# BOOKSPACE DATABASE DESCRIPTION

The ‘bookspace’ database consists of following main entities: books, genres, covers, users:

* ‘**books’**: Stores information about books, including book\_id (Primary Key), title, author, isbn, publication year, and foreign keys reference to the ‘genres’ and ‘covers’ tables.
* **‘genres’**: Defines different book genres (e.g., Fiction, Biography, Technology, History), with each genre being referenced by the books, including genre\_id (Primary Key) and genre\_name.
* ‘**covers’**: Contains details about book cover images, including cover\_id (Primary key), cover\_url (the pathname which is used in php functions), alternate text (alt\_text) and caption, which are linked to the books.
* **‘users’**: Stores user information, including user\_id (Primary Key), username, email, password, and role (admin or user).

*Associative entity:*

**‘reviews’**: Allows users to submit reviews for books, including a rating (1 to 5) and review text, with a foreign key reference to both the user and book. Attributes includes review\_id (Primary Key), rating, review\_text, user\_id (Foreign key referencing to ‘users’ table), book\_id (Foreign key referencing to ‘books’ table)

**‘user\_preferences’**: Captures user preferences for specific genres, representing a many-to-many relationship between users and genres, including preference\_id, user\_id (Foreign key referencing to ‘users’ table), and genre\_id ((Foreign key referencing to ‘genres’ table).

**Relationships:**

* books are related to genres (many-to-one), with each book associated with one genre.
* books are related to covers (one-to-one), where each book has one cover image.
* users can leave reviews for multiple Books (many-to-many via the ‘reviews’ table).
* users can have preferences for multiple Genres (many-to-many via the ‘user\_preferences’ table).

These entities work together to create a structured system for managing books, user preferences, and reviews in the BookSpace platform.