
| Television | Whether the offer includes access to cable TV |
| Dryer | Whether the offer includes one or more dryer |
| Washing machine | Whether the offer includes access to one or more washing machines |
| Telephone | Whether the offer includes access to a telephone line |
| Status | Whether the offer is hidden, public or closed |
| Creation Date | Date when the offer was created |
| Last Modified | Date when of the last time the offer was changed |
| Longitude | Longitude value to geolocate the apartment |
| Latitude | Latitude value to geolocate the apartment |
| Landlord | User-ID of the user, which created this offer |
| Reviews | List of reviews-IDs, which were created for this offer |
| Tags | List of tags, which are landlord set for this offer |
| Media | List of MediaObject-IDs, which the landlord attached to this offer |
| Statistics | List of Statistic-IDs, which are associated with this offer |

**Table 3: Review**

|  |  |
| --- | --- |
| Colum name | Description |
| Review ID | Unique identifier of the review |
| Title | Title of the review |
| Rating | Value which represents the rating of an offer |
| Comment | Text which is a comment about an offer |
| Creator | Unique identifier of a user, which created this rating |
| Offer | Unique identifier of the offer, which this rating belongs to. |
| Creation date | Date, when this review was created |
| Media | List of MediaObject IDs, which are attached to this rating. |

**Table 4: Tag**

|  |  |
| --- | --- |
| Colum name | Description |
| Tag ID | Unique identifier of the tag |
| Title | Name of the tag |
| Category | Category to which the tag belongs |
| Offers | List of offer IDs, which are associated with this tag |

**Table 5: Favorite**

|  |  |
| --- | --- |
| Colum name | Description |
| Favorite ID | Unique identifier of this favorite |
| User | Unique identifier of a user, who favorited an offer |
| Offer | Unique identifier of an offer, which was favorited |

**Table 6: MediaObject**

|  |  |
| --- | --- |
| Column name | Description |
| MediaObject ID | Unique identifier of an media object |
| Type | Whether the media is an image or video |
| Creation Date | Date when the entry was created |
| Main URL | URL that locates the main media file |
| Thumbnail URL | URL that locates the smaller thumbnail media file |

**Table 7: Session**

|  |  |
| --- | --- |
| Colum name | Description |
| Session ID | Unique identifier for the session |
| Cookie ID | ID of the cookie for this session |
| Content | Contains all session relevant data |

**Table 8: Statistics**

|  |  |
| --- | --- |
| Colum name | Description |
| Statistics ID | Unique identifier for the statistic |
| Offer ID | Unique identifier for the offer, which is associated with this statistic |
| Date | Date, when this statistic was created |
| Type | What the statistic is about |
| Payload | Payload of the http(s) packet |

**Database UML Diagram**

